



# Integrated Ecosystem Restoration & Hurricane Protection in Coastal Louisiana: Fiscal Year 2014 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) 2014 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 2014 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

# Coastal Protection and Restoration Authority Members

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Governor's Executive Assistant for Coastal Activities

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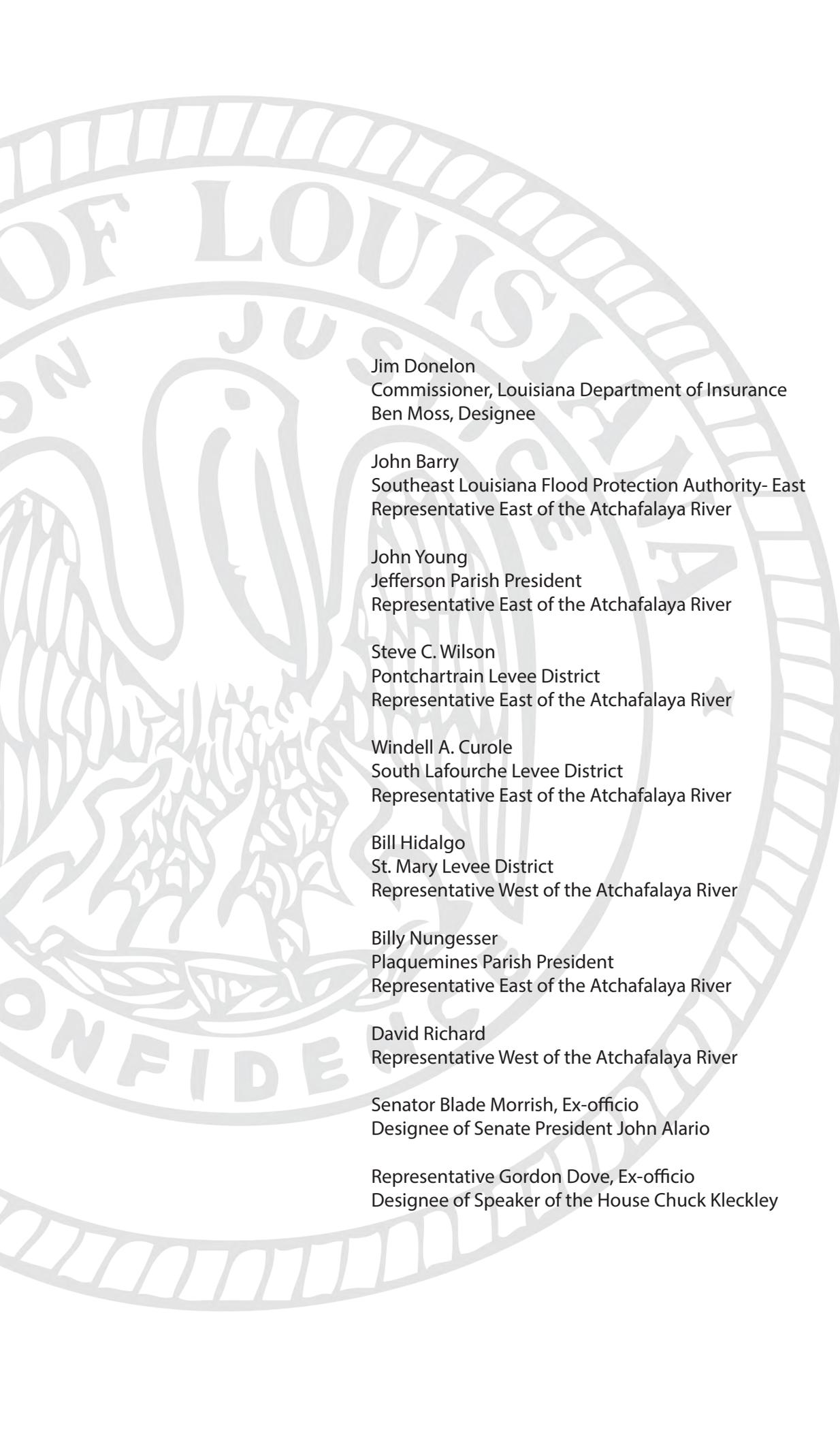
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ness

The background of the page features a large, light gray watermark of the Seal of the State of Louisiana. The seal is circular and contains the text "SEAL OF THE STATE OF LOUISIANA" around the perimeter. In the center, there is a figure of a pelican feeding its young in a nest. Below the nest, the words "CONFIDENCE" and "JUSTICE" are visible. The seal is partially obscured by the text on the right side of the page.

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Representative East of the Atchafalaya River

John Young  
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Representative East of the Atchafalaya River

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- Brown and Caldwell
- CH2M Hill

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# State of Louisiana

BOBBY JINDAL  
GOVERNOR

March 26, 2013

Dear Friends,

The Coastal Protection and Restoration Authority is pleased to present our *Fiscal Year 2014 Annual Plan, Integrated Ecosystem Restoration and Hurricane Protection in Coastal Louisiana*.

This is the yearly report on our progress in implementing the Louisiana's Comprehensive Master Plan for a Sustainable Coast, and we are pleased to report that our young organization continues to make progress at an accelerating rate. As these pages show, funding from a variety of sources is allowing us to increase the number of projects in construction and coming to construction, with a subsequent positive impact on people, jobs, industry and infrastructure in more areas of our coast than ever before.

*Louisiana's Comprehensive Master Plan for a Sustainable Coast* is a 50-year roadmap designed to achieve the goals of preserving and protecting our people, property, environment, culture and history. The 50-year plan is updated every five years, and in the past year our updated Master Plan was unanimously approved by the Louisiana Legislature. As is expected with future Master Plan updates, the 2012 update utilized our most current understanding of coastal processes to refine our path forward. It is quite specific in outlining the projects and concepts to advance in the coming years.

It is a plan worth following, as it demonstrates scientifically that we can greatly reduce the expected risk of damage to our coastal communities from storms as well as begin to address the land loss that has been plaguing Louisiana for almost 80 years. While the current plan is constrained by the reality of limited available resources, our resolve to do more whenever and wherever possible is unwavering, because all of South Louisiana and everyone in it is worth saving.

The CPRA and the State of Louisiana work diligently every day to see that we turn these plans and concepts into reality. We invite you to participate in the process by contributing your opinion at public planning and scoping meetings, by speaking up at our monthly board meetings, by reading our Quarterly Progress Reports available on our Website ([www.coastal.la.gov](http://www.coastal.la.gov)), and by studying this Annual Plan and helping to shape future annual and master plans.

Within these pages you'll find a report on what we have done in the past fiscal year, our project implementations in the new fiscal year, and a look at what is in the project funding pipeline for the following two fiscal years.

We have planned our work, and planned it well. Now we invite you to join us as we work our plan.

Sincerely,

A handwritten signature in blue ink, appearing to read "Garret Graves", is written over a white background.

Garret Graves  
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 what is being done and why and how it is being done.

## 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.

Although the 2007 Coastal Master Plan broke new ground by identifying a strategy for achieving a sustainable coast, it was not intended to address the numerous complex issues that coastal Louisiana faces. To accommodate the dynamic nature of coastal processes, Act 8 specifies that the Coastal Master Plan is a living document that will be updated approximately every five years. These updates incorporate new data and planning tools as they become available. 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 next update will be due in 2017.

Act 523 of the 2009 Regular Legislative Session directed the 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.\*

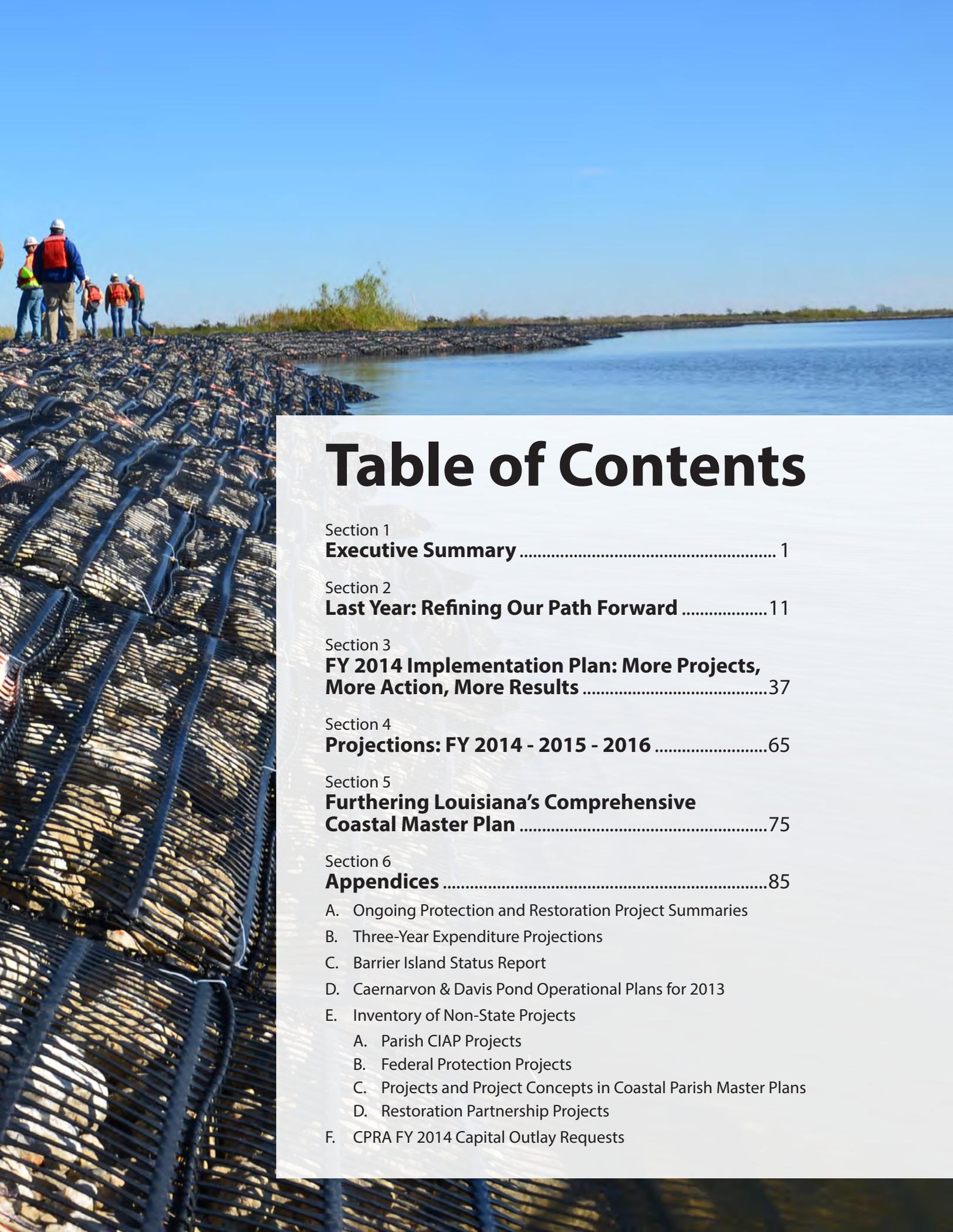
## Evolution of the Annual Plan

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 2014 Annual Plan fulfills the legislative mandate of Act 8 by presenting the CPRA's three-year program for funding and implementing projects during FY 2014–FY 2016.

Additionally, the FY 2014 Annual Plan builds on the process first begun in the FY 2010 plan and provides an expanded discussion of the CPRA's progress in protecting and restoring the coast. Section 2 provides a summary of the challenges encountered during FY 2013; Section 3 outlines an implementation plan for FY 2014; Section 4 gives fiscal projections for FY 2014 to 2016; Section 5 highlights the new Coastal Master Plan; 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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## Section 5 | Furthering Louisiana’s Comprehensive Coastal Master Plan

None





# Section 1 Executive Summary

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# Section 1

## Executive Summary



The Coastal Protection and Restoration Authority enters Fiscal Year (FY) 2014 with a full head of steam. Projects that have been in the pipeline are being completed. More and more are moving from planning, engineering and design and into construction, and many more are on the drawing board. Success is building upon success.

## Accomplishments and Notable Projects

Some accomplishments and notable projects completed or in construction in FY 2013 included:

- **Madisonville Bulkhead Project (PO-87):** This project will construct improvements to the existing bulkhead along the shore of Lake Pontchartrain and the Tchefuncte River at the Madisonville Marina.
- **Franklin Floodgate Sinkable Barge and Pump Station (TV-52):** This project will construct a sinkable barge structure on Franklin Canal to prevent storm surge from inundating the town of Franklin.
- **Caminada Headland Beach and Dune Restoration (BA-45):** The project will restore and protect beach and dune habitat across the Caminada Headland by the direct placement of sediment from offshore borrow areas.
- **Fringe Marsh Repair (BA-58):** By using dredge materials to reestablish shoreline, this program reestablishes critical areas of fragile marsh and minimizes the continuous fragmentation of the State's coastal wetlands.
- **Orleans Landbridge Shoreline Protection and Marsh Creation (PO-36[EB]):** The project creates shoreline protection on the northwest rim of Lake Borgne.
- **Central Wetlands Demonstration (PO-73):** This water assimilation demonstration project will be completed in conjunction with the Sewerage and Water Board of New Orleans.
- **Port of Iberia Bridge Replacement - Port Road over Commercial Canal (TV-28):** This project replaces the existing bridge on Port Road over Commercial Canal.
- **Port of Iberia Bridge Replacement - David Dubois Road over Commercial Canal (TV-30):** The project replaces the existing bridge on David Dubois Road over Commercial Canal.
- **Barataria Basin Landbridge Shoreline Protection, Phase 3 (BA-27C):** This project tests sections of shoreline protection types such as concrete panel wall, rock, and light rock. The Barataria Basin Land Bridge Shoreline Protection projects have constructed over 41,000 feet of shoreline protection.
- **Lake Hermitage Marsh Creation (BA-42):** The project creates wetlands and reduces tidal exchange in marshes surrounding Lake Hermitage by using material dredged from the Mississippi River.
- **Sediment Containment System for Marsh Creation Demonstration (LA-09):** The purpose of this project is to demonstrate an unconventional sediment containment system for marsh creation.

## Accomplishments and Notable Projects (continued)

- **Raccoon Island Shoreline Protection/Marsh Creation Project (TE-48):** To protect the existing southern shoreline of Raccoon Island, this project will construct eight additional rock breakwaters as part of Phase A. Phase B uses dredged sediment from the Gulf of Mexico to create marsh on the land side of the island.
- **West Bank and Vicinity (BA-66):** The project provides 100-year protection levels to the project area through levees constructed to 2011 protection levels and T-Walls and other structures to 2057 protection levels.
- **Storm-Proofing of Interior Pumping Stations (BA-74):** Orleans and Jefferson Parishes will receive a variety of improvements to the parishes' interior pump stations under the Hurricane and Storm Damage Risk Reduction System (HSDRRS).
- **SELA – Overall (PO-57):** The project reduces damage due to rainfall flooding in Orleans and Jefferson Parishes by increasing pump station capacity and improving sub-surface drainage features.
- **Lake Pontchartrain and Vicinity (PO-63):** The Lake Pontchartrain and Vicinity project refers to the hurricane protection program around Lake Pontchartrain. This program involves approximately 30 projects in east Jefferson and Saint Charles Parishes.
- **New Orleans to Venice (BA-67):** The New Orleans to Venice project consists of working with seven levee reaches, comprising 58 miles of major levee enhancement. The project repairs and re-builds the Empire Flood Gate and Empire Locks and provides repair and fronting protection for several pumping stations.
- **NRDA Lake Hermitage Marsh Creation Increment 2 (BA-141):** The project will create 104 acres of marsh.
- **Cameron Parish Shoreline Restoration (CS-33):** This project re-establishes the dunes and beachhead for 8.7 miles, from the western Calcasieu River Jetty to the eastern-most breakwater at the Holly Beach-Constance Beach breakwater field.
- **Biloxi Marsh (PO-72):** This project provides shoreline protection for a portion of the southeastern shoreline in Lake Borgne along Biloxi Marsh in Saint Bernard Parish.
- **Morganza to the Gulf (TE-64):** The project provides protection to Terrebonne and portions of Lafourche Parishes against storm events by developing levees, T-walls, navigation structures, water control structures, and floodgates.
- **Larose to Golden Meadow - Flood Protection (TE-65):** Through this project, levee improvements and modifications are being completed in Lafourche Parish to inhibit flooding.
- **Pelican Island and Pass La Mer to Chalard Pass Restoration (BA-38),** Plaquemines Parish.
- **Lake Pontchartrain & Vicinity, Seabrook LPV-IHNC-01 (PO-55),** Orleans Parish.
- **West Belle Pass Barrier Headland Restoration (TE-52),** Lafourche Parish.
- **Riverine Sand Mining/Scofield Island Restoration (BA-40):** The project transports sediments from the Mississippi River to Scofield Island to restore the island's dune and marsh habitats.
- **Bayou Lafourche Fresh Water District - Walter S. Lemann Memorial Pump Station Renovations (BA-84):** This project will replace two of the existing pumps and motors at the Walter S. Lemann Pump Station and install an emergency generator to operate the pump station during power outages.

## Anticipated Projects

Projects anticipated to begin or continue construction in FY 2014 include:

- Acadiana Regional Airport Street Improvements - Admiral Doyle Drive, Iberia Parish (TV-31)
- Bayou Dupont Marsh and Ridge Creation Project, Jefferson Parish (BA-48)
- Bayou Lamoque Floodgate Removal, Plaquemines Parish (BS-13 [EB])
- Central Wetlands - EBSTP to A2, Orleans and St. Bernard Parishes (PO-73-2)
- Central Wetlands – Riverbend, St. Bernard Parish (PO-73-1)
- Falgout Canal Freshwater Enhancement, Terrebonne Parish (TE-63)
- Freshwater Bayou Bank Stabilization (CIAP), Vermilion Parish (TV-11B [EB])
- GIWW Bank Restoration of Critical Areas in Terrebonne, Terrebonne Parish (TE-43)
- Grand Liard Marsh and Ridge Restoration, Plaquemines Parish (BA-68)
- Jean Lafitte Tidal Protection, Jefferson Parish (BA-75-1)
- Lafitte Area Levee Repair, Jefferson Parish (BA-82)
- Mississippi River Long Distance Sediment Pipeline, Jefferson, Plaquemines and Lafourche Parishes (BA-43 [EB])
- Marsh Creation Near Freshwater Bayou, Vermilion Parish (ME-25 SF)
- Morgan City Industrial Road, St. Mary Parish (AT-05)
- Non-rock Alternatives to Shoreline Protection Demo, Iberia, Lafourche and Jefferson Parishes (LA-16)
- Shell Island East – BERM, Plaquemines Parish (BA-110)
- South Lake Lery Shoreline and Marsh Restoration, Plaquemines Parish (BS-16)
- Saint Charles West Bank Hurricane Protection Levee, St. Charles Parish (BA-85)

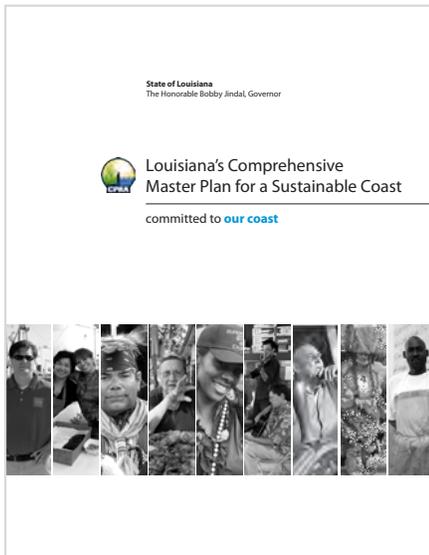
## Feasibility Studies

Future projects are dependent on feasibility factors such as cost effectiveness and impacts on the environment, commerce and culture. Feasibility studies underway for potential projects include:

Feasibility Study	Potential Impact of Project
Lower Breton Sound Mississippi River Sediment Diversion	Deposition of approximately 214 million metric tons of sediment over 50 years
Mid Barataria Basin Mississippi River Sediment Diversion	Deposition of approximately 210 million metric tons of sediment over 50 years
Lower Barataria Basin Mississippi River Sediment Diversion	Deposition of approximately 206 million metric tons of sediment over 50 years
Increase Atchafalaya Flow to Eastern Terrebonne	Preventing future loss of more than 9,600 acres of marsh habitat
Calcasieu Ship Channel Salinity Control Measures	Saving more than 21,000 acres of marsh environment from degradation over 50 years
West Shore of Lake Pontchartrain	Reduction of risk of major storm damage and flooding in the portions of St. Charles, St. John the Baptist, and St. James Parishes
Houma Navigation Canal Lock Hydrologic Restoration	Saving more than 3,400 acres of marsh environment from degradation over 50 years

*More information on these feasibility studies is available in Section 2.*

# Updated Coastal Master Plan



In 2007, as mandated by the Louisiana Legislature, a State Coastal Master Plan was created to establish planning objectives to serve as benchmarks for implementing coastal protection and restoration projects and to identify large-scale measures needed to achieve a sustainable coast. The Legislature also specified that this *Comprehensive Master Plan for a Sustainable Coast* should be a living document to be updated approximately every five years, incorporating new data and planning tools as they become available. The first update of the Coastal Master Plan was completed in 2012.

In accomplishing the update, the original 2007 plan underwent rigorous review, and, with more than two years of public input and scientific review, the updated and revised plan was unanimously approved by the Louisiana Legislature in 2012.

*For more information on this updated Coastal Master Plan that provides a vision for the next 50 years of coastal protection and restoration, see Section 5.*

## The Year Ahead: Projecting FY 2014

The FY 2014 Annual Plan also contains budget projections (Tables ES-1 and ES-2) that show projected revenues and the amount of State funds that would actually be needed to accomplish the proposed implementation plan over the next three fiscal years. Resources in FY 2014 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 2014 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, including Clean Water Act (CWA) penalties resulting from the *Deepwater Horizon* oil spill, future Gulf of Mexico Energy Security Act (GOMESA) funding, and credit initiatives that would generate revenue from the carbon sequestration and water quality benefits of constructed projects. The State is also exploring, as part of the Natural Resources Damage Assessment (NRDA) for the *Deepwater Horizon* oil spill, the implementation of coastal restoration projects to address injuries to natural resources caused by the spill.

New project opportunities may arise as Federal funds become available after the approval of the FY 2014 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 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.

► **Table ES-1: Projected Three-Year Revenues (FY 2014 - FY 2016)**

Revenue Sources	FY 2014	FY 2015	FY 2016	Program Total (FY 2014 - FY 2016)
CPR Trust Fund Annual Revenue <sup>1</sup>	\$34,277,097	\$34,300,000	\$34,300,000	\$102,877,097
GOMESA <sup>1</sup>	\$80,775	\$80,775	\$80,775	\$242,325
DOTD Interagency Transfer <sup>1</sup>	\$4,000,000	\$4,000,000	\$4,000,000	\$12,000,000
CIAP	\$92,524,301	\$55,352,629	\$11,913,664	\$159,790,594
Surplus '07, '08, '09	\$319,282,714	\$100,941,667	\$11,705,995	\$431,930,376
Community Development Block Grants	\$14,560,385	\$5,254,452	\$0	\$19,814,836
Berm to Barrier	\$44,576,037	\$0	\$0	\$44,576,037
NRDA <sup>2</sup>	\$131,807,719	\$335,552,000	\$69,657,000	\$537,016,719
Other Oil Spill Related Revenues	\$40,030,469	\$47,781,721	\$58,598,883	\$146,411,073
LDNR Mitigation Funds <sup>3</sup>	\$900,000	\$0	\$0	\$900,000
MOEX Settlement <sup>4</sup>	\$6,755,059	\$0	\$0	\$6,755,059
OCD-DRU Grant <sup>5</sup>	\$300,000	\$300,000	\$0	\$600,000
FEMA Reimbursement for OM&M	\$860,000	\$0	\$0	\$860,000
Project Generated - Adaptive Management	\$13,496,208	\$28,750,029	\$9,619,191	\$51,865,428
Project Generated - Administrative	\$3,598,989	\$7,666,674	\$2,565,118	\$13,830,781
Project Billing	\$14,000,000	\$16,000,000	\$18,000,000	\$48,000,000
<b>Total Projected Revenue</b>	<b>\$721,049,753</b>	<b>\$635,979,947</b>	<b>\$220,440,626</b>	<b>\$1,577,470,326</b>

**Notes**

1. Annually recurring revenue source.
2. NRDA funds have not been procured; projections represent possible FY 2014-2016 expenditures if funding is procured by June 30, 2013. NRDA project schedules are currently under development and may be refined at a later date; funds will be distributed according to final project schedules.
3. Used to partially fund ME-25 SF.
4. Represents anticipated balance as of FY 2014 of an initial deposit of \$6.75 million of funds from the MOEX settlement.
5. Used to fund Coastal Community Resiliency Program.

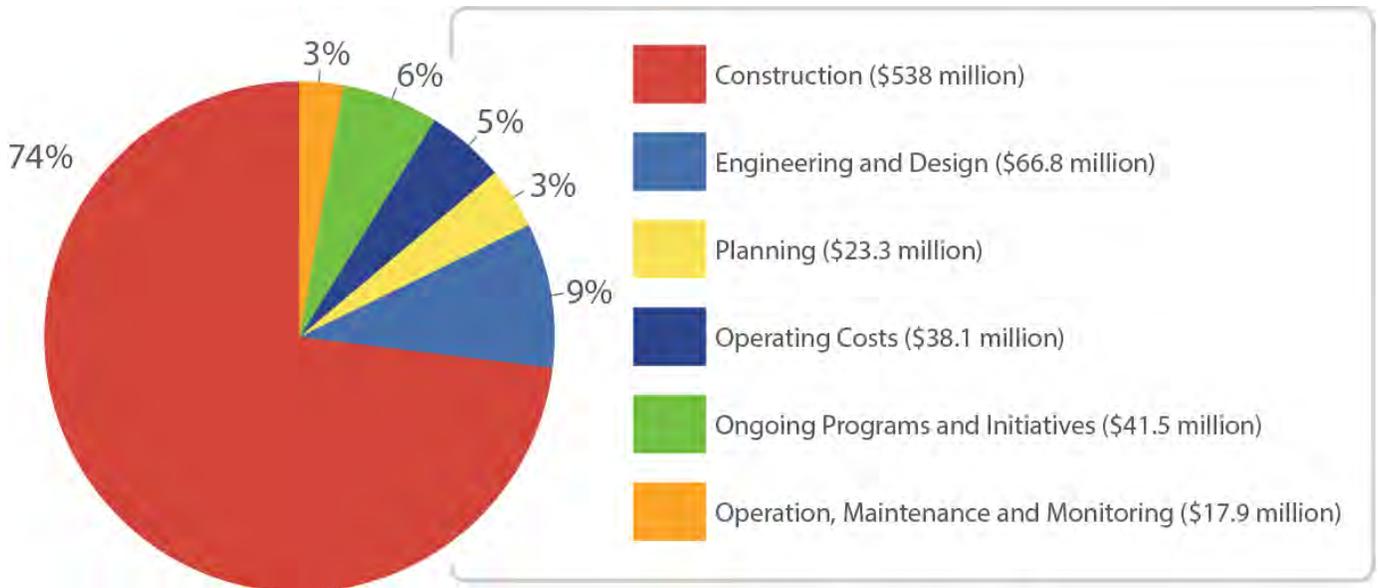
► **Table ES-2: Projected Three-Year Expenditures<sup>1</sup> (FY 2014 - FY 2016)**

Program/Funding Source	FY 2014	FY 2015	FY 2016	Program Total (FY 2014 - FY 2016)
CWPPRA Projects (not including Surplus expenditures) <sup>2</sup>	\$20,770,557	\$23,421,622	\$25,000,000	\$69,192,180
WRDA Projects (not including Surplus or CIAP expenditures)	\$0	\$0	\$0	\$0
CIAP Projects and Programs (not including Surplus Expenditures)	\$92,524,301	\$55,352,629	\$11,913,664	\$159,790,594
Surplus Projects and Programs	\$319,282,714	\$100,941,667	\$11,705,995	\$431,930,376
Community Development Block Grants	\$14,560,385	\$5,254,452	\$0	\$19,814,836
HSDRRS 30 Year Payback <sup>3</sup>	\$42,188,962	\$42,188,962	\$73,849,854	\$158,227,778
State-Only Projects (Non-Surplus)	\$9,151,505	\$48,126,000	\$35,696,000	\$92,973,505
Berm to Barrier	\$44,576,037	\$0	\$0	\$44,576,037
NRDA <sup>4</sup>	\$131,807,719	\$335,552,000	\$69,657,000	\$537,016,719
Other Oil Spill Related Expenditures	\$40,030,469	\$47,781,721	\$58,598,883	\$146,411,073
LDNR Mitigation Expenditures <sup>5</sup>	\$900,000	\$0	\$0	\$900,000
OM&M- Projects (not including Surplus or CIAP expenditures)	\$8,607,881	\$12,159,950	\$4,798,874	\$25,566,704
OM&M- Marine Debris Removal (FEMA)	\$860,000	\$0	\$0	\$860,000
Project Support	\$4,000,000	\$4,000,000	\$4,000,000	\$12,000,000
Operating Costs (see Tables 4-3 and 4-4)	\$38,057,989	\$53,043,378	\$54,032,989	\$145,134,356
<b>Total Planned Expenditures</b>	<b>\$767,318,519</b>	<b>\$727,822,380</b>	<b>\$349,253,259</b>	<b>\$1,844,394,158</b>

**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 2015 - FY 2016 are therefore based on prior years' expenditures.
3. Payback is based on current HSDRRS construction schedule; payback will not commence until completion of HSDRRS construction activities and consequently payback schedule may be revised at a later date.
4. NRDA funds have not been procured; projections represent possible FY 2014-2016 expenditures if funding is procured by June 30, 2013. NRDA project schedules are currently under development and may be refined at a later date; funds will be distributed according to final project schedules.
5. Used to partially fund ME-25 SF.

► **Figure ES-1: Projected FY 2014 Expenditures by Project Phase**



- Construction includes Beneficial Use (\$7 million)
- OM&M includes BIMP (\$3.4 million). Repair/Rehabilitation of Projects (\$305,000) and Marine Debris Removal (\$860,000)
- Ongoing Programs Includes Project Support (\$4 million)
- Total excludes HSDRRS Payback (\$42.2 million)

**TOTAL Expenditures**  
**\$725 million**





## **Section 2**

Last Year: Refining Our Path Forward

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## Section 2

# Last Year: Refining Our Path Forward

On August 29, 2012, seven years to the day after Katrina made landfall, floodwaters from another hurricane surged over Southeast Louisiana, inundating places that had never flooded before, forcing thousands of people from homes that were either washed away or submerged in up to 12 feet of water.

For many it was a shocking revelation that dire projections can come true, that depriving sediment and fresh water from the body of an ecosystem—the very nourishment and substance that built it in the first place—does cause it to shrink and subside and become so frail it no longer has the strength to stand in harm's way and protect us in our times of greatest need.

Hurricane Isaac's wind speed made it "only" a category one storm, but its wide torrential footprint, its low barometric pressure and its slow progression over a depleted coastline made its impact greater than anticipated. Sadly, there is another reason.

The damages wrought by each storm are cumulative; the addition of time and neglect only make the inevitable next storm an even greater threat. Isaac's impact on Louisiana was worse because it came after the recent impacts of Katrina, Rita, Gustav and Ike. The next storm will be more impactful because it comes after Isaac.

And yet for all its harmful effects, Hurricane Isaac emphasized what we have done correctly, what we have done wrong, and what we now must do to preserve a future for the Louisiana we know and love, the Louisiana that is of great interest and importance to all of America.

W. Craig Fugate, Administrator of the Federal Emergency Management Agency, tours areas of Southeast Louisiana devastated by Hurricane Isaac. Much of the damage occurred in areas that had never flooded in previous storm events, or sustained damage when non-Federal levees proved inadequate to the task.

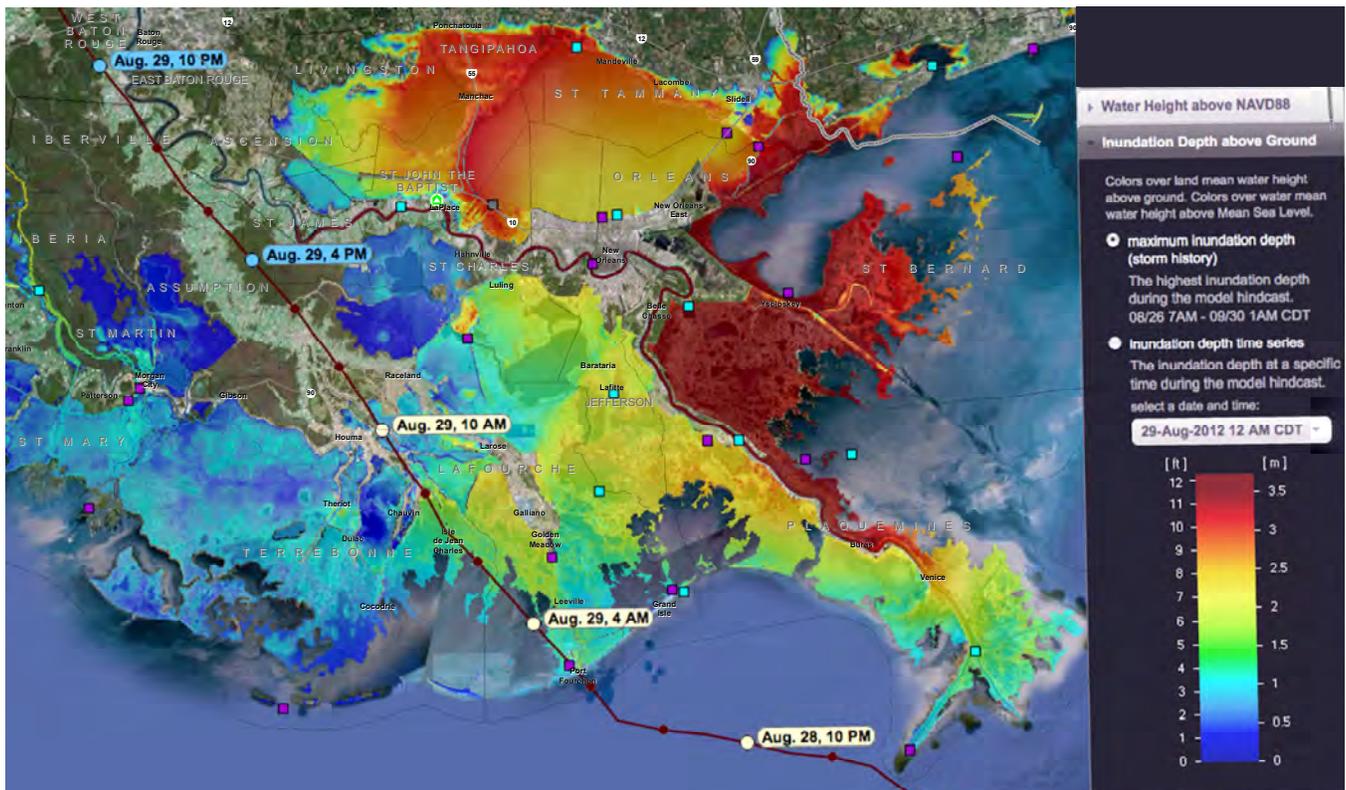


Hurricane Isaac again highlighted the importance of funding and executing proactive measures for flood control and coastal restoration. It is imperative that Louisiana receive the support and commitment from our Federal partners necessary to protect our communities and focus on disaster prevention rather than disaster response.

We must better protect our people, our homes, our industry, our infrastructure, our way of life—and our Coastal Master Plan charts our path forward in furthering these goals. Where we have built stronger protection we were more secure from the greatest damage Hurricane Isaac could inflict: flooding. But those communities that have been and continue to be at risk because of inadequate structural protection suffered as they have suffered in the past, or in too many instances, suffered as they have never suffered before.

Hurricane Isaac floodwaters reached a depth of 12 feet in eastern St. Bernard Parish where a back levee failed and hundreds of homes were severely damaged, especially in the hard-hit communities of Braithwaite and Scarsdale.

So, we know what works, what needs more work, and where we must apply our future efforts. And we have a plan: our continually evolving Coastal Master Plan, a scientifically-demonstrated path forward in our journey to more-sustainable restoration and protection for coastal Louisiana.



## Updating Louisiana’s Comprehensive Master Plan for a Sustainable Coast

Approved unanimously by both the House and Senate of the Louisiana Legislature, the 2012 *Louisiana’s Comprehensive Master Plan for a Sustainable Coast* updates our 50 year vision with projects that offer Louisiana protection, restoration and resilience, all based on extensive public outreach and a two-year analysis led by some of the nation’s best scientists. The scientific models conclude that our dream goal can become reality; we can significantly reduce flooding risk to our communities and address land loss issues that have been plaguing our coast.



The updated Coastal Master Plan for a Sustainable coast is studied by students in Dr. Amy E. Lesen's environmental biology class at Dillard University in New Orleans.

## Advancing Understanding of Our Dynamic Coast

### Another New Tool

While the new state Coastal Master Plan identifies general areas and basins that can best benefit from land-building sediment diversions along the lower Mississippi River, it is the task of a joint CPRA-United States Army Corps of Engineers (USACE) study to further our understanding of the essential geomorphology and bathymetry of the river and develop tools that can be used by project feasibility teams to help inform the location of specific diversions.

That multi-year project is the Mississippi River Hydrodynamic and Delta Management Study. In addition to investigating side effects of the river's currents and proposed management regimes, the study advances the modeling tools developed for the 2012 update of the Coastal Master Plan, and will help advance the knowledge and modeling that will go into development of the next Coastal Master Plan update in 2017.

The CPRA is leading an effort to construct a major tool that will aid in understanding Mississippi River sediment diversions: an expanded Small Scale Physical Model (SSPM) and River Modeling Center. An expanded SSPM will include the lower 195 river miles of the Mississippi River (Donaldsonville to the end of the East Jetty of Southwest Pass) and 13,946 square miles of adjacent coastal delta and will provide a world class research test bed for furthering the understanding of the impacts of major diversions of water and sediment into the vanishing coastal wetlands in the lower delta. The River Modeling Center on the Baton Rouge campus of LSU will include classrooms, laboratories, conference rooms, office space and an exhibit area which will serve as a vehicle for coastal education and outreach.

The new model, scheduled to be fully operational by late 2014, will be one of the largest moving bed physical models in the world. Its design is being based upon lessons learned from the construction and operation of the existing SSPM, which was built in 2002. The expanded SSPM will incorporate a broader study area and will be larger scale, which should improve the accuracy and dependability of the results it produces. Using survey and river data collected by the CPRA, along with technology being used to construct and operate the model, the SSPM will mimic the lower Mississippi River more accurately than any other model used in coastal restoration. The expanded SSPM will be capable of evaluating all of the diversions included in the Coastal Master Plan.

The model will also be used to verify the locations, parameters and effectiveness of the diversions being looked at in the Mississippi River Hydrodynamic and Delta Management Study. The CPRA's effort will serve as in-kind credit for the State and USACE's Mississippi River Hydrodynamic and Delta Management Study. The SSPM is an important research tool that can validate and forecast land building through major diversions, as well as the impacts of doing nothing, and visually depicts the results to decision makers, scientist and engineers as well as the general public and other vested groups.

## Progress that Shows

Fiscal Year 2013 activity includes a total of 42 projects either completed or in construction, including 15 flood protection projects, 24 restoration projects, and three infrastructure projects (Table 2-1, Figure 2-1). Of these projects, nine projects could be completed by the end of the fiscal year if all remains on schedule (Table 2-2, Figure 2-2). Information on active coastal projects, as well as an inventory of past projects, is presented in Appendix A.

The River Modeling Center is intended to serve as a venue for formal education of science and engineering graduate and undergraduate students. Additionally, it will provide an opportunity to convey the do-ability of saving Louisiana's coast by exposing high school students, particularly those interested in studying River Morphology, Coastal Ecology or Coastal Engineering, decision makers and other groups, such as environmental and navigational interests, to the application of science and engineering. The exhibit area of the River Modeling Center will feature interactive displays and graphics that explain the issue of coastal land loss and highlight the science, the people and the tools involved in engineering and constructing projects that will protect and restore coastal Louisiana.



## Barrier Islands: Our First Line of Defense

Nothing better represents the progress, completion and new beginnings of the past year than the story of two adjacent barrier islands off the coast of Plaquemines Parish: Pelican and Scofield Islands (BA-38 and BA-40). Bordering the southeastern edge of the Barataria Basin system, these two islands were deteriorating, awaiting construction funding until the *Deepwater Horizon* oil spill created the need for an emergency deposit of sand on these islands to serve as protective berms against oil potentially intruding into delicate marshlands.



Even with the sand berms created in response to the *Deepwater Horizon* oil spill, Pelican Island (top) and Scofield Island (bottom) were mere whispers of the substantial barrier islands they once had been. The CPRA is seizing the opportunity and is fortifying these islands, building upon the sand introduced into the system in 2010, pumping in additional sediment to create additional beach, dune and marsh. This restoration will help return these islands to a state where they can again serve as our perimeter defense against storm surge.

The CPRA is taking advantage of the sand put into the system and is taking the next step to restore these islands into more-substantial, more-sustainable barrier island ecosystems with beach, dune and a thriving marsh. Pelican Island was completed using sand pumped from ten miles offshore. However, for the restoration of neighboring Scofield Island, a renewable source is being used: sand from the bottom of the Mississippi River, a first for barrier island restoration. Riverine sands are being dredged and pumped 20 to 26 miles to restore a barrier island. The Scofield project is not only a great engineering achievement; it also demonstrates that the Mississippi River is a superb resource for high-quality sediment that is usable, abundant and endlessly renewable.

Pelican and Scofield Islands are just part of the CPRA's ongoing restoration of our barrier island chain, an important first line of defense against natural and manmade threats advancing from the Gulf of Mexico.



April 2012



December 2012

This back marsh area of Pelican Island was created by building a back containment dike and then pumping in sediment to create 264 acres of marsh platform that will soon be lush with vegetation. On the front side of the barrier island facing the Gulf of Mexico, an offshore sand source created 134 acres of dune, beach and berm. A similar reconstruction of the adjacent Scofield Island will use sand pipelined more than 20 miles from the borrow site on the bed of the Mississippi River.

## Headlands and Shoreline Protection

The West Belle Pass Barrier Headland Restoration (TE-52) at the southeastern edge of Timbalier Bay serves much like a barrier island in that it stands as the first line of defense against storm surge. But in addition to protecting the wetlands behind it, this land mass also shields the infrastructure of one of the nation's most-important energy/transportation complexes: Port Fourchon. This one spot on the map services more than 90 percent of the Gulf's deep-water oil production and up to 18 percent of the U.S. oil supply.



Approximately 9,300 feet of beach and dune are being rebuilt on the West Belle Pass headland which had eroded to about half of its original size and had a shoreline retreating at a rate of more than 100 feet per year. This project is using approximately two million cubic yards of sand dredged and pipelined in from a source 10 miles offshore. Another one million cubic yards of dredged material is building about 150 acres of marsh habitat that will be planted with native vegetation.

The Caminada Headland (BA-45) on the other side of the mouth of Bayou Lafourche serves an equally important role in protecting Port Fourchon, and is the western most protective barrier for the Barataria Basin. It has suffered severe erosional and environmental degradation that requires substantial rebuilding of the dune and beach system. More than 2.8 million cubic yards of sand will be dredged and pumped more than 20 miles from an offshore borrow area to enhance nearly five miles of beachfront. This will raise the beach, on average, to a height of approximately 4.5 feet and the dune to a height of 7 feet. This will help to protect and sustain significant and unique coastal habitats, protect threatened and endangered species, reduce wave energy and salt-water intrusion from the Gulf of Mexico into back-barrier environments, including chenier ridges, marshes and mangrove wetlands.



The Caminada Headland beach is an important protective barrier for the marsh environment behind it, but in recent years its effectiveness has eroded along with the beach itself. The Caminada Headland Beach and Dune Restoration project is replenishing and restoring this important land mass using sediment from the sand-rich South Pelto borrow area in the Gulf of Mexico deposited thousands of years ago when Bayou Lafourche was the main channel of the Mississippi River.



The eroding shoreline in Cameron Parish.

The Caminada and West Belle Pass restoration projects have the additional benefit of reintroducing sediment sources into the coastal system that will ultimately help sustain other barrier beaches in both Timbalier and Barataria Bay through natural processes.

Far to the west in Cameron Parish sand is also much in need on a shoreline system starved by the lack of a replenishing source.

This eroding beachfront has taken a pounding in recent years from hurricanes Katrina, Rita, Ike and Gustav, and the erosion now threatens Louisiana Highway 27/82, the major east-west corridor in the parish. Behind it, 40,000 acres of marsh are in danger. To combat the threat, the CPRA is pumping high-quality sand from a borrow area 26 miles offshore. The Cameron Parish Shoreline Protection project (CS-33) creating approximately 525 acres of new beach along an 8.7 mile stretch of the Gulf shoreline.

Shoreline protection is also vital to saving the Orleans Landbridge (PO-36 [EB]), the stretch of land and marsh that is the only separation between Lake Pontchartrain and the open waters of Lake Borgne and the Gulf of Mexico. While large, substantial solutions will need to be pursued, the CPRA is addressing some of the immediate erosion problems in a unique way: recycling the old Interstate 10 Twin Span structure that spanned the open water between New Orleans East and Slidell. The old bridge was torn down and replaced with a taller, more resilient structure. Working in cooperation with the State Department of Transportation and Development, the CPRA has taken 217,000 tons of concrete from the old highway spans, crushed it into aggregate and loaded it into thousands of geogrid marine mattresses that have been laid along 7.8 miles of shoreline along the northern shoreline of Lake Borgne.



Approximately 87,000 cubic yards of recycled Twin Span concrete is now protecting a vital shoreline that was retreating at almost 8 feet per year, leaving the communities surrounding Lake Pontchartrain at greater risk from storm surge flooding.

## Marsh Creation and Restoration

There used to be land and ridges and bayous and trees in the area south of the bend in the Mississippi River near Triumph in Plaquemines Parish. For a thousand years or more Bayou Grand Liard, a Mississippi River distributary, flowed due south carrying fresh water and sediment into its corner of the Barataria Basin. Today it is almost impossible to find that bayou or its banks on a map or satellite image. The area of higher ground lined with trees is now mostly sunken marsh—and a threatened marsh at that. Saltwater continues its deadly encroachment, converting terra firma into open water.

The CPRA's Grand Liard Marsh and Ridge Restoration project (BA-68) is seeking to restore the geography and reverse the trend of land loss. Dredged material is being used to recreate the ridge that formed the higher ground on the eastern flank of Grand Liard Bayou, while dredged material pumped into appropriately-gapped containment dikes is restoring approximately 328 acres of marsh adjacent to it. Cordgrass is being planted into the new marsh area, while the ridge is planted with appropriate woody vegetation and high marsh species.

Louisiana can point to great successes in marsh creation through such projects as the Barataria Landbridge, North Lake Mechant, Goose Point, Lake Hermitage and Bayou Dupont. In fact, Bayou Dupont's success is spurring new phases of marsh creation in that area, including a shared use of pipeline infrastructure.



Many other areas of South Louisiana have suffered from saltwater intrusion due to subsidence, sea level rise and other industrial factors. Trees such as these usually die before the ground beneath them disappears below the water line.

The CPRA’s Mississippi River Long Distance Sediment Pipeline project (BA-43) is designed to transport river sediment 12 miles via pipeline to create marsh in an area south of The Pen in Jefferson Parish. That pipeline is serving a double purpose, as it also provides sediment for use in a nearby ridge and marsh creation project along Bayou Dupont. The greater efficiency is helping to create a combined benefit of 688 acres of marsh and 12,000 linear feet of ridge restoration.

## Protection Projects

The USACE-constructed hurricane protection system around the New Orleans metropolitan area is nearly complete.

Part of the system, the \$1.13 billion Inner Harbor Navigation Canal (IHNC) Surge Barrier was featured in a CNN television documentary as a good example of what other places at risk—including New York and New Jersey following Hurricane Sandy—might consider implementing. It is a 1.8 mile floodwall separating Lake Borgne from the Gulf Intracoastal Waterway (GIWW), Bayou Bienvenue and the former Mississippi River Gulf Outlet (MRGO), with navigation gates that can be closed to block storm surge from entering the IHNC from the lake.

A CNN crew shoots video at the base of the \$1.13 billion IHNC Surge Barrier, the largest design-build civil works project in the history of the USACE.



An additional \$6.5 billion in structures form the rest of the hurricane protection system surrounding heavily-populated areas on the east and west banks of the Mississippi River, protecting all of Orleans Parish along with sections of St. Charles, Jefferson, Plaquemines and St. Bernard parishes. The system consists of 350 miles of levees and floodwalls; 73 non-Federal pumping stations; three canal closure structures with pumps; and four gated outlets. It is designed to reduce the risk of flooding caused by a storm surge that has a one percent chance of occurring each year.

Bigger, stronger floodwalls and levees designed to withstand storm surge that has a one percent chance of occurring in any given year make up parts of the 350 mile flood protection system that surrounds the greater New Orleans metropolitan area.



West Closure Complex pump station.

On New Orleans' West Bank, the hurricane protection system's \$1 billion West Closure Complex uses the nation's largest sector gates to block storm surge from the Harvey and Algiers canals that potentially could flood a 70 square mile area of the West Bank. The pump station—with the largest pumps of their kind in the world—can evacuate 19,140 cubic feet of water per second.

Similarly, New Orleans proper is surrounded by an upgraded risk reduction system consisting of levees, walls, gates and pump stations designed to relieve potential pressure on interior levees and floodwalls, the type that failed during Hurricane Katrina.

One component of the new configuration is the Seabrook Floodgate Complex. The \$165 million gate across the Industrial Canal where it intersects with Lake Pontchartrain will keep lake water out of the canal, relieving potential pressure on 28 miles of interior levees and flood walls along the IHNC navigation complex in Orleans and St. Bernard parishes.



## Project Undergoing Feasibility Studies

All large-scale coastal projects must undergo rigorous feasibility studies before being funded or constructed. Some of the projects currently being vetted through this important step include:

- **Lower Breton Sound Mississippi River Medium Sediment Diversion.** A sediment diversion into lower Breton Sound in the approximate vicinity of Black Bay to build and maintain land; 50,000 cfs capacity. Over 50 years, this project could divert approximately 214 million metric tons of sediment.
- **Mid Barataria Basin Mississippi River Sediment Diversion.** A sediment diversion into mid-Barataria in the approximate vicinity of Myrtle Grove to build and maintain land; maximum capacity 50,000 cfs. Over 50 years, this project could divert approximately 210 million metric tons of sediment.
- **Lower Barataria Basin Mississippi River Sediment Diversion.** A sediment diversion into lower Barataria Bay in the vicinity of Empire; 50,000 cfs capacity. Over 50 years, this project could divert approximately 206 million metric tons of sediment.
- **Increase Atchafalaya Flow to Eastern Terrebonne.** This restoration project is intended to provide fresh water and sediment from the Atchafalaya River through the Gulf Intracoastal Waterway into marsh areas of eastern Terrebonne Parish, including Lake Boudreaux and Grand Bayou marsh areas.
- **Calcasieu Ship Channel Salinity Control Measures.** Construction of measures designed to prevent saltwater from entering Calcasieu Lake through the Calcasieu Ship Channel. Measures would control salinity spikes, provide storm surge benefits, and would be constructed in a manner that would allow for the continued functioning, and, ideally, improvement and increased viability of the Calcasieu Ship Channel and the Port of Lake Charles.
- **West Shore of Lake Pontchartrain.** Assessing hurricane and storm reduction measures in a study area bounded by the Bonnet Carre Spillway to the east, The Mississippi River to the south, Lakes Pontchartrain and Maurepas to the north, and the St. James Parish/Ascension Parish line to the west.
- **Houma Navigation Canal Lock Hydrologic Restoration.** Construction of a lock on the Houma Navigation Canal and operation to reduce saltwater intrusion and distribute freshwater to the surrounding wetlands. The project is intended to be constructed as a component of the Morganza to the Gulf hurricane protection project. Costs associated with this project include planning, engineering, and design and operational and maintenance costs to operate the lock for restoration.

## Coastal Science Assistantship Program Awardees Selected

The Coastal Science Assistantship Program (CSAP) provides support for up to three years for Master of Science students enrolled full-time at Louisiana colleges and universities who are involved in research relevant to Louisiana coastal protection and restoration efforts. This program is funded by the CPRA to direct academic research to answer questions about planning, designing, and constructing coastal restoration projects, which ultimately contribute to the CPRA's overall success. In addition, these assistantships improve the CPRA's technical credibility by developing relationships with the students, the professors, and their universities. These improved relationships allow for greater communication, participation, and integration between Louisiana higher education and the state's coastal protection and restoration program.

The CPRA selects up to four new proposals each year for funding. Once chosen, the faculty members select graduate students to work on the projects. These students are required to complete a master's thesis at their institution and a 240 hour internship with the CPRA.

The academic advisors and proposal titles selected for the 2013-2016 awards are:

- Dr. Juan M. Lorenzo, LSU - Shallow seismic monitoring of New Orleans Levees.
- Dr. Q. Jim Chen, Dr. Clinton Willson, Dr. Samuel Bentley, and Dr. Gregg Zhang, LSU - Field Observation and Computer Modeling of Marsh Edge Erosion for Louisiana Coastal Protection and Restoration.
- Dr. Brian Roberts, LUMCON - Influence of River Diversions on Carbon and Nitrogen Cycling in Louisiana Freshwater, Brackish, and Salt Marshes.
- Dr. Emad Habib, ULL - Assessment of Model Performance and Prediction Uncertainty in Support of CPRA Master Plan Studies.

Since the program's inception in 2008, 23 research proposals have been selected across eight different institutions including Louisiana Tech, LSU, LUMCON, Nicholls State, ULL, UNO, Southeastern, and Tulane.

## CPRA Studies to Aid in Future Project Development

Effective, resilient, cost-efficient projects are rooted in the best science available. Therefore, the CPRA engages in studies and scientific development intended to generate new data, models, tools and insight that can accomplish the best and most useful feasibility studies, planning, engineering and design.

Among the 21 studies recently completed or currently underway are: the use of laser Light Detection and Ranging (LiDAR) to monitor marsh, barrier island, and levee elevations; development of a Louisiana Sediment Management Plan (LASMP) to promote effective management of sediment resources, including components such as a sediment database (LASARD) that will help to minimize the cost and time required to identify appropriate resources; development of a Delta Sand Search Model (DSSM); a Borrow Area Monitoring and Maintenance investigation; investigations of sediment quality and quantity available from offshore, nearshore, and riverine areas; development of an Atchafalaya Basin Sediment Management Plan and investigations of factors (such as cold fronts) affecting the transport and deposition of sediment in Atchafalaya Bay, including the effects of sea level rise; and development of and quantifying how natural landforms—healthy marshes, barrier islands, and coastal ridges—can reduce waves and storm surge, and how we can better utilize the information to achieve increased coastal protection.

As these and other studies are completed, they are added to the Library section of the CPRA website ([www.coastal.la.gov](http://www.coastal.la.gov)) under Coastal Studies and Findings.

## Oil Spill Restoration Planning

The 2010 *Deepwater Horizon* disaster was the worst oil spill in our nation's history. This disaster resulted in an estimated five million barrels of oil being released into the Gulf of Mexico. Ultimately, the majority of the oil that reached the Gulf's coastline did so in Louisiana. The impacts on Louisiana's natural resources have been greater than all of the other affected states combined. Nearly three years after this incident, our coast continues to be impacted and our natural resources continue to accrue injuries from this ongoing disaster.

As oil spill injuries are determined and penalties are assessed, multiple avenues for restoration are anticipated. Although the timing and amount of funds related to the *Deepwater Horizon* oil spill have not been fully determined, preliminary oil spill restoration planning is underway. With an understanding that the use of restoration funds will be guided by specific criteria, Louisiana is committed to maximizing its investment in oil spill recovery activities by implementing restoration projects that are consistent with the Coastal Master Plan to the extent possible. The following information provides an overview of anticipated sources of funding for oil spill restoration.

## Natural Resource Damage Assessment Restoration

A 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 party or parties responsible for the spill. Through that claim, the trustees will seek compensation in the form of restoration for the harm done to natural resources and services. The assessment process is lengthy and complex. The NRDA will continue until the natural resource trustees have determined the full extent of damages, restoration plans are designed and implemented, and the environment and public are made whole for injuries to natural resource and services resulting from the *Deepwater Horizon* oil spill.

## Clean Water Act Penalties

The Clean Water Act (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 Environmental Protection Agency (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 proactively passed 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 sets forth the following framework for allocation of the Trust Fund:

- 35 percent to be divided equally between the five Gulf States for ecological and economic restoration efforts in the region;
- 30 percent through the Gulf Coast Ecosystem Restoration Council to implement a comprehensive plan for ecosystem and economic recovery of the Gulf Coast;

- 30 percent for states' plans based on impacts from the *Deepwater Horizon* oil spill;
- 2.5 percent to create the Gulf Coast Ecosystem Restoration Science, Observation, Monitoring and Technology Program within the Department of Commerce's National Oceanic and Atmospheric Administration (NOAA); and
- 2.5 percent to the Centers of Excellence Research grants, which will each focus on science, technology, and monitoring related to Gulf restoration.

## Supplemental Environmental Projects

A civil action settlement may also include Supplemental Environmental Projects (SEPs), which is a tool used by the EPA and DOJ in settlements in environmental enforcement actions. The EPA describes SEPs as environmentally beneficial projects that a violator agrees to undertake when settling an enforcement action. The purpose of a SEP is to provide environmental or public health benefits beyond those required to remediate environmental damages.

## BP Criminal Settlement

On November 15, 2012, DOJ announced an agreement with BP to resolve criminal charges against the company related to the *Deepwater Horizon* disaster. In total, BP agreed to pay \$4 billion to resolve the criminal charges. A portion of the monies, \$2.394 billion, was directed to the National Fish and Wildlife Foundation (NFWF) for natural resources restoration in the Gulf of Mexico. Approximately \$1.2 billion of the funds directed to NFWF is dedicated to targeting Louisiana impacts by using the funds to "create or restore barrier islands off the coast of Louisiana and/or to implement river diversion projects on the Mississippi and/or Atchafalaya Rivers for the purpose of creating, preserving and restoring coastal habitat". The agreement states that NFWF must consider the Coastal Master Plan and the Mississippi River Hydrodynamic and Delta Management Study "to identify the highest priority projects, and to maximize the environmental benefits of such projects." If approved by the Court, the payments will be structured over a five-year period. The criminal fines do not impact the BP's liability for additional civil penalties from CWA violations.

As we work to restore our coast from the impacts and losses associated with the *Deepwater Horizon* oil spill it is important that we have a common vision. The Coastal Master Plan will play a crucial role in the selection and development of projects during oil spill restoration planning.

## Harvard on the Bayou

Recognizing the challenges national governments face in overseeing vast water systems that cross local jurisdictional boundaries, Harvard University's Environmental Law Program and Water Security Initiative sent teams of students to Australia, Brazil, Pakistan and areas of the United States to study the legal, policy and technical challenges of managing water across state boundaries. The teams' findings were reported at a symposium on the Harvard campus entitled "Water Federalism: Comparative Perspectives on Water Institutions in Federal Systems."



Harvard University students Jonathan Baker, Kim Smet, William Niebling, Sarah Katz and Laila Kasuri tour Louisiana's wetlands as part of Harvard's international Water Security Initiative.

### **Reporting on the Mississippi River's Federal oversight system, the student team found:**

The speed and efficiency of Federal government action have declined dramatically in recent decades, threatening the ability of the USACE to execute its priorities. Over that time, the number of procedures, forms, assessments, permits, and public consultations that must be undertaken prior to implementing any kind of engineering work has increased drastically.

Each process often needs to be completed multiple times during one single project, and it is possible to cycle indefinitely between stages, or become stalled at any particular stage.

The combination of the parts appears to have resulted in a dysfunctional procedure that does not achieve its ends efficiently, quickly, or cost-effectively. Instead, the current gridlock achieves the goals of none of the interested parties. A successful response would likely entail reconsideration of how the Federal government authorizes and executes spending and of the extent to and manner in which environmental impacts should be considered prior to action.



# HARVARD WATER SECURITY INITIATIVE Harvard University



The eyes of the world are turning to Louisiana as we develop the strategies, engineering, logistics and experience that can serve as good examples to a world threatened by a changing climate and sea level rise. The London, England-based International Water Association featured Louisiana's Coastal Master Plan as its cover story feature; CNN highlighted the New Orleans Hurricane Protection System as a model New York City and other coastal communities might have to emulate in light of Super Storm Sandy; and Harvard University sought the input of CPRA Chair Garret Graves during a symposium on the challenges faced by governments worldwide in coping with issues that the CPRA faces every day.

## Jobs and Economic Development

Numerous studies conclude the economic impact of coastal protection and restoration projects is substantial.

- 2010 spending on restoration only: \$618 million created 8,900 total jobs (4,880 direct jobs) and \$1.1 billion in sales
- Future investments in restoration of \$400 million to \$1 billion: Potential 10,300 total jobs and \$720 million to \$1.35 billion in sales per year

Green Jobs Impact Study,  
Louisiana Workforce Commission, 2011

Coastal restoration can create 30 jobs per \$1 million invested:

- Represents two times the job multiplier of the oil & gas and road construction industries combined

Jobs & Dollars: Big Returns from Coastal Habitat Restoration,  
Restore America's Estuaries, 2011

Potential impact of \$25 billion in restoration funding to the Gulf Coast as a result of Clean Water Act fines and the RESTORE Act:

- Moderate forecast: 77,453 incremental jobs in the Gulf Coast region over 50 years
- Equivalent to 29.5 jobs per million dollars invested

Study, Job Creation from Gulf Coast Wetlands Restoration,  
Walton Foundation, June 2012

Louisiana has the highest concentration of firms working in coastal restoration, 42% of the national total.

Center on Globalization, Governance & Competitiveness,  
Duke University, 2011

Weeks Marine invested \$41 million in its new cutter dredge, the C.R. McCaskill. Christened at Houma, La., in the summer of 2012, the dredge is now at work clearing Louisiana waterways and helping to rebuild barrier islands, creating at least 125 direct jobs.

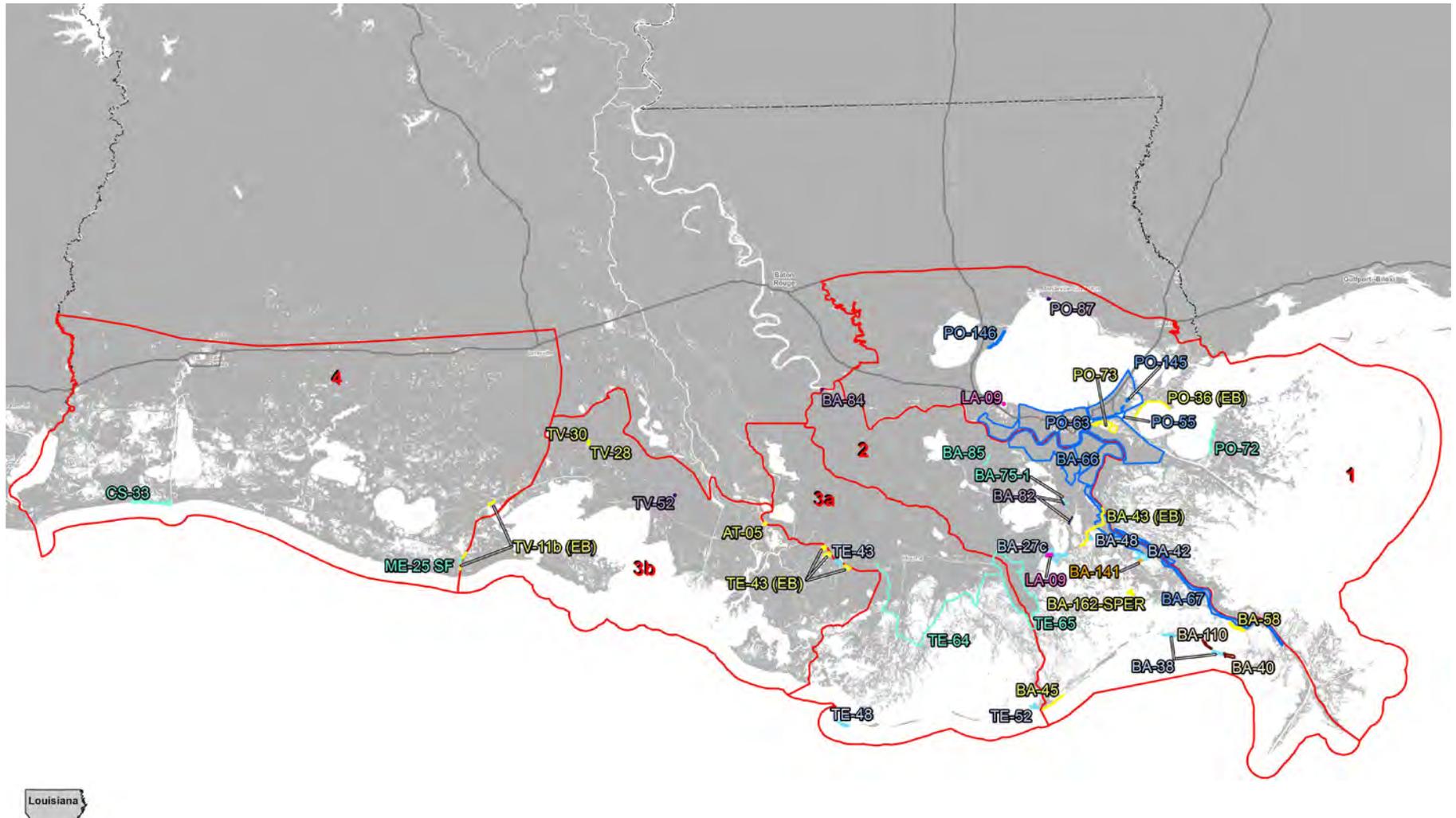


► **Table 2-1: Projects Scheduled to be in Construction in FY 2013**

Project ID	Project Name	Construction Start Date <sup>1</sup>	Construction Finish Date	State Construction Budget
<b>CWPPRA Phase II Projects</b>				
BA-27C	Barataria Basin Landbridge Shoreline Protection, Phase 3-CU7 & 8	08-May-06	28-Sep-15	\$3,765,298
BA-38	Pelican Island and Pass La Mer to Chalard Pass Restoration	27-Jul-05	28-Nov-12	\$7,746,554
BA-42	Lake Hermitage Marsh Creation	29-Sep-11	17-Sep-14	\$5,498,186
BA-48	Bayou Dupont Marsh and Ridge Creation Project	23-Apr-13	23-Dec-15	\$5,343,343
TE-43	GIWW Bank Restoration of Critical Areas in Terrebonne	08-Feb-13	02-Feb-15	\$1,692,940
TE-48	Raccoon Island Shoreline Protection/Marsh Creation Project	23-Jan-08	08-Jun-13	\$2,896,736
TE-52	West Belle Pass Barrier Headland Restoration	27-May-11	26-Nov-12	\$5,509,158
<b>CWPPRA Demonstration Projects</b>				
LA-09	Sediment Containment System for Marsh Creation Demonstration	01-Jun-11	10-Feb-14	\$117,197
<b>CIAP Projects</b>				
AT-05	Morgan City Industrial Road	29-Apr-13	08-Sep-14	\$165,000
BA-43 (EB)	Mississippi River Long Distance Sediment Pipeline <sup>2</sup>	23-Apr-13	04-Aug-15	\$57,269,428
BA-45	Caminada Headland Beach and Dune Restoration <sup>2</sup>	08-Oct-12	13-Nov-14	\$59,512,673
BA-58	Fringe Marsh Repair	19-Jun-12	28-Jan-14	\$2,300,000
BA-162-SPER	Shoreline Protection Emergency Restoration	29-Apr-13	19-Mar-14	\$150,000
PO-36 (EB)	Orleans Land Bridge Shoreline Protection and Marsh Creation	10-Jan-11	28-Jun-13	\$20,860,000
PO-73	Central Wetlands Demonstration	22-Aug-11	31-Jul-14	\$2,750,000
TE-43 (EB)	GIWW Bank Restoration (CIAP) of Critical Areas of Terrebonne	13-Feb-09	29-Apr-13	\$7,826,906
TV-11B (EB)	Freshwater Bayou Bank Stabilization (CIAP)	16-Jan-13	05-Feb-15	\$10,560,000
TV-28	Port of Iberia Bridge Replacement - Port Road over Commercial Canal	09-Jan-12	1-Apr-13	\$500,000
TV-30	Port of Iberia Bridge Replacement - David Dubois Road over Commercial Canal	09-Jan-12	1-Apr-13	\$570,000
<b>State-Only Projects</b>				
BA-75-1	Jean Lafitte Tidal Protection	27-Mar-13	10-Dec-14	\$12,230,000
BA-85	St. Charles West Bank Hurricane Protection Levee	15-Apr-13	30-Dec-14	\$2,231,574
CS-33	Cameron Parish Shoreline Restoration	10-Aug-12	14-Aug-14	\$42,445,299
ME-25 SF	Marsh Creation Near Freshwater Bayou	31-Jan-13	18-Jul-14	\$4,628,116
PO-72	Biloxi Marsh	31-May-12	18-Feb-15	\$18,500,000
TE-64	Morganza to the Gulf	30-Nov-05	24-Sep-15	\$120,734,763
TE-65	Larose to Golden Meadow - Flood Protection	06-Jan-09	14-May-14	\$19,820,000
TE-111	Valentine to Larose	1-Apr-13	30-Aug-13	\$500,000

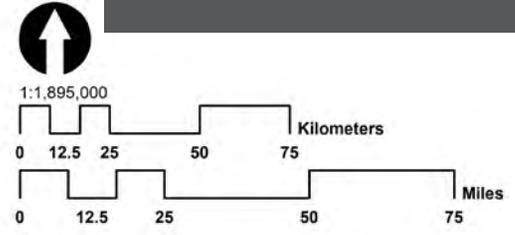
► **Table 2-1: Projects Scheduled to be in Construction in FY 2013**

Project ID	Project Name	Construction Start Date <sup>1</sup>	Construction Finish Date	State Construction Budget
<b>CDBG Projects</b>				
BA-82	Lafitte Area Levee Repair	22-Apr-13	02-Sep-14	\$216,563
BA-84	Bayou Lafourche Fresh Water District - Walter S. Lemann Memorial Pump Station Renovations	24-Jan-13	13-Jan-15	\$2,128,521
PO-87	Madisonville Bulkhead Project <sup>2</sup>	22-Oct-12	23-Apr-14	\$1,874,999
TV-52	Franklin Floodgate Sinkable Barge and Pump Station <sup>2</sup>	05-Jul-12	17-Oct-14	\$4,700,000
<b>HSDRRS Projects<sup>3,4</sup></b>				
BA-66	West Bank and Vicinity	06-Nov-08	28-Mar-16	\$4,429,661,325
BA-67	New Orleans to Venice	09-Jan-06	27-Jun-17	\$1,500,000,000
BA-74	Storm-Proofing of Interior Pumping Stations	17-Aug-07	28-Feb-14	\$340,000,000
PO-55	Lake Pontchartrain & Vicinity Lake Borgne Surge Barrier LPV-IHNC-02	08-Apr-08	21-Mar-13	\$1,134,000,000
PO-57	SELA-Overall	18-Feb-09	14-Jun-17	\$1,073,380,000
PO-63	Lake Pontchartrain and Vicinity	07-Jul-09	14-Mar-14	\$3,852,000,000
PO-145	LPV Task Force Guardian Mitigation- Bayou Sauvage	01-Mar-12	18-Aug-14	\$782,335
PO-146	Previously Authorized Mitigation LPV- Manchac	07-Jan-12	9-Apr-14	\$21,000,000
<b>Berm to Barrier Projects</b>				
BA-40	Riverine Sand Mining/Scofield Island Restoration	14-Dec-11	13-Mar-14	\$58,338,408
BA-110	Shell Island East- BERM	14-Dec-12	9-Dec-14	\$44,800,000
<b>NRDA Projects</b>				
BA-141	Lake Hermitage Marsh Creation, Increment 2	15-Mar-12	17-Sep-14	\$13,900,000
<b>Notes</b>				
<ol style="list-style-type: none"> <li>1. Construction start date is defined as projected date for advertisement of construction bid notice; actual date of mobilization may vary.</li> <li>2. Project partially funded with Surplus funds.</li> <li>3. Full construction budget is presented.</li> <li>4. Pending completion of approval process.</li> </ol>				



- Planning Units**
- |  |   |  |  |
|--|---|--|--|
| <span style="border: 1px solid red; display: inline-block; width: 15px; height: 10px;"></span> CWPBRA PHASE II                   | <span style="background-color: #FFD700; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> CWPBRA DEMO | <span style="background-color: #90EE90; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> STATE ONLY | <span style="background-color: #FFD700; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> NRDA |
| <span style="background-color: #800080; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> CDBG | <span style="background-color: #FFD700; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> CIAP        | <span style="background-color: #4169E1; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> HSDRRS     | <span style="background-color: #FFD700; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> BERM |

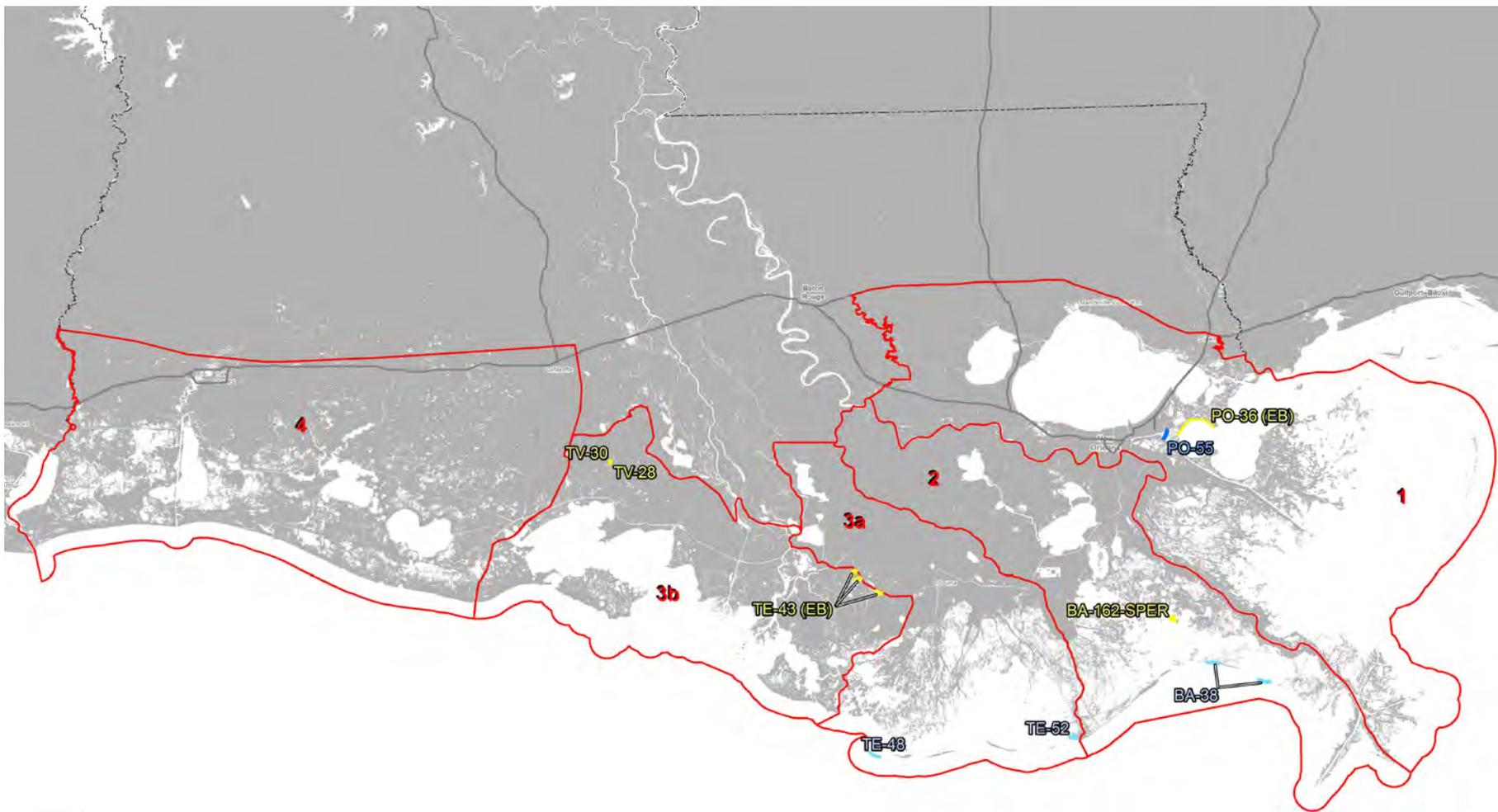
▶ Map 2-1: Projects Scheduled to be in Construction in FY 2013



Projects not included on map:		
BA-74	HSDRRS	PU1,PU2
PO-57	HSDRRS	PU1
TE-111	STATE	PU3a

► **Table 2-2: Projects Scheduled to Complete Construction in FY 2013**

Project ID	Project Name	Construction Start Date <sup>1</sup>	Construction Finish Date	State Construction Budget
<b>CWPPRA Phase II Projects</b>				
BA-38	Pelican Island and Pass La Mer to Chalant Pass Restoration	27-Jul-05	28-Nov-12	\$7,746,554
TE-48	Raccoon Island Shoreline Protection/Marsh Creation Project	23-Jan-08	18-Jun-13	\$2,896,736
TE-52	West Belle Pass Barrier Headland Restoration	27-May-11	26-Nov-12	\$5,509,158
<b>CIAP Projects</b>				
BA-162-SPER	Shoreline Protection Emergency Restoration	29-Apr-13	19-Mar-14	\$150,000
PO-36 (EB)	Orleans Land Bridge Shoreline Protection and Marsh Creation	10-Jan-11	28-Jun-13	\$20,860,000
TE-43 (EB)	GIWW Bank Restoration (CIAP) of Critical Areas of Terrebonne	13-Feb-09	29-Apr-13	\$7,826,906
TV-28	Port of Iberia Bridge Replacement - Port Road over Commercial Canal	09-Jan-12	1-Apr-13	\$500,000
TV-30	Port of Iberia Bridge Replacement - David Dubois Road over Commercial Canal	09-Jan-12	1-Apr-13	\$570,000
<b>HSDRRS Projects<sup>2,3</sup></b>				
PO-55	Lake Pontchartrain & Vicinity Lake Borgne Surge Barrier LPV-IHNC-02	08-Apr-08	21-Mar-13	\$1,134,000,000
<b>Notes</b>				
1. Construction start date is defined as projected date for advertisement of construction bid notice; actual date of mobilization may vary.				
2. Full construction budget is presented.				
3. Pending completion of approval process.				



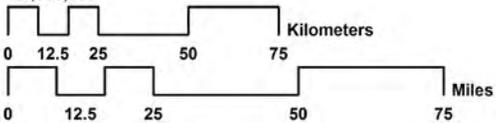
**Planning Units**

-  CWPRA PHASE II
-  CIAP
- 

-  HSDRRS



1:1,895,000

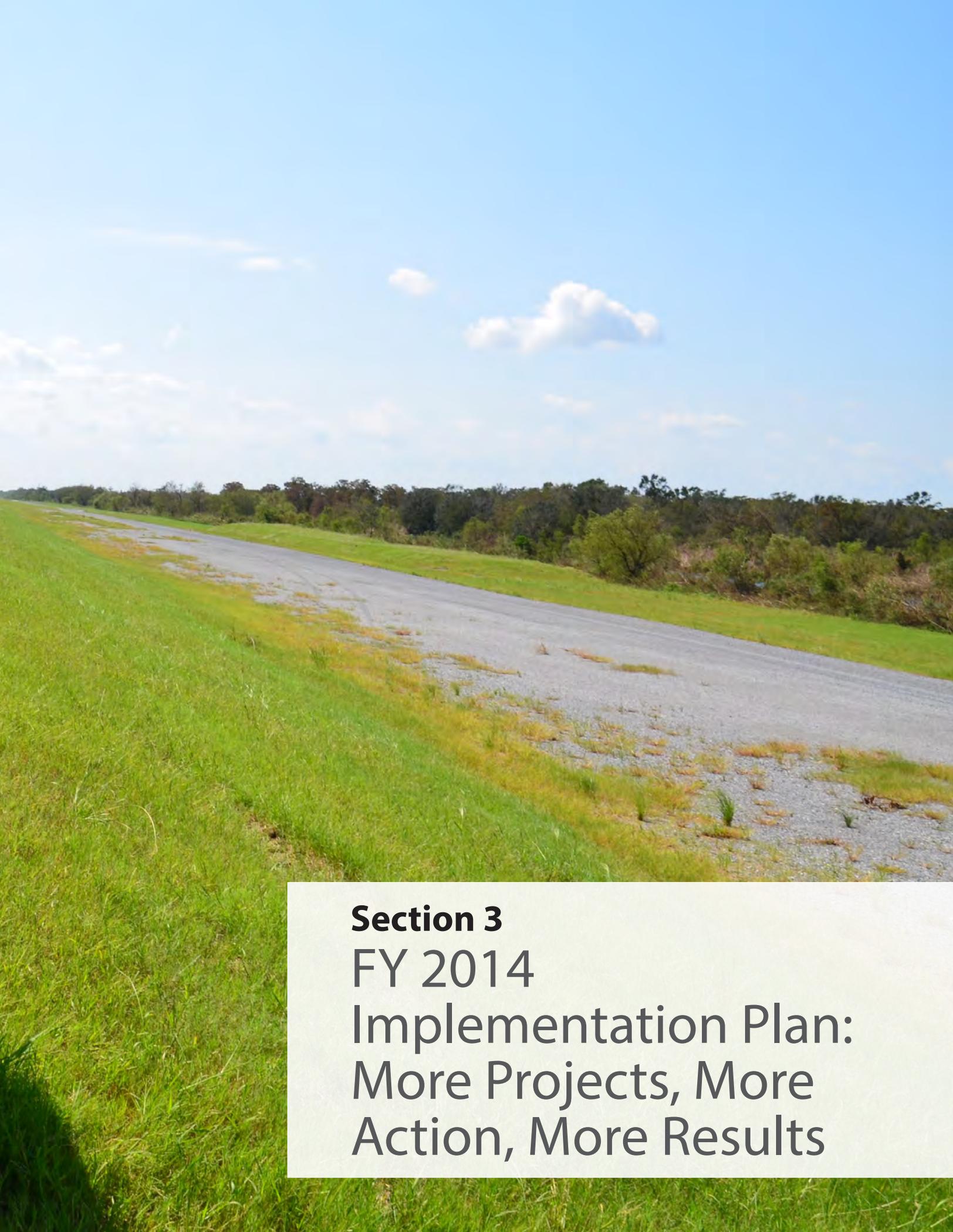


► **Map 2-2: Projects Scheduled for Completion in FY 2013**



**CPRA**

**CPRA**



## **Section 3**

FY 2014

Implementation Plan:  
More Projects, More  
Action, More Results

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## Section 3

# FY 2014 Implementation Plan: More Projects, More Action, More Results

This section presents an implementation plan that describes the State's proposed investment in coastal restoration and protection during FY 2014 (July 1, 2013, through June 30, 2014). Included are all 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.

## Project Status Summaries

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 (OM&M). 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 2014 are presented in Figures 3-1 through 3-3.

## Projects in Planning

The planning team identified 10 projects in the planning phase in FY 2014, including one protection project, seven restoration projects, and two integrated protection and restoration projects. These projects represent a total State investment of \$23.3 million in FY 2014, and will proceed to design and construction according to their authorizing program as discussed in the Coastal Program Details section.

## Projects in Design

The planning team identified 41 projects in design for FY 2014, including three protection projects and 38 restoration projects. These projects represent a total State investment of \$66.8 million in FY 2014. 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

The planning team identified 57 projects that will begin or continue construction in FY 2014, including 18 protection projects, 37 restoration projects, and two infrastructure projects. These projects represent a total State investment of \$538 million in FY 2014, and 11 of these projects are projected to complete construction in FY 2014. Table 3-1 presents additional information about projects set for construction in FY 2014, and Figure 3-4 provides a map with the locations of these projects. Several of these projects are described in Section 2.

## Constructed Projects in Operation, Maintenance, and Monitoring

The CPRA will expend approximately \$17.9 million in FY 2014 on operation, maintenance, and monitoring (OM&M) in FY 2014. OM&M expenditures in FY 2014 will cover the operation and maintenance of 95 constructed projects and monitoring of 53 constructed projects. OM&M expenditures also include approximately \$1.2 million for monitoring coast-wide conditions using CRMS-Wetlands (<http://www.lacoast.gov/crms2/Home.aspx>). Finally, the State will expend \$860,000 in FY 2014 to engage in marine debris removal in offshore areas.

These expenditures are fully 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 2014. 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](http://www.coastal.la.gov)). The Operating Plans for the Caernarvon and Davis Pond diversions during calendar year 2013 (Caernarvon Operational Plan for 2013 and Davis Pond Operational Plan for 2013) are contained in Appendix D.

## Ongoing Programs

The State operates eight ongoing programs. These efforts provide supporting research, financial assistance, additional project benefits or educational support for our protection and restoration program.

## Adaptive Management

The Coastal Master Plan process recognizes that we need to quickly implement large scale projects within an extremely dynamic environment. We will continue to build on the decades of research and analysis performed to date, but we must move forward to maximize riverine resources even though our science may be imperfect. 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.

## Coastal Program Details

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 EPA, the U.S. Fish and Wildlife Service (USFWS), the Natural Resources Conservation Service (NRCS), the National Marine Fisheries Service (NMFS), and the USACE. 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 2014 on the implementation of 19 CWPPRA Phase 1 projects (design) and 12 CWPPRA Phase 2 projects (design and construction) and the Coastwide Planting program. Finally, the State is participating in two CWPPRA demonstration projects, the results of which will be incorporated into the design of future projects. Active CWPPRA projects include the following:

- Northwest Turtle Bay Marsh Creation (BA-125) (Phase 1)
- Cole's Bayou Marsh Creation (TV-63) (Phase 1)
- South Lake Lery Marsh Creation (BS-16) (Phase 2)
- Bayou Dupont Marsh and Ridge Restoration (BA-48) (Phase 2)

## Water Resources Development Act (WRDA)

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](http://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.

The State is partnered with the USACE on multiple large-scale protection and restoration projects 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. Active WRDA projects are discussed by category below.

**WRDA 2007, Title VII (LCA Study).** WRDA 2007, Title VII enacted several recommendations from the LCA Study, which was released in 2004. The LCA Study evaluated 20 parishes in the Louisiana coastal area from Mississippi to Texas, with the objective of identifying critical human/ecological needs, identifying near-term restoration measures that address those needs, and presenting a strategy for addressing the long-term needs of coastal Louisiana beyond the near-term focus of the LCA Plan. WRDA 2007 authorized several of the study's recommendations, including: construction of five near-term critical restoration projects for which planning and design were already underway; the study of 10 additional near-term critical restoration projects, the Mississippi River to the Gulf Outlet ecosystem restoration project, several protection projects, and multiple investigations into large-scale concepts; and the establishment of a demonstration project program, a beneficial use of dredged material program, and a Science and Technology program.

The State currently intends to expend funds on the planning and/or design of five LCA projects in FY 2014, including:

- Medium Diversion with Dedicated Dredging at Myrtle Grove (BA-71)
- Small Diversion at Convent/Blind River (PO-68)
- Mississippi River Hydrodynamic and Delta Management Study (MR-16)
- Medium Diversion at White Ditch (BS-20)
- Barataria Basin Barrier Shoreline Restoration (LA-10)

Schedules for these projects are presented in Table 3-3. Additional information about these projects is available at [www.lca.gov](http://www.lca.gov).

LCA projects receive Federal funding for planning and design and will proceed through these phases in accordance with the schedules provided in Table 3-3. The State is responsible for 50 percent of planning costs and 35 percent of design costs. LCA project construction is subject to the appropriation of Federal construction funds from Congress, with the State being responsible for 35 percent of the total construction cost. Project-specific expenditures for LCA projects are presented in Appendix B.

**Future WRDA Authorizations.** The State has signed cost-share agreements with the USACE on two other projects that are currently authorized for study and are anticipated to be authorized for construction in subsequent WRDAs. These projects include the Donaldsonville to the Gulf Hurricane Protection Project (BA-115) and the Southwest Coastal Louisiana Feasibility Study (LA-20). Under the cost-share agreements, the State is responsible for 50 percent of study costs for both projects, which would proceed with implementation upon WRDA authorization and appropriation of Federal construction funds from Congress. Currently there are no Federal funds to continue the Southwest Coastal Feasibility Study, but the State has requested approval from the Assistant Secretary of the Army (Civil Works) to pursue the study under other authority and seek reimbursement of the Federal share after construction. Schedules for these projects are included in Table 3-3. Project-specific expenditures are presented in Appendix B.

Because WRDA projects are generally dependent upon Congressional appropriation for construction funding, Federal fund procurement is the principal issue that could affect project implementation. Other issues affecting WRDA projects include cost-share agreement issues with Federal partners, land rights issues, and permitting issues.

## Coastal Impact Assistance Program (CIAP)

CIAP was authorized in 2005 as part of the Federal Energy Policy Act to help six coastal States mitigate the onshore effects of Outer Continental Shelf (OCS) oil and gas development. CIAP will provide approximately \$495.6 million to Louisiana from the federal administrator, the USFWS. The State will receive 65 percent of these funds with the remaining 35 percent being distributed to the 19 coastal parishes. To date, approximately \$486 million of Louisiana's CIAP funds have gone into implementation of 96 projects (97 percent of total Louisiana CIAP projects).

Authorized uses of CIAP funds include projects and activities to conserve, protect or restore coastal areas, including wetlands; mitigation of damage to fish, wildlife or natural resources; planning assistance and the administrative costs of CIAP compliance; implementation of a Federally approved marine, coastal or comprehensive conservation management plan; and onshore infrastructure projects and public service needs. Up to 23 percent of those funds can be spent on CIAP planning assistance and compliance and for onshore infrastructure projects and public service needs to mitigate OCS impacts.

The current approved Louisiana CIAP Plan identifies a total of 99 State only, State/Parish-Shared, and Parish-only funded projects for which these funds were allocated.

The State will expend funds on the design and/or construction of 15 CIAP projects in FY 2014, including 10 restoration projects and two infrastructure projects. CIAP funds will also continue to be used to fund the CFCI program and five Performance Evaluation studies of constructed CIAP projects. Active CIAP projects include:

- Caminada Headland Beach and Dune Restoration and Marsh Creation (BA-45)
- Mississippi River Long Distance Sediment Pipeline (BA-43 [EB])
- Morgan City Industrial Road (AT-05)

- Mississippi River Water Introduction into Bayou Lafourche (BA-161)
- Living Shoreline Protection Demonstration Project (PO-148)
- Falgout Canal Freshwater Enhancement (TE-63)

Project schedules for CIAP projects are included in Table 3-4. Additional information about these projects is available on the State's coastal website. Project specific expenditures for CIAP projects are presented in Appendix B.

Projects within the approved CIAP plan are funded for implementation by approval of CIAP grant applications which were submitted to USFWS for approval and were required to be submitted separately for the design and construction phases of a project. Once the grant application is approved, the CIAP projects are authorized and the phase of the project is funded. Once the design of the project is completed, applications for the construction phase can be submitted. Once the construction grant application is approved, the project is fully funded and will proceed to construction according to its schedule. Principal causes for the delay of CIAP projects include grant delays, land rights issues, permitting issues, and most recently the transfer of the federal administration of CIAP.

## 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., Mississippi River Long Distance Sediment Pipeline [BA-43 (EB)], Southwest Coastal Louisiana Feasibility Study [LA-20]) 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 2014 on 17 State-only projects, including 10 protection projects, six restoration projects, and one integrated protection and restoration project. Broadly speaking, State-only projects generally involve one of the following categories:

- Expedited construction of components of Federal protection projects (e.g., Larose to Golden Meadow [TE-65], Morganza to the Gulf [TE-64]);
- Coordination on Federal-only protection projects (e.g., Storm-Proofing of Interior Pumping Stations [BA-74]);
- Feasibility studies for flood protection in areas not currently covered by the existing Federal protection network (e.g., South Central Hurricane Protection Plan [TV-54]);
- 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-75-1], Morgan City/St. Mary Flood Protection [TV-55]); and
- Augmented design or construction of projects in other coastal programs (e.g., Medium Diversion with Dedicated Dredging at Myrtle Grove [BA-71], Caminada Headland Beach and Dune Restoration [BA-45]).

A total of \$293.3 million in 2008 and 2009 was allocated to cover LERRDS cost for the Greater New Orleans Hurricane Protection System. 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 Greater New Orleans Hurricane Protection System work underway. The non-Federal cost share of such work is estimated to be \$1.8 billion plus applicable interest. Under the plan, \$100 million of these funds advance planning, engineering, design and construction of hurricane protection and flood control projects in southeast Louisiana during the 2013-2014 fiscal year. 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 2016.

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

Of the 17 active State-only projects, 11 are funded for construction and will proceed to construction in accordance with their schedules as presented in Table 3-5. Two projects have completed construction, and the remaining surplus funds will be used to implement OM&M activities for the next two fiscal years. Two of the projects are funded for design and following completion of design will proceed to construction upon procurement of construction funds. The remaining two projects are funded for feasibility only and would proceed to design upon receipt of further authorization through another coastal program.

## Community Development Block Grants (CDBG)

Louisiana received \$1.06 billion from FEMA'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. FEMA subsequently approved nine projects for CDBG funding.

Project schedules for CDBG projects are included in Table 3-6. Project-specific expenditures for CDBG projects are presented in Appendix B.

All State CDBG projects are funded for construction and will proceed to construction in accordance with their schedules as presented in Table 3-6. 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. OCD-DRU has already

performed a pre-screening of all nine State CDBG projects and has determined that the projects meet these 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)

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. Beginning in FY 2014 the non-Federal sponsor is anticipated to begin its 30 year payback to the federal government for the non-Federal sponsor's cost-share portion of construction costs (approximately 35 percent). Schedules for HSDRRS projects are included in Table 3-7. These projects are fully funded for construction and will proceed with construction according to the schedules provided in Table 3-7. The principal issues that affect the HSDRRS projects include engineering, constructability, budget and time issues.

## Berm to Barrier Projects

The construction of the Barrier Berm projects introduced a significant amount of sediment into the State's barrier island systems. To maximize this opportunity and to improve resiliency of the material placed during construction of the berms, the State plans to convert existing barrier berms into barrier island restoration projects. The State plans to use approximately \$105 million of Berm Enhancement Funding to construct the Riverine Sand Mining/Scofield Island Restoration (BA-40) project designed under CWPPRA. Any remaining funds will be applied to the Shell Island Restoration project (BA-110). Project schedules for Berm to Barrier projects are included in Table 3-8. Additional information about these projects is available on the State's coastal website. Project-specific expenditures for Berm to Barrier projects are presented in Appendix B.

## 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.

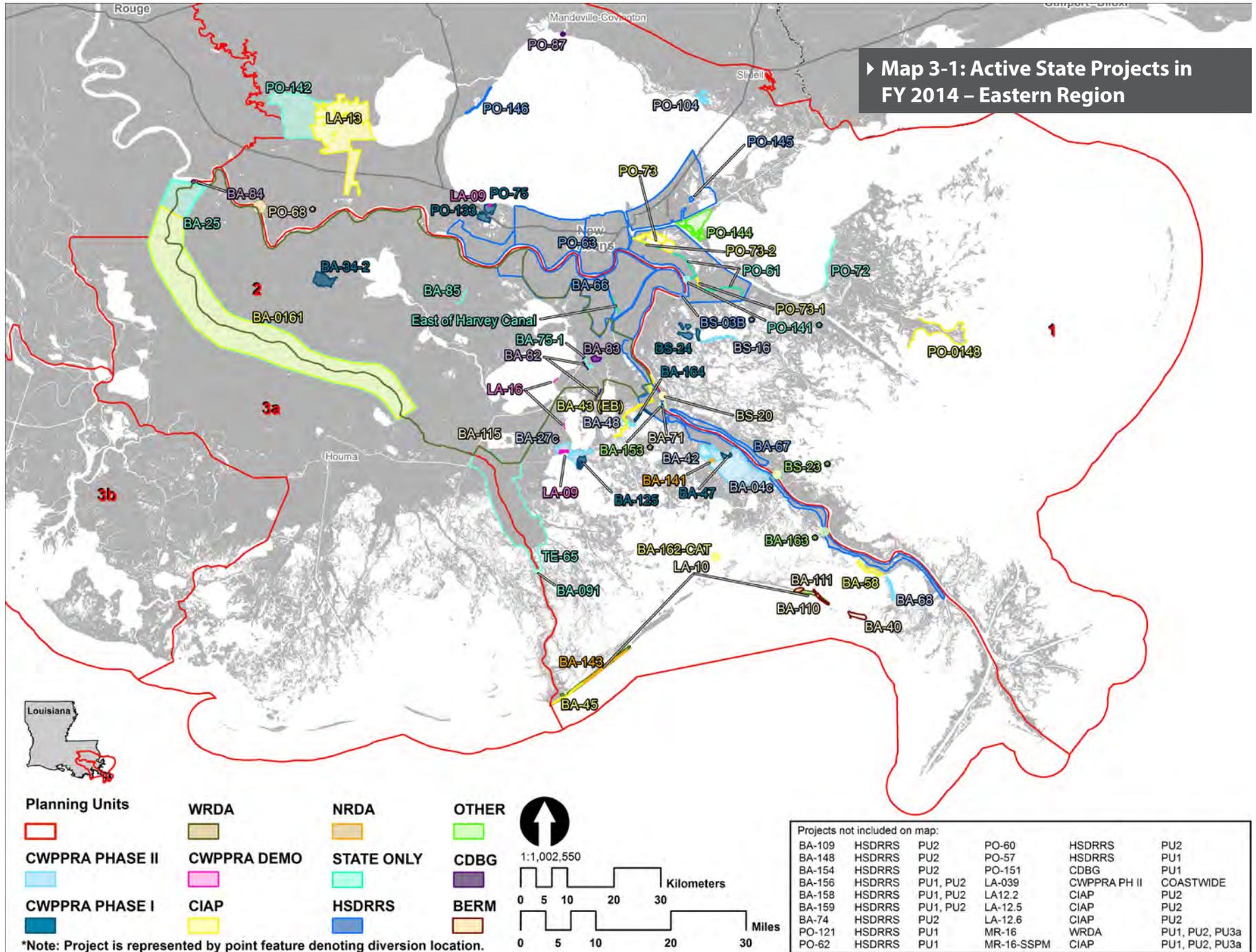
## Oil Spill Restoration Planning

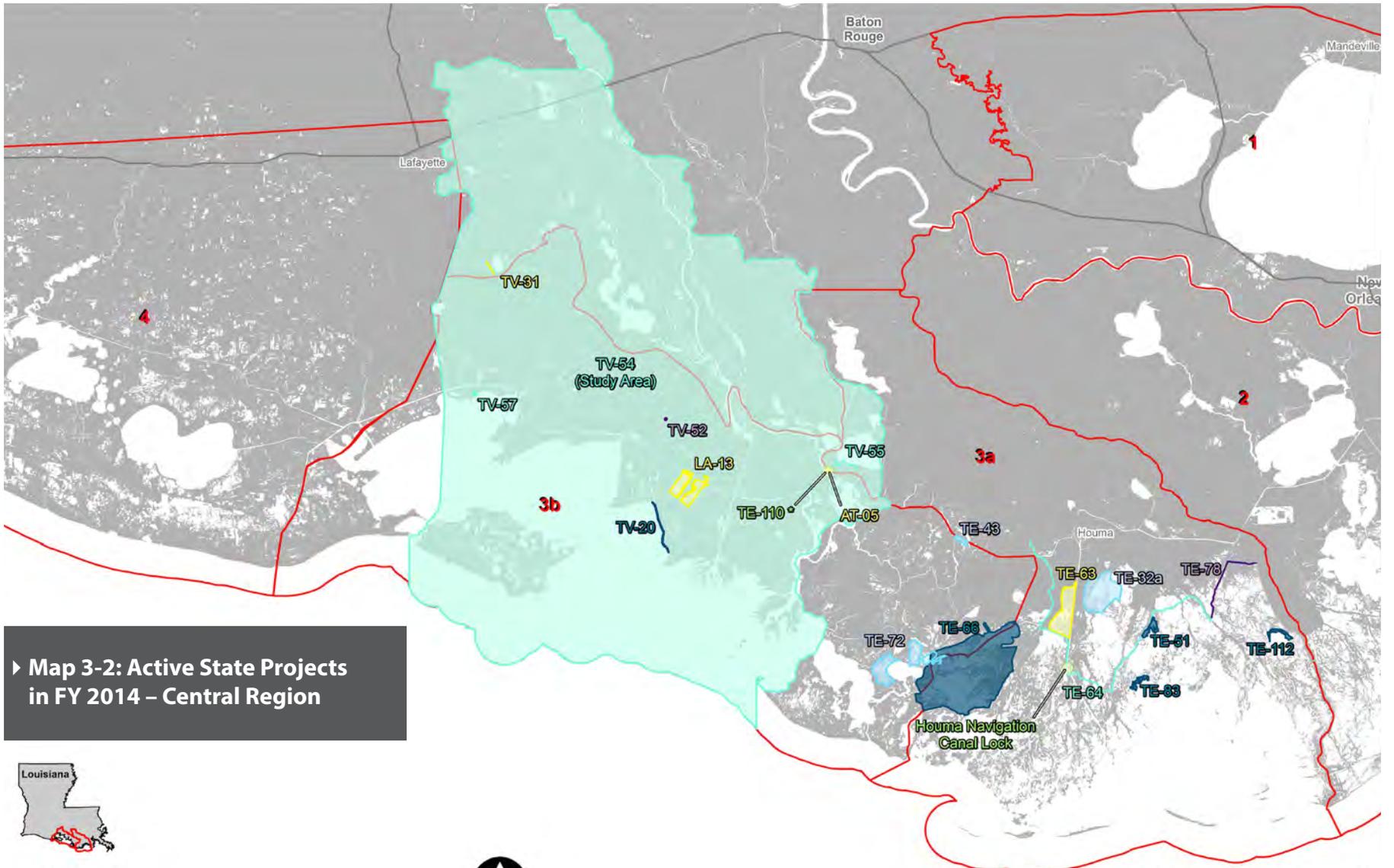
Although the timing and amount of funds related to the *Deepwater Horizon* oil spill have not been fully determined, preliminary oil spill restoration planning is underway. With an understanding that the use of restoration funds will be guided by specific criteria, Louisiana is committed to maximizing its investment in oil spill recovery activities by implementing restoration projects that are consistent with the Coastal Master Plan to the extent possible. Schedules for projects that may be implemented for oil spill restoration planning are presented in Tables 3-9 and 3-10. Project specific expenditures are presented in Appendix B.

## MOEX Settlement

As part of the *Deepwater Horizon* oil event, MOEX agreed to pay \$70 million in civil penalties. Each of the Gulf States received a portion of these penalty payments. Louisiana's portion, \$6,755,059, was directed to the Coastal Protection and Restoration Fund in accordance with Act 805 of 2012. As required by Act 805, these funds will be used for integrated coastal protection efforts, including coastal restoration, hurricane protection and improving the resiliency of the Louisiana Coastal Area affected by the *Deepwater Horizon* oil spill. Specifically, \$3,400,000 will be utilized to construct PO-142 Hydrologic Restoration of the Amite River Diversion Canal, \$750,000 will be paid to the Attorney General's Office for oil spill related legal service, \$2,585,059 will be utilized to cover expenses associated with Mississippi River Hydrodynamic modeling and \$20,000 will be utilized to cover administrative expenses associated with the land acquisition portion of the MOEX settlement.

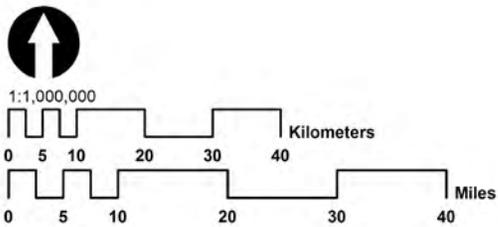
Map 3-1: Active State Projects in FY 2014 – Eastern Region





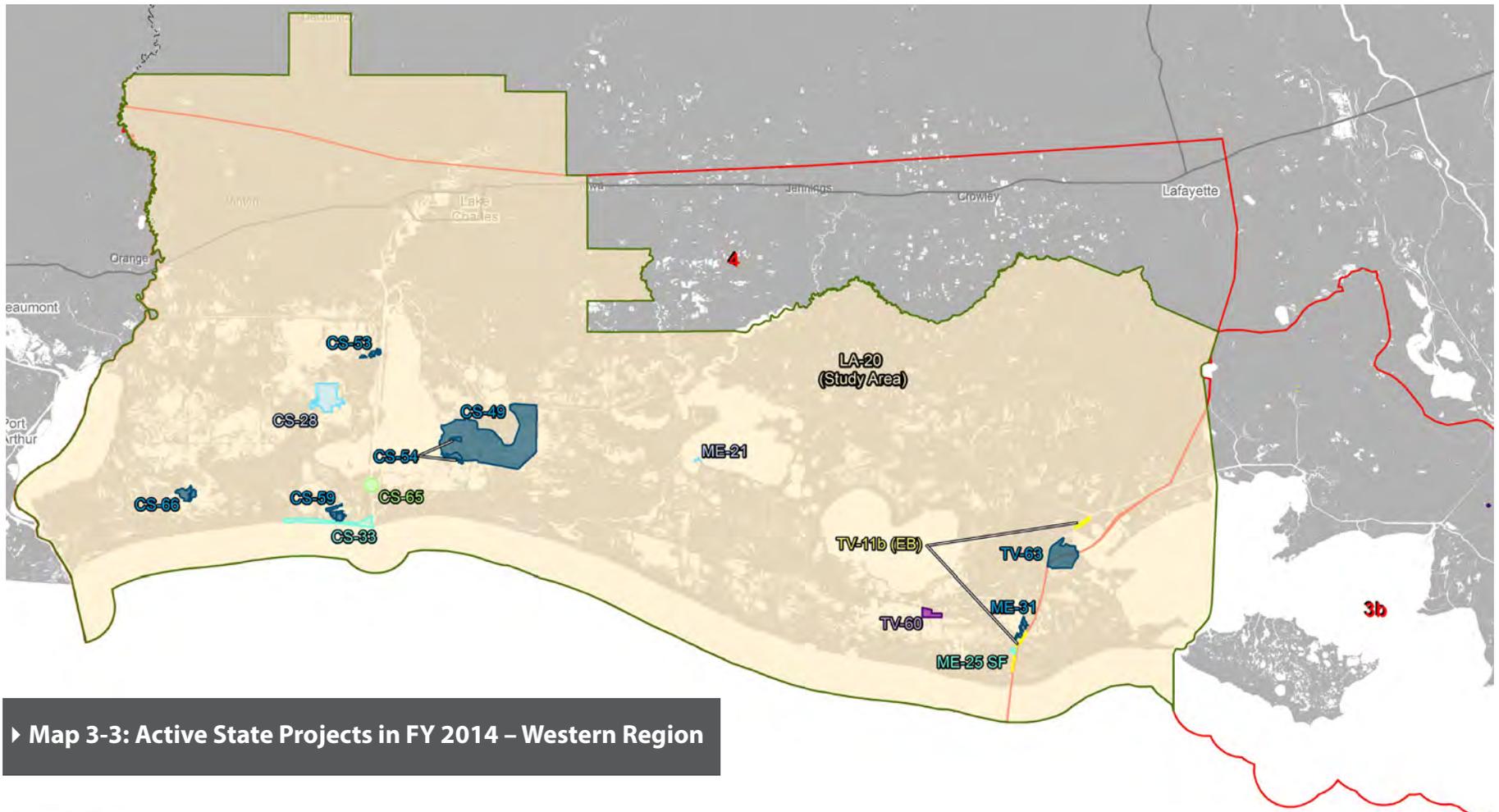
**Planning Units**

- CWPBRA PHASE II
- CWPBRA PHASE I
- STATE ONLY
- CIAP
- CDBG
- OTHER



Projects not included on map:		
AT-015	CIAP	PU3a, PU3b
LA-039	CWPBRA PH II	COASTWIDE
LA-12.3	CIAP	PU3b
LA-12.7	CIAP	PU2, PU3a
MR-16	WRDA	PU1, PU2, PU3a
MR-16-SSPM	CIAP	PU1, PU2, PU3a
TE-100	NRDA	PU3a
TE-108	STATE	PU3a
TE-111	STATE	PU3a

\*Note: Project is represented by point feature denoting diversion location.

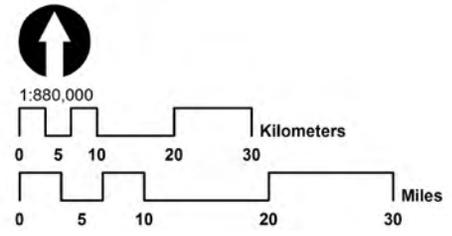


▶ Map 3-3: Active State Projects in FY 2014 – Western Region



**Planning Units**

- CWPBRA PHASE II
- CWPBRA PHASE I
- WRDA
- CIAP
- STATE ONLY
- CDBG
- OTHER



Projects not included on map:  
LA-039 CWPBRA PHII COASTWIDE

► **Table 3-1: Projects Scheduled to be in Construction in FY 2014**

Project ID	Project Name	Construction Start Date <sup>1</sup>	Construction Finish Date	State Construction Budget
<b>CWPPRA Phase II Projects</b>				
BA-04C	West Pointe a la Hache Outfall Management	26-May-14	17-Sep-15	\$298,807
BA-27C	Barataria Basin Landbridge Shoreline Protection, Phase 3-CU7 & 8	08-May-06	28-Sep-15	\$3,765,298
BA-42	Lake Hermitage Marsh Creation	29-Sep-11	17-Sep-14	\$5,498,186
BA-48	Bayou Dupont Marsh and Ridge Creation Project	23-Apr-13	23-Dec-15	\$5,343,343
BA-68	Grand Liard Marsh and Ridge Restoration	06-Nov-13	04-Feb-15	\$5,742,509
BS-16	South Lake Lery Shoreline and Marsh Restoration	15-Oct-13	18-Jun-15	\$4,470,149
TE-32A	North Lake Boudreaux Basin Freshwater Introduction and Hydrologic Management	14-Oct-13	30-Sep-15	\$2,263,452
TE-43	GIWW Bank Restoration of Critical Areas in Terrebonne	08-Feb-13	02-Feb-15	\$1,692,940
TE-72	Lost Lake Marsh Creation and Hydrologic Restoration	30-Dec-13	30-Jun-15	\$4,322,443
<b>CWPPRA Demonstration Projects</b>				
LA-09	Sediment Containment System for Marsh Creation Demonstration	01-Jun-11	10-Feb-14	\$117,197
LA-16	Non-rock Alternatives to Shoreline Protection Demonstration	27-Sep-13	22-Aug-14	\$718,991
<b>CIAP Projects</b>				
AT-05	Morgan City Industrial Road	29-Apr-13	08-Sep-14	\$165,000
BA-43 (EB)	Mississippi River Long Distance Sediment Pipeline <sup>2</sup>	23-Apr-13	04-Aug-15	\$57,269,428
BA-45	Caminada Headland Beach and Dune Restoration <sup>2</sup>	08-Oct-12	13-Nov-14	\$59,512,673
BA-58	Fringe Marsh Repair	19-Jun-12	28-Jan-14	\$2,300,000
BA-161	Mississippi River Water Reintroduction into Bayou Lafourche - BLFWD	11-Jun-14	30-Mar-16	\$18,350,000
BA-162-CAT	Shoreline Protection Cat Island	30-Jul-13	30-Apr-14	\$1,200,000
MR-16-SSPM	Mississippi River Delta Strategic Planning - SSPM Expansion	15-Sep-13	30-Mar-15	\$13,500,000
PO-73	Central Wetlands Demonstration	22-Aug-11	31-Jul-14	\$2,750,000
PO-73-1	Central Wetlands - Riverbend	15-Nov-13	15-Apr-15	\$1,800,000
PO-73-2	Central Wetlands - EBSTP to A2	15-Nov-13	1-Jul-15	\$4,280,000
TE-63	Falgout Canal Freshwater Enhancement	30-Mar-14	30-Jun-15	\$3,300,000
TV-11B (EB)	Freshwater Bayou Bank Stabilization (CIAP)	16-Jan-13	05-Feb-15	\$10,560,000
TV-31	Acadiana Regional Airport Street Improvements - Admiral Doyle Drive	01-Sep-13	31-Dec-15	\$602,500
<b>State-Only Projects</b>				
BA-75-1	Jean Lafitte Tidal Protection	27-Mar-13	10-Dec-14	\$12,230,000
BA-85	St. Charles West Bank Hurricane Protection Levee	15-Apr-13	30-Dec-14	\$2,231,573
CS-33	Cameron Parish Shoreline Restoration	10-Aug-12	14-Aug-14	\$42,445,299

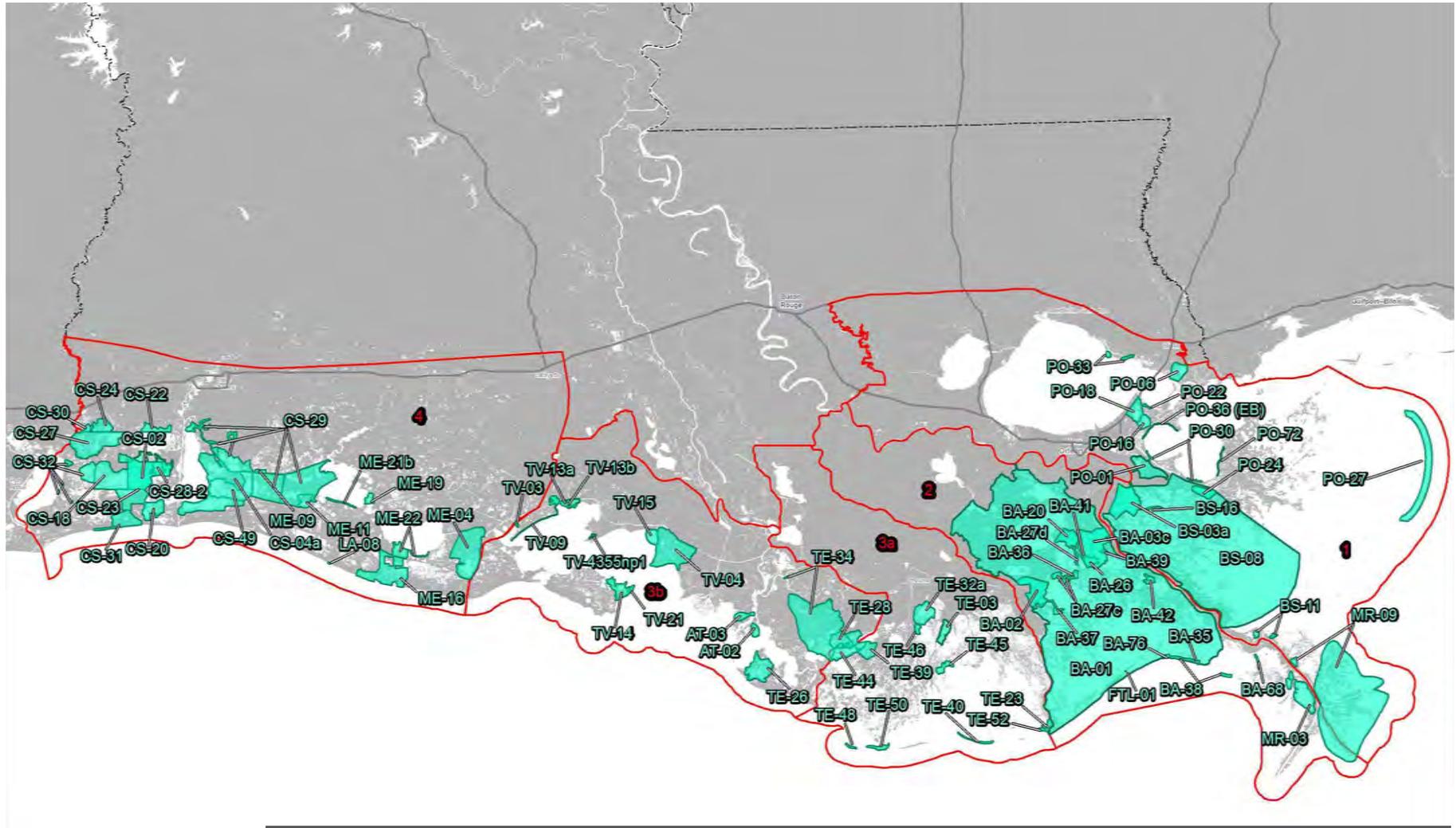
► **Table 3-1: Projects Scheduled to be in Construction in FY 2014**

Project ID	Project Name	Construction Start Date <sup>1</sup>	Construction Finish Date	State Construction Budget
ME-25 SF	Marsh Creation Near Freshwater Bayou	31-Jan-13	18-Jul-14	\$4,628,116
PO-61	Forty Arpent Levee	01-Jul-13	29-Jun-14	\$5,000,000
PO-72	Biloxi Marsh	31-May-12	18-Feb-15	\$18,500,000
TE-64	Morganza to the Gulf	30-Nov-05	24-Sep-15	\$120,734,763
TE-65	Larose to Golden Meadow - Flood Protection	06-Jan-09	14-May-14	\$19,820,000
TE-111	Valentine to Larose	01-Apr-13	30-Aug-13	\$500,000
<b>CDBG Projects</b>				
BA-82	Lafitte Area Levee Repair	22-Apr-13	02-Sep-14	\$216,563
BA-83	Rosethorne Wetland Assimilation Project	07-Mar-14	07-Nov-14	\$771,875
BA-84	Bayou Lafourche Fresh Water District - Walter S. Lemann Memorial Pump Station Renovations	24-Jan-13	13-Jan-15	\$2,128,522
PO-87	Madisonville Bulkhead Project <sup>2</sup>	22-Oct-12	23-Apr-14	\$1,874,999
TE-78	Cut-Off/Pointe Aux Chene Levee	01-Apr-14	16-Jul-15	\$5,718,044
TV-52	Franklin Floodgate Sinkable Barge and Pump Station <sup>2</sup>	05-Jul-12	17-Oct-14	\$4,700,000
TV-60	Front Ridge Chenier Terracing/Protection	03-Feb-14	20-Feb-15	\$1,224,301
<b>HSDRRS Projects<sup>3,4</sup></b>				
BA-66	West Bank and Vicinity	06-Nov-08	28-Mar-16	\$4,429,661,325
BA-67	New Orleans to Venice	09-Jan-06	27-Jun-17	\$1,500,000,000
BA-74	Storm-Proofing of Interior Pumping Stations	17-Aug-07	28-Feb-14	\$340,000,000
BA-148	Risk Reduction- Barataria Basin Landbridge	04-Mar-14	04-May-15	\$10,100,000
BA-156	Plaquemines TFU Mitigation - Braithwaite to Scarsdale - Big Mar	04-Mar-14	30-Sep-14	\$2,800,000
BA-158	New Orleans to Venice Mitigation - Plaquemines Non-Federal	03-Jun-14	15-Sep-16	\$14,500,000
BA-159	New Orleans to Venice Mitigation - Federal	03-Jun-14	15-Sep-16	\$30,000,000
PO-57	SELA-Overall	18-Feb-09	14-Jun-17	\$1,073,380,000
PO-60	Permanent Canal Closures and Pump Stations	04-Oct-13	09-Jun-17	\$750,000,000
PO-63	Lake Pontchartrain and Vicinity	07-Jul-09	14-Mar-14	\$3,852,000,000
PO-121	HSDRRS Mitigation- LPV	18-Feb-14	29-Mar-19	\$85,000,000
PO-145	LPV Task Force Guardian Mitigation- Bayou Sauvage	01-Mar-12	18-Aug-14	\$782,335
PO-146	Previously Authorized Mitigation LPV- Manchac	07-Jan-12	9-Apr-14	\$21,000,000
<b>Berm to Barrier Projects</b>				
BA-40	Riverine Sand Mining/Scofield Island Restoration	14-Dec-11	13-Mar-14	\$58,338,408
BA-110	Shell Island East- BERM	14-Dec-12	9-Dec-14	\$44,800,000

► **Table 3-1: Projects Scheduled to be in Construction in FY 2014**

Project ID	Project Name	Construction Start Date <sup>1</sup>	Construction Finish Date	State Construction Budget
<b>NRDA Projects</b>				
BA-141	Lake Hermitage Marsh Creation, Additional Increment	15-Mar-12	17-Sep-14	\$13,900,000
BA-143	Caminada Headland Beach and Dune Restoration Increment 2	06-May-14	23-May-16	\$130,707,000
<b>Notes</b>				
<ol style="list-style-type: none"> <li>1. Construction start date is defined as projected date for advertisement of construction bid notice; actual date of mobilization may vary.</li> <li>2. Project partially funded with Surplus funds.</li> <li>3. Full construction budget is presented.</li> <li>4. Pending completion of approval process.</li> </ol>				





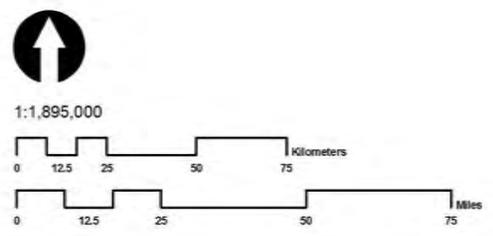
► Map 3-5: Constructed Projects with Operation, Maintenance and Monitoring Expenditures in FY 2014



**Planning Units**


OM&M PROJECTS



► **Table 3-2: Projected Three-Year Schedules for Active CWPPRA Projects (FY 2014 - 2016)**

Project ID	Project Name	Tier	Federal Sponsor	2014				2015				2016			
				1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
<b>CWPPRA Phase I Projects</b>															
BA-34-2	Hydrologic Restoration and Vegetative Planting in the Lac des Allemands Swamp	-	EPA	D	D	D	D	W	W	W	W	W	W	W	W
BA-47	West Pointe a la Hache Marsh Creation Project	1	NRCS	D	D	D	D	D	W	W	W	W	W	W	W
BA-125	Northwest Turtle Bay Marsh Creation	2	USFWS	D	D	D	D	D	D	W	W	W	W	W	W
BA-164	Bayou Dupont Sediment Delivery-Marsh Creation 3 <sup>1</sup>	-	EPA	D	D	D	D	D	D	D	D	D	D	D	W
BS-18	Bertrandville Siphon <sup>2</sup>	3	EPA												
BS-24	Terracing and Marsh Creation South of Big Mar <sup>1</sup>	-	USFWS	D	D	D	D	D	D	W	W	W	W	W	W
CS-49	Cameron-Creole Freshwater Introduction	1	NRCS	D	D	D	D	D	D	W	W	W	W	W	W
CS-53	Kelso Bayou Marsh Creation	1	NRCS	D	D	D	D	D	D	D	D	D	D	D	W
CS-54	Cameron-Creole Watershed Grand Bayou Marsh Creation	1	USFWS	D	D	D	D	W	W	W	W	W	W	W	W
CS-59	Oyster Bayou Marsh Creation and Terracing	1	NOAA	D	D	D	D	D	D	W	W	W	W	W	W
CS-66	Cameron Meadows Marsh Creation and Terracing <sup>1</sup>	-	NOAA	D	D	D	D	D	D	D	D	D	D	D	W
ME-31	Freshwater Bayou Marsh Creation (CWPPRA)	1	NRCS	D	D	D	D	D	W	W	W	W	W	W	W
PO-75	LaBranche East Marsh Creation	2	NRCS	D	D	D	D	D	D	D	D	D	D	D	W
PO-133	Labranche Central Marsh Creation	2	NRCS	D	D	D	D	D	D	D	D	D	W	W	W
TE-51	Madison Bay Marsh Creation and Terracing	1	NOAA	D	D	D	D	D	D	W	W	W	W	W	W
TE-66	Central Terrebonne Freshwater Enhancement	1	NRCS	D	D	D	D	D	D	D	D	D	D	D	W
TE-83	Terrebonne Bay Marsh Creation	1	USFWS	D	D	D	D	D	W	W	W	W	W	W	W
TE-112	North Catfish Lake Marsh Creation <sup>1</sup>	-	NRCS	D	D	D	D	D	D	D	D	D	D	D	W
TV-20	Bayou Sale Shoreline Protection	3	NRCS	D	D	D	D	D	D	D	W	W	W	W	W
TV-63	Cole's Bayou Marsh Restoration	1	NOAA	D	D	D	D	D	D	D	D	D	W	W	W
<b>CWPPRA Phase I Projects (Continued)</b>															
MR-15	Venice Ponds Marsh Creation and Crevasses	2	EPA	W	W	W	W	W	W	W	W	W	W	W	W
PO-34	Alligator Bend Marsh Restoration and Shoreline Protection	-	NRCS	W	W	W	W	W	W	W	W	W	W	W	W

► **Table 3-2: Projected Three-Year Schedules for Active CWPPRA Projects (FY 2014 - 2016)**

Project ID	Project Name	Tier	Federal Sponsor	2014				2015				2016			
				1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
TE-47	Ship Shoal: Whiskey West Flank Restoration	1	EPA	W	W	W	W	W	W	W	W	W	W	W	W
TV-11B	Freshwater Bayou Bank Stabilization - Belle Isle Canal to Lock	3	USACE	W	W	W	W	W	W	W	W	W	W	W	W
<b>CWPPRA Phase II Projects</b>															
BA-04C	West Pointe a la Hache Outfall Management	3	NRCS	D	D	D	B	C	C	C	C	F	O	O	O
BA-27C	Barataria Basin Landbridge SP, Phase 3-CU7 & 8	C	NRCS	C	C	C	C	C	C	C	C	F	O	O	O
BA-42	Lake Hermitage Marsh Creation	C	USFWS	C	C	C	C	F	O	O	O	O	O	O	O
BA-48	Bayou Dupont Marsh and Ridge Creation Project	1	NOAA	C	C	C	C	C	C	C	C	C	F	O	O
BA-68	Grand Liard Marsh and Ridge Restoration	1	NOAA	D	D	C	C	C	C	F	O	O	O	O	O
BS-16	South Lake Lery Shoreline and Marsh Restoration	1	USFWS	D	D	C	C	C	C	C	F	O	O	O	O
CS-28	Sabine Refuge Marsh Creation Cycles 4 & 5	-	USFWS	D	D	D	D	D	D	C	C	C	C	C	C
LA-39	Coastwide Planting	2	NRCS	I	I	I	I	I	I	I	I	I	I	I	I
ME-21	Grand Lake Shoreline Protection, Tebo Point	1	NRCS	D	D	D	D	B	C	C	F	O	O	O	O
PO-104	Bayou Bonfouca Marsh Creation <sup>3</sup>	2	USFWS	D	D	D	D	B	B	C	C	C	F	O	O
TE-32A	North Lake Boudreaux Basin Freshwater Introduction and Hydrologic Management	1	USFWS	D	B	C	C	C	C	C	C	F	O	O	O
TE-43	GIWW Bank Restoration of Critical Areas in Terrebonne	1	NRCS	C	C	C	C	C	C	F	O	O	O	O	O
TE-72	Lost Lake Marsh Creation and Hydrologic Restoration <sup>3</sup>	1	USFWS	D	B	C	C	C	C	C	F	O	O	O	O
<b>CWPPRA Demonstration Projects</b>															
LA-09	Sediment Containment System for Marsh Creation Demonstration	C	NRCS	C	C	F	O	O	O	O	O	O	O	O	O
LA-16	Non-rock Alternatives to Shoreline Protection Demo	2	NRCS	D	B	C	C	F	O	O	O	O	O	O	O

Legend		P	Feasibility & Planning	B	Both Design & Construction
References	1. Project newly approved for Phase I; schedule under development.	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
	3. Project newly approved for Phase II; schedule under development.	C	Construction	O	Operations, Maintenance, & Monitoring

► **Table 3-3: Projected Three-Year Schedules for Active WRDA Projects (FY 2014 - 2016)**

Project ID	Project Name	Tier	Federal Sponsor	2014				2015				2016			
				1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
<b>LCA Projects</b>															
BA-71	Medium Diversion with Dedicated Dredging at Myrtle Grove <sup>1</sup>	-	USACE	P	P	P	W	W	W	W	W	W	W	W	
BS-20	Medium Diversion at White Ditch	-	USACE	D	D	D	D	D	D	D	D	D	D	D	
LA-10	Barataria Basin Barrier Shoreline Restorations	-	USACE	D	D	D	D	W	W	W	W	W	W	W	
MR-16	Mississippi River Hydrodynamic and Delta Management Study <sup>2</sup>	-	USACE	P	P	P	P	P	P	P	P	P	P	P	
PO-68	LCA Small Diversion at Convent / Blind River	1	USACE	D	D	D	D	D	D	D	D	W	W	W	
<b>Other WRDA Projects</b>															
BA-115	Donaldsonville to the Gulf of Mexico Hurricane Protection Project <sup>1</sup>	2	USACE	P	P	W	W	W	W	W	W	W	W	W	
LA-20	Southwest Coastal Louisiana Feasibility Study <sup>1</sup>	-	USACE	P	P	P	P	P	P	W	W	W	W	W	
<b>Legend</b>			P	Feasibility & Planning				B	Both Design & Construction						
<b>References</b>	1. Project partially funded by Surplus funds.		D	Engineering & Design				F	Construction Complete						
	2. Project partially funded by CIAP Funds.		W	Awaiting Additional Funding for Implementation				I	Program Implementation						
			C	Construction				O	Operations, Maintenance, & Monitoring						

► **Table 3-4: Projected Three-Year Schedules for Active CIAP Projects (FY 2014 - 2016)**

Project ID	Project Name	Tier	Federal Sponsor	2014				2015				2016			
				1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
<b>Restoration Projects</b>															
AT-15	Atchafalaya Long Distance Sediment Pipeline	-	USFWS	P	P	P									
BA-43 (EB)	Mississippi River Long Distance Sediment Pipeline <sup>1</sup>	1	USFWS	C	C	C	C	C	C	C	C	F			
BA-45	Caminada Headland Beach and Dune Restoration <sup>1</sup>	C	USFWS	C	C	C	C	C	F						
BA-58	Fringe Marsh Repair	C	USFWS	C	C	F									
BA-161	Mississippi River Water Reintroduction into Bayou Lafourche - BLFWD	1	USFWS	D	D	D	B	C	C	C	C	C	C	F	
BA-162-CAT	Shoreline Protection Cat Island	-	USFWS	C	C	C	F								

► **Table 3-4: Projected Three-Year Schedules for Active CIAP Projects (FY 2014 - 2016)**

Project ID	Project Name	Tier	Federal Sponsor	2014				2015				2016			
				1Q	2Q	3q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
<b>Restoration Projects (Continued)</b>															
LA-12.2	Performance Evaluation - Barataria Land Bridge Biological Monitoring	2	USFWS	O	O	O	O	O	O	O					
LA-12.3	Performance Evaluation - Freshwater Bayou	2	USFWS	O	O	O	O	O	O	O	O	O	O	O	O
LA-12.5	CIAP Performance Evaluation - Barrier Island Studies	2	USFWS	O	O	O	O	O	O	O					
LA-12.6	CIAP Performance Evaluation - Caminada Moreau Subsidence Study	2	USFWS	O	O	O									
LA-12.7	CIAP Performance Evaluation Borrow Area Management and Monitoring	2	USFWS	O	O	O	O								
LA-13	Coastal Forest Conservation Initiative	1	USFWS	I	I	I	I	I	I						
MR-16-SSPM	Mississippi River Delta Strategic Planning - SSPM Expansion		USFWS	B	C	C	C	C	C	F					
PO-73	Central Wetlands Demonstration	C	USFWS	C	C	C	C	F							
PO-73-1	Central Wetlands - Riverbend	1	USFWS	D	D	C	C	C	C	C	F				
PO-73-2	Central Wetlands - EBSTP to A2	1	USFWS	D	D	C	C	C	C	C	C	F			
PO-148	Living Shoreline	1	USFWS	D	D	D	D	D	D	D	C	C	C	F	
TE-63	Falgout Canal Freshwater Enhancement	2	USFWS	D	D	B	C	C	C	C	F				
TV-11B (EB)	Freshwater Bayou Bank Stabilization (CIAP)	1	USFWS	C	C	C	C	C	C	F					
<b>Infrastructure Projects</b>															
AT-05	Morgan City Industrial Road	2	USFWS	C	C	C	C	F							
TV-31	Acadiana Regional Airport Street Improvements - Admiral Doyle Drive	2	USFWS	B	C	C	C	C	F						

Legend		P	Feasibility & Planning	B	Both Design & Construction
References	1. Project partially funded by Surplus funds.	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 State-Only Projects (FY 2014 - 2016)**

Project ID	Project Name	Tier	Federal Sponsor	2014				2015				2016			
				1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
<b>State Non-Surplus Projects</b>															
BA-091	Bayou LaFourche Salt Water Control Structure	1	N/A	D	D	D	D	C	C	C	F				
PO-142	Hydrologic Restoration of the Amite River Diversion Canal	1	N/A	D	D	D	D	W	W	W	W	W	W	W	
TE-108	HNC Deepening Section 203 Study <sup>1</sup>	-	USACE	P	P	P									
PO-29	River Reintroduction into Maurepas Swamp	1	N/A	W	W	W	W	W	W	W	W	W	W	W	
<b>State Surplus Projects</b>															
BA-25	Bayou Lafourche Freshwater Introduction	-	N/A	O	O	O	O								
BA-75-1	Jean Lafitte Tidal Protection	1	N/A	C	C	C	C	C	F						
BA-85	St. Charles West Bank Hurricane Protection Levee	1	N/A	C	C	C	C	C	F						
CS-33	Cameron Parish Shoreline Restoration	C	N/A	C	C	C	C	F							
ME-25 SF	Marsh Creation Near Freshwater Bayou	1	N/A	C	C	C	C	F							
PO-61	Forty Arpent Levee	-	N/A	C	C	C	F								
PO-72	Biloxi Marsh	C	N/A	C	C	C	C	C	C	F					
TE-64	Morganza to the Gulf	C	USACE	C	C	C	C	C	C	C	C	F			
TE-65	Larose to Golden Meadow - Flood Protection	C	N/A	C	C	C	F								
TE-111	Valentine to Larose <sup>2</sup>	-	N/A	C	F										
TV-54	South Central Coastal Plan	-	N/A	P	P	P	P	P	P						
TV-55	Morgan City/ St. Mary Flood Protection	1	N/A	D	D	D	D	D	B	C	C	C	C	C	
TV-56	Four-Mile Canal Storm Surge Reduction Construction <sup>3</sup>	1	N/A												
TV-57	Delcambre-Avery Canal (E&D)	1	N/A	D	D	D	D	D	D						
	East of Harvey Canal	-	N/A	O	O	O	O								

Legend		P	Feasibility & Planning	B	Both Design & Construction
References	1. Project is currently 100% Federal; State expenditures are for agency coordination.	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
	3. Project currently on hold; schedule to be updated when implementation recommences.	C	Construction	O	Operations, Maintenance, & Monitoring

► **Table 3-6: Projected Three-Year Schedules for Active CDBG Projects (FY 2014 - 2016)**

Project ID	Project Name	Tier	Federal Sponsor	2014				2015				2016				
				1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	
BA-82	Lafitte Area Levee Repair	1	HUD	C	C	C	C	F								
BA-83	Rosethorne Wetland Assimilation Project	1	HUD	D	D	D	C	C	F							
BA-84	Bayou Lafourche Fresh Water District - Walter S. Lemann Memorial Pump Station Renovations	1	HUD	C	C	C	C	C	C	F						
PO-87	Madisonville Bulkhead Project <sup>1</sup>	1	HUD	C	C	C	F									
PO-151	St. Tammany Parish Watershed Management Study	-	HUD	P	P	P	P									
TE-78	Cut-Off/Pointe Aux Chene Levee	1	HUD	D	D	D	B	C	C	C	C	F				
TV-52	Franklin Floodgate Sinkable Barge and Pump Station <sup>1</sup>	1	HUD	C	C	C	C	C	F							
TV-58	Flood Control Structure at Boston Canal <sup>2</sup>	-	HUD													
TV-60	Front Ridge Chenier Terracing/Protection	1	HUD	D	D	B	C	C	C	F						

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 3-7: Projected Three-Year Schedules for Active HSDRRS Projects (FY 2014 - 2016)<sup>1</sup>**

Project ID	Project Name	Tier	Federal Sponsor	2014				2015				2016			
				1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
BA-66	West Bank and Vicinity <sup>2,3</sup>	C	USACE	C	C	C	C	C	C	C	C	C	F		
BA-67	New Orleans to Venice <sup>2</sup>	1	USACE	B	B	B	B	B	B	B	B	B	B	B	B
BA-74	Storm-Proofing of Interior Pumping Stations	C	USACE	C	C	F									
BA-109	HSDRRS Mitigation- WBV <sup>2</sup>	2	USACE	D	D	D	D	B	B	B	B	B	B	B	B
BA-148	Risk Reduction- Barataria Basin Landbridge	-	USACE	D	D	B	C	C	C	C	F				
BA-154	Previously Authorized Mitigation WBV <sup>2</sup>	-	USACE	D	D	D	D	B	C	C	C	C	C	C	C
BA-156	Plaquemines TFU Mitigation - Braithwaite to Scarsdale - Big Mar <sup>2</sup>	-	USACE	D	D	B	C	C	F						
BA-158	New Orleans to Venice Mitigation - Plaquemines Non-Federal <sup>2</sup>	-	USACE	P	D	D	B	C	C	C	C	C	C	C	C
BA-159	New Orleans to Venice Mitigation - Federal <sup>2</sup>	-	USACE	P	D	D	B	C	C	C	C	C	C	C	C
BS-03B	Risk Reduction Via Modification to the Caernarvon Freshwater Diversion	-	USACE	D	D	D	D	D	D	C	F				
PO-57	SELA-Overall	C	USACE	B	B	C	C	C	C	C	C	C	C	C	C
PO-60	Permanent Canal Closures and Pump Stations <sup>2</sup>	1	USACE	D	B	C	C	C	C	C	C	C	C	C	C
PO-62	West Shore-Lake Pontchartrain, Louisiana Hurricane Protection Project Feasibility Study	-	USACE	P	P	P	P	P							
PO-63	Lake Pontchartrain and Vicinity <sup>2,3</sup>	C	USACE	C	C	F									
PO-121	HSDRRS Mitigation- LPV <sup>2</sup>	2	USACE	D	D	D	B	B	B	B	B	B	B	B	B
PO-145	LPV Task Force Guardian Mitigation- Bayou Sauvage <sup>2</sup>	-	USACE	C	C	C	C	F							
PO-146	Previously Authorized Mitigation LPV- Manchac <sup>2</sup>	-	USACE	C	C	C	F								

Legend		P	Feasibility & Planning	B	Both Design & Construction
References	1. OM&M duties are the responsibility of the local sponsor.	D	Engineering & Design	F	Construction Complete
	2. State expenditures may be covered with Surplus allocation for HSDRRS LERRDS.	W	Awaiting Additional Funding for Implementation	I	Program Implementation
	3. Payments for 30 year payback to commence upon completion of construction activities. According to the USACE, payback will begin in calendar year 2015.	C	Construction	O	Operations, Maintenance, & Monitoring

► **Table 3-8: Projected Three-Year Schedules for Active Berm to Barrier Projects**

Project ID	Project Name	Tier	2014				2015				2016			
			1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
BA-40	Riverine Sand Mining/Scotfield Island Restoration	C	C	C	F									
BA-110	Shell Island East- BERM	C	C	C	C	C	F							

Legend		P	Feasibility & Planning	B	Both Design & Construction
References	None	D	Engineering & Design	F	Construction Complete
		W	Awaiting Additional Funding for Implementation	I	Program Implementation
		C	Construction	O	Operations, Maintenance, & Monitoring

► **Table 3-9: Projected Three-Year Schedules for Active and Proposed NRDA Projects (FY 2014 - 2016)**

Project ID	Project Name	Tier	2014				2015				2016			
			1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
BA-76	Cheniere Ronquille Barrier Island Restoration <sup>1</sup>	1	W	W	W	W	W	W	W	W	W	W	W	W
BA-111	Shell Island West- NRDA	1	D	D	W	W	W	W	W	W	W	W	W	W
BA-141	Lake Hermitage Marsh Creation Increment 2 <sup>2</sup>	C	C	C	C	C	F							
BA-143	Caminada Headland Beach and Dune Restoration Increment 2 <sup>3</sup>	1	D	D	D	B	C	C	C	C	C	C	C	F
PO-143	NRDA Biloxi Marsh Increment 2 <sup>1</sup>	-	W	W	W	W	W	W	W	W	W	W	W	W
TE-100	NRDA Caillou Lake Headlands <sup>3</sup>	1	D	D	D	D	W	W	W	W	W	W	W	W
	Bay Side Segmented Breakwater at Grand Isle <sup>1</sup>	-	W	W	W	W	W	W	W	W	W	W	W	W
	Chandeleur Islands Restoration <sup>1</sup>	-	W	W	W	W	W	W	W	W	W	W	W	W
	West Grand Terre Beach Nourishment <sup>1</sup>	-	W	W	W	W	W	W	W	W	W	W	W	W
	West Grand Terre Stabilization <sup>1</sup>	-	W	W	W	W	W	W	W	W	W	W	W	W

Legend		P	Feasibility & Planning	B	Both Design & Construction
References	1. Project may be initiated with Trust Fund revenue if available to be reimbursed with oil spill revenues. 2. Project has received early restoration funding and is currently in implementation. 3. State is using Trust Fund revenue to initiate implementation and is reimbursed by NRDA.	D	Engineering & Design	F	Construction Complete
		W	Awaiting Additional Funding for Implementation	I	Program Implementation
		C	Construction	O	Operations, Maintenance, & Monitoring

► **Table 3-10: Projected Three-Year Schedules for Active Other *Deepwater Horizon* Oil Spill Related Projects (FY 2014 - 2016)<sup>1</sup>**

Project ID	Project Name	Tier	2014				2015				2016			
			1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q	1Q	2Q	3Q	4Q
BA-153	Mid-Barataria Diversion	1	D	D	D	D	D	D	W	W	W	W	W	
BA-163	Lower Barataria Diversion	-	P	P	D	D	D	D	D	D	D	D	D	
BS-23	Lower Breton Diversion	-	P	P	D	D	D	D	D	D	D	D	D	
CS-65	Calcasieu Ship Channel Salinity Control Measures	-	P	P	P	P	D	D	D	D	D	D	D	
PO-141	Central Wetlands Diversion	1	D	D	D	D	D	D	D	D	D	D	D	
PO-144	Mississippi River Sediment Delivery System East	1	P	D	D	D	D	D	D	D	D	D	D	
TE-110	Increase Atchafalaya Flow to Eastern Terrebonne	-	P	P	D	D	D	D	D	D	D	D	D	
	Houma Navigation Canal Lock Complex	-	D	D	D	D	D	D	D	D	D	D	D	

Legend		P	Feasibility & Planning	B	Both Design & Construction
References	1. Project may be initiated with Trust Fund revenue if available to be reimbursed with oil spill revenues.	D	Engineering & Design	F	Construction Complete
		W	Awaiting Additional Funding for Implementation	I	Program Implementation
		C	Construction	O	Operations, Maintenance, & Monitoring





**Section 4**  
Projections:  
2014 - 2015 - 2016

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## Section 4

# Projections: Fiscal Years 2014 – 2015 – 2016

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 2014–FY 2016, 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 2014 (July 1, 2013 through June 30, 2014). 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 this 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 2014 Annual Plan. In this event, any requests for additional expenditures will be submitted for approval by the CPRA.

## 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 USFWS is the Administrator of the CIAP program, which allocates approximately \$497 million in CIAP funds to Louisiana and its 19 coastal parishes over a four-year period, of which the State will receive 65 percent. All State CIAP funds are expected to be expended by December 2016.
- 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.
- 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 2017 and is expected to eventually contribute \$100–200 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.
- 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 2014, 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 2013 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:

1. 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.
2. 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 2014 Annual Plan.
3. 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.

## 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, 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.

► **Table 4-1: Projected Three-Year Revenues (FY 2014 - FY 2016)**

Revenue Sources	FY 2014	FY 2015	FY 2016	Program Total (FY 2014 - FY 2016)
CPR Trust Fund Annual Revenue <sup>1</sup>	\$34,277,097	\$34,300,000	\$34,300,000	\$102,877,097
GOMESA <sup>1</sup>	\$80,775	\$80,775	\$80,775	\$242,325
DOTD Interagency Transfer <sup>1</sup>	\$4,000,000	\$4,000,000	\$4,000,000	\$12,000,000
CIAP	\$92,524,301	\$55,352,629	\$11,913,664	\$159,790,594
Surplus '07, '08, '09	\$319,282,714	\$100,941,667	\$11,705,995	\$431,930,376
Community Development Block Grants	\$14,560,385	\$5,254,452	\$0	\$19,814,836
Berm to Barrier	\$44,576,037	\$0	\$0	\$44,576,037
NRDA <sup>2</sup>	\$131,807,719	\$335,552,000	\$69,657,000	\$537,016,719
Other Oil Spill Related Revenues	\$40,030,469	\$47,781,721	\$58,598,883	\$146,411,073
LDNR Mitigation Funds <sup>3</sup>	\$900,000	\$0	\$0	\$900,000
MOEX Settlement <sup>4</sup>	\$6,755,059	\$0	\$0	\$6,755,059
OCD-DRU Grant <sup>5</sup>	\$300,000	\$300,000	\$0	\$600,000
FEMA Reimbursement for OM&M	\$860,000	\$0	\$0	\$860,000
Project Generated - Adaptive Management	\$13,496,208	\$28,750,029	\$9,619,191	\$51,865,428
Project Generated - Administrative	\$3,598,989	\$7,666,674	\$2,565,118	\$13,830,781
Project Billing	\$14,000,000	\$16,000,000	\$18,000,000	\$48,000,000
<b>Total Projected Revenue</b>	<b>\$721,049,753</b>	<b>\$635,979,947</b>	<b>\$220,440,626</b>	<b>\$1,577,470,326</b>

**Notes**

1. Annually recurring revenue source.
2. NRDA funds have not been procured; projections represent possible FY 2014-2016 expenditures if funding is procured by June 30, 2013. NRDA project schedules are currently under development and may be refined at a later date; funds will be distributed according to final project schedules.
3. Used to partially fund ME-25 SF.
4. Represents anticipated balance as of FY 2014 of an initial deposit of \$6.75 million of funds from the MOEX settlement.
5. Used to fund Coastal Community Resiliency Program.

► **Table 4-2: Projected Three-Year Expenditures<sup>1</sup> (FY 2014 - FY 2016)**

Program/Funding Source	FY 2014	FY 2015	FY 2016	Program Total (FY 2014 - FY 2016)
CWPPRA Projects (not including Surplus expenditures) <sup>2</sup>	\$20,770,557	\$23,421,622	\$25,000,000	\$69,192,180
WRDA Projects (not including Surplus or CIAP expenditures)	\$0	\$0	\$0	\$0
CIAP Projects and Programs (not including Surplus Expenditures)	\$92,524,301	\$55,352,629	\$11,913,664	\$159,790,594
Surplus Projects and Programs	\$319,282,714	\$100,941,667	\$11,705,995	\$431,930,376
Community Development Block Grants	\$14,560,385	\$5,254,452	\$0	\$19,814,836
HSDRRS 30 Year Payback <sup>3</sup>	\$42,188,962	\$42,188,962	\$73,849,854	\$158,227,778
State-Only Projects (Non-Surplus)	\$9,151,505	\$48,126,000	\$35,696,000	\$92,973,505
Berm to Barrier	\$44,576,037	\$0	\$0	\$44,576,037
NRDA <sup>4</sup>	\$131,807,719	\$335,552,000	\$69,657,000	\$537,016,719
Other Oil Spill Related Expenditures	\$40,030,469	\$47,781,721	\$58,598,883	\$146,411,073
LDNR Mitigation Expenditures <sup>5</sup>	\$900,000	\$0	\$0	\$900,000
OM&M- Projects (not including Surplus or CIAP expenditures)	\$8,607,881	\$12,159,950	\$4,798,874	\$25,566,704
OM&M- Marine Debris Removal (FEMA)	\$860,000	\$0	\$0	\$860,000
Project Support	\$4,000,000	\$4,000,000	\$4,000,000	\$12,000,000
Operating Costs (see Tables 4-3 and 4-4)	\$38,057,989	\$53,043,378	\$54,032,989	\$145,134,356
<b>Total Planned Expenditures</b>	<b>\$767,318,519</b>	<b>\$727,822,380</b>	<b>\$349,253,259</b>	<b>\$1,844,394,158</b>

**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 2015 - FY 2016 are therefore based on prior years' expenditures.
3. Payback is based on current HSDRRS construction schedule; payback will not commence until completion of HSDRRS construction activities and consequently payback schedule may be revised at a later date.
4. NRDA funds have not been procured; projections represent possible FY 2014-2016 expenditures if funding is procured by June 30, 2013. NRDA project schedules are currently under development and may be refined at a later date; funds will be distributed according to final project schedules.
5. Used to partially fund ME-25 SF.

► **Table 4-3: Programmatic Projected Three-Year Expenditures (FY 2014 - FY 2016)**

Program	FY 2014	FY 2015	FY 2016	Program Total (FY 2014 - FY 2016)
<b>Ongoing Program Expenditures</b>				
Beneficial Use Program <sup>1</sup>	\$7,000,000	\$2,000,000	\$2,000,000	\$11,000,000
Carbon Credits Program	\$1,000,000	\$1,000,000	\$1,000,000	\$3,000,000
Vegetative Plantings	\$400,000	\$400,000	\$400,000	\$1,200,000
Assistance to Levee Authorities	\$1,000,000	\$1,000,000	\$1,000,000	\$3,000,000
Coastal Science Assistantship Program	\$300,000	\$300,000	\$300,000	\$900,000
Workshop and Conference Development	\$100,000	\$125,000	\$125,000	\$350,000
Youth Wetlands Education and Outreach Program	\$500,000	\$500,000	\$500,000	\$1,500,000
Restoration Partnerships	\$1,000,000	\$1,000,000	\$1,000,000	\$3,000,000
<b>Total Ongoing Programs Expenditures</b>	<b>\$11,300,000</b>	<b>\$6,325,000</b>	<b>\$6,325,000</b>	<b>\$23,950,000</b>
<b>Adaptive Management Expenditures</b>				
Barrier Island Maintenance Program <sup>1</sup>	\$3,390,000	\$698,955	\$0	\$4,088,955
System Wide Assessment and Monitoring Program <sup>2</sup>	\$10,000,000	\$10,500,000	\$11,000,000	\$31,500,000
Data Management <sup>1</sup>	\$2,250,000	\$2,000,000	\$2,000,000	\$6,250,000
Monitoring Data Interpretations	\$1,300,000	\$1,500,000	\$1,200,000	\$4,000,000
Model Development and Maintenance <sup>1</sup>	\$4,000,000	\$4,000,000	\$4,000,000	\$12,000,000
Small Scale Physical Model	\$500,000	\$750,000	\$750,000	\$2,000,000
Future Project Development	\$5,650,000	\$5,700,000	\$5,950,000	\$17,300,000
Science Advisory Boards	\$330,000	\$330,000	\$330,000	\$990,000
Louisiana Coastal Engineering and Science <sup>1</sup>	\$1,600,000	\$1,600,000	\$1,600,000	\$4,800,000
<b>Total Adaptive Management Expenditures</b>	<b>\$29,020,000</b>	<b>\$27,078,955</b>	<b>\$26,830,000</b>	<b>\$82,928,955</b>
<b>TOTAL Programmatic Expenditures</b>	<b>\$40,320,000</b>	<b>\$33,403,955</b>	<b>\$33,155,000</b>	<b>\$106,878,955</b>
<b>Programmatic Surplus Expenditures</b>	<b>\$19,820,307</b>	<b>\$698,955</b>	<b>\$0</b>	<b>\$20,519,262</b>
<b>Programmatic Operations Expenditures</b>	<b>\$16,430,000</b>	<b>\$32,165,389</b>	<b>\$33,155,000</b>	<b>\$81,750,389</b>
<b>Notes</b>				
1. FY 2014 expenditures fully funded by surplus funds.				
2. FY 2014 expenditures partially funded by surplus funds.				

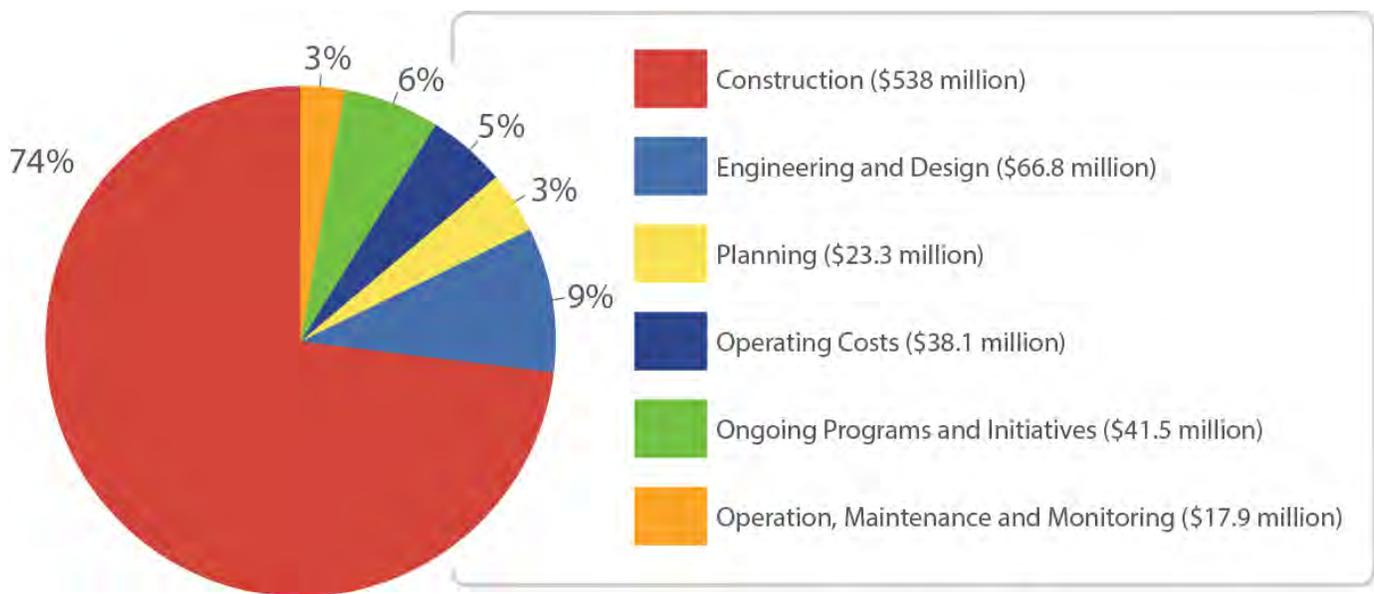
► **Table 4-4: State Protection and Restoration Projected Three-Year Operating Expenditures (FY 2014 - FY 2016)**

Program	FY 2014	FY 2015	FY 2016	Program Total (FY 2014 - FY 2016)
CPRA	\$14,849,125	\$14,849,125	\$14,849,125	\$44,547,375
OCM <sup>1</sup>	\$2,827,134	\$2,827,134	\$2,827,134	\$8,481,402
Office of the Governor - Coastal Activities	\$1,367,730	\$1,367,730	\$1,367,730	\$4,103,190
DNR Secretary	\$1,649,000	\$1,649,000	\$1,649,000	\$4,947,000
Office of the Attorney General	\$935,000	\$185,000	\$185,000	\$1,305,000
<b>Total Operating Costs</b>	<b>\$21,627,989</b>	<b>\$20,877,989</b>	<b>\$20,877,989</b>	<b>\$63,383,967</b>

**Notes**

1. Includes \$75,000 per fiscal year for support of the Louisiana Department of Wildlife and Fisheries.

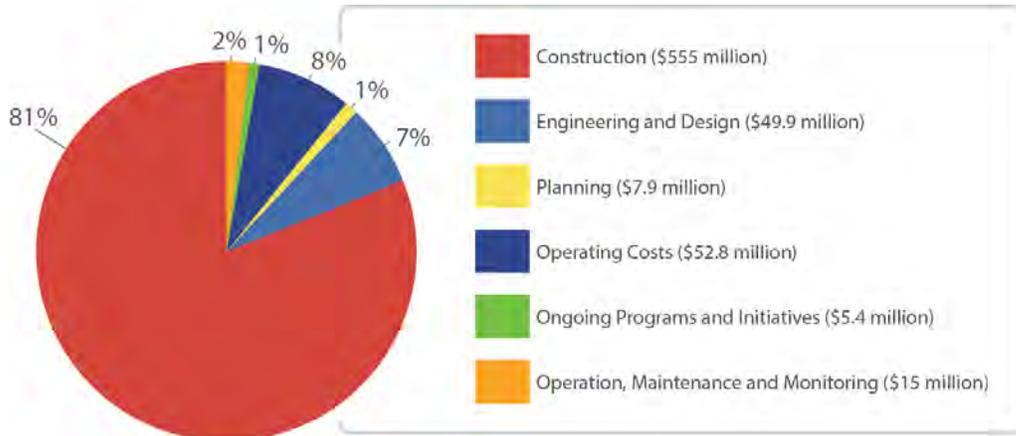
► **Figure 4-1: Projected FY 2014 Expenditures by Project Phase**



- Construction includes Beneficial Use (\$7 million)
- OM&M includes BIMP (\$3.4 million). Repair/Rehabilitation of Projects (\$305,000) and Marine Debris Removal (\$860,000)
- Ongoing Programs Includes Project Support (\$4 million)
- Total excludes HSDRRS Payback (\$42.2 million)

**TOTAL Expenditures**  
**\$725 million**

► **Figure 4-2: Projected FY 2015 Expenditures by Project Phase**

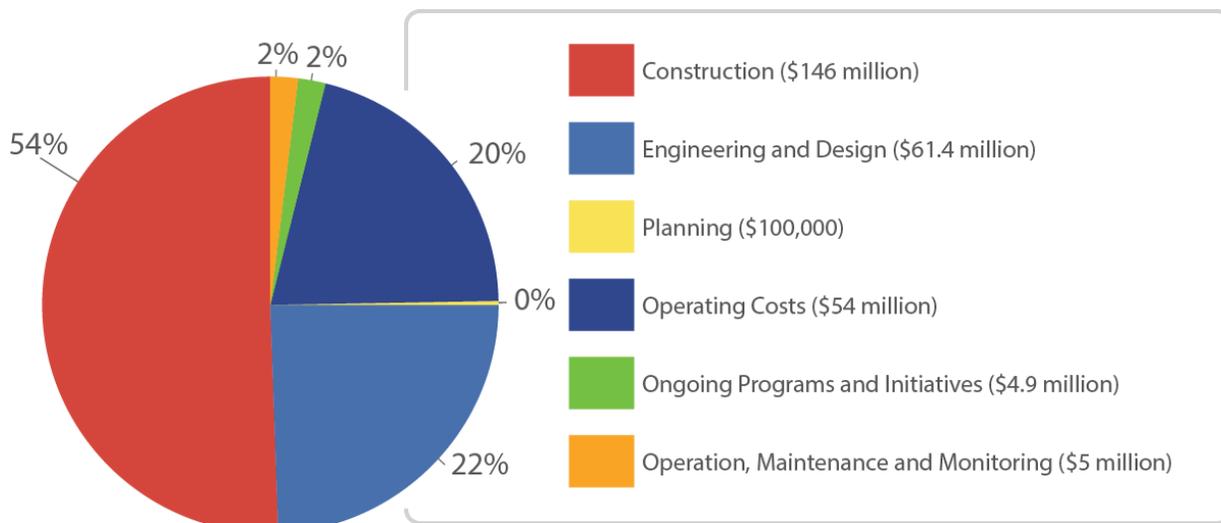


**Notes**

- Engineering and Design and Construction include CWPPRA adjustment for outlying years (see Table 4-2 for explanation)
- OM&M includes BIMP (\$698,955)
- Ongoing Programs includes Project Support (\$4 million)
- Total excludes HSDRRS Payback (\$42.2 million)

**TOTAL Expenditures**  
**\$686 million**

► **Figure 4-3: Projected FY 2016 Expenditures by Project Phase**



**Notes**

- Engineering and Design and Construction include CWPPRA adjustment for outlying years (see Table 4-2 for explanation).
- Ongoing Programs Includes Project support (\$4 million)
- Total excludes HSDRRS Payback (\$73.9 million)

**TOTAL Expenditures**  
**\$275 million**

Ljubljana's 2017  
Coastal Master Plan

# SOUTHWEST COAST





**Section 5**  
Furthering Louisiana's  
Comprehensive  
Master Plan

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## Section 5

# Furthering Louisiana's Comprehensive Master Plan

*Louisiana's Comprehensive Master Plan for a Sustainable Coast* is one of the nation's largest environmental planning efforts. The Coastal Master Plan utilizes a science-based and stakeholder-informed decision-making process, to lay the groundwork for the establishment of a more sustainable Louisiana Gulf Coast. The latest revision of the Coastal Master Plan, completed in 2012, is based on a two year analysis involving some of the state's best scientists, national and international specialists, as well as feedback from hundreds of local stakeholders and citizens. The State used this analysis to select 109 high performing projects that could deliver measurable benefits to our communities and coastal ecosystem over the coming decades. The plan shows that if these projects were fully funded at a price tag of \$50 billion, we could reduce land loss and increase flood protection to create a more sustainable coast.

## Why Was the Plan Developed?

Louisiana is in the midst of a land loss crisis that has claimed 1,880 square miles of land since the 1930s. Given the importance of so many of south Louisiana's natural assets—its waterways, natural resources, unique culture, and wetlands—this land loss crisis is nothing short of a national emergency, one that takes a daily toll on the lives of coastal residents. To address this crisis the Louisiana Legislature passed Act 8 in 2006, which created the CPRA and required it to develop a Coastal Master Plan that is updated every five years. The first Coastal Master Plan was approved by the legislature in 2007. The first update to the Coastal Master Plan was submitted to the legislature and unanimously approved on May 23, 2012. The plan's unanimous passage evidences its broad public support, where individuals from across the state have rallied behind the plan's forward thinking and scientifically-based recommendations.

Louisiana has already lost 1,880 square miles of land in the last 80 years. If we take no action, we risk losing an additional 1,750 square miles in the next 50 years.



## How Were Citizens and Stakeholders Involved?

Logos shown above represent the diversity of organizations represented on the Framework Development Team.



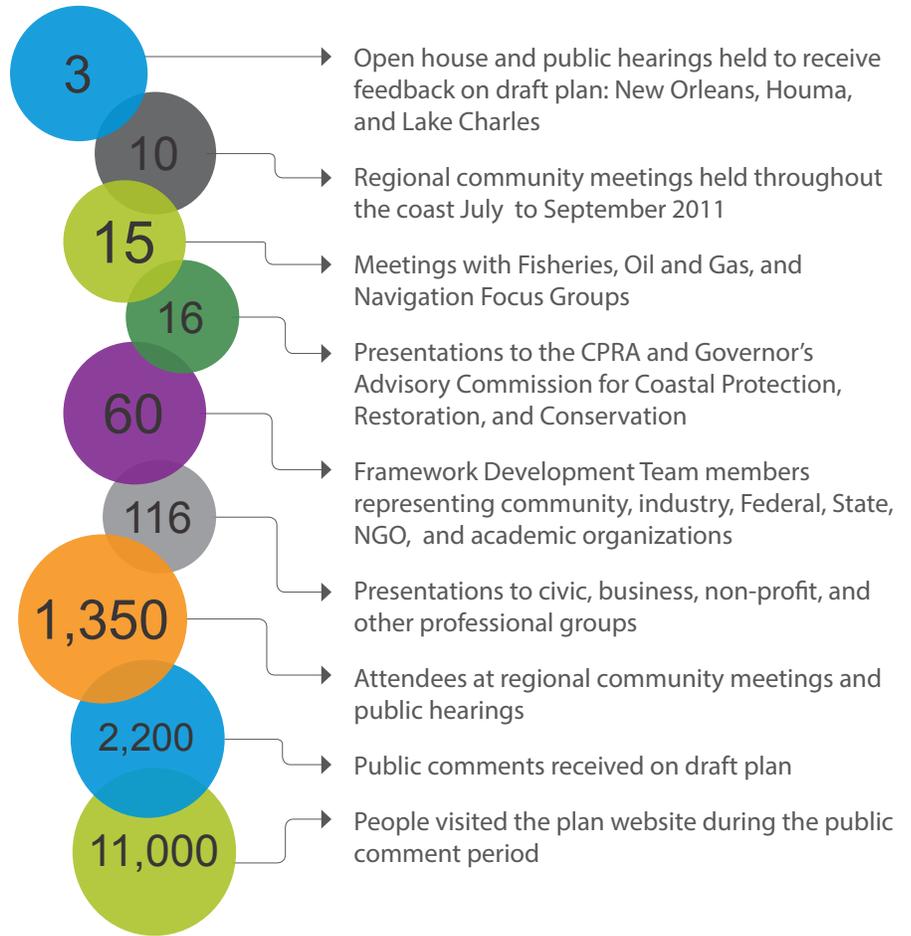
The Coastal Master Plan is an example of a planning process lead by diverse teams united around the goal of creating a more sustainable future for our Louisiana coast. Guided by the collaboration between coastal scientists, engineers, planners, stakeholders and citizens, the interdisciplinary nature of the Coastal Master Plan process was instrumental to its success.

Not simply soliciting feedback on a finished product, the 2012 Coastal Master Plan Update created a platform for participation from a range of diverse voices. The plan was significantly shaped by a group of committed coastal stakeholders, the Framework Development Team, a 32 member collaboration consisting of representatives from Federal, State, and local governments, non-governmental organizations (NGOs), industry, and coastal researchers. Three focus groups representing fisheries, navigation, and oil and gas were also met regularly to discuss industry-related issues in more detail. These groups were instrumental in creating a substantive two-way dialogue between the core planning team and public / private partners, and thus could offer essential critique of the plan, build bridges between the state and local communities, develop a common knowledge base, and organize networks of support.

In addition, the plan development process included extensive public outreach: first through a coast-wide “listening tour” which solicited input about communities’ coastal values and concerns; through three public hearings which released a draft plan that received over 2,200 comments; and finally through over a hundred less formal meetings that engaged community groups, civic organizations, landowners, student organizations, business groups, and tribal councils. More informal formats were particularly successful where community partners mediated smaller discussions between fishermen, parents, young people, trade workers, and others who may not have felt comfortable voicing their thoughts in larger forums.

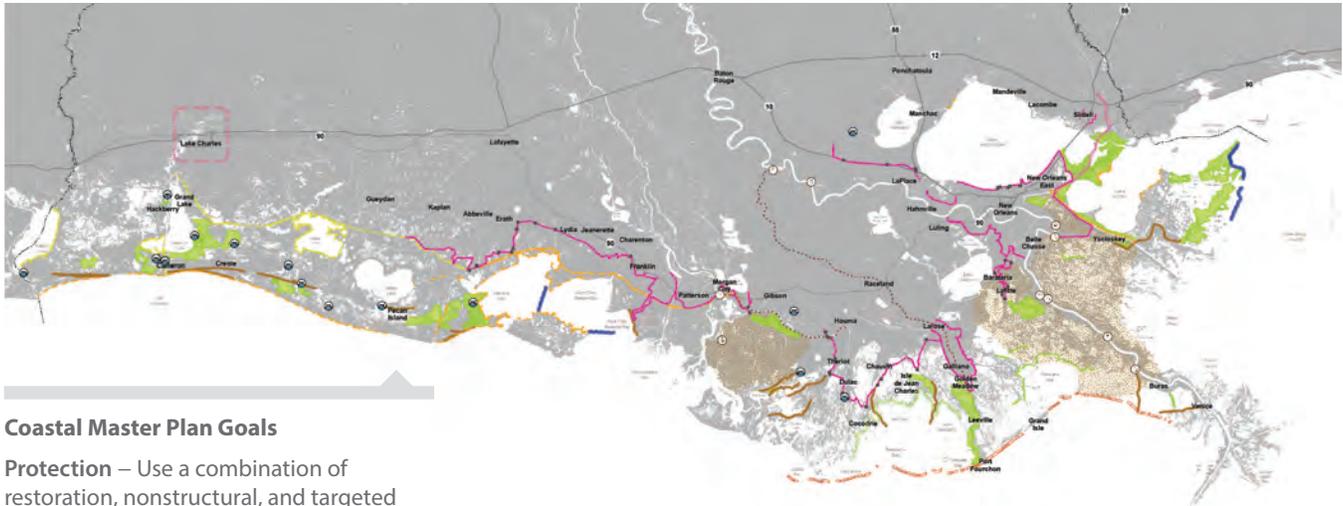
Finally, the planning team is also already responding to public feedback to increase engagement by creating two additional focus groups: one for communities and another for landowners. These assemblages, along with the other focus groups and Framework Development Team, will continue to dialogue with the planning team as the process carries forward towards the next iteration of the Coastal Master Plan due in 2017.

## Key Outreach & Engagement Statistics



Over 1,350 people attended regional community meetings and public hearings held in Lake Charles, Houma, and New Orleans.





**Coastal Master Plan Goals**

**Protection** – Use a combination of restoration, nonstructural, and targeted structural measures to provide increased flood protection for all communities.

**Restoration** – Use an integrated and synergistic approach to ensure a sustainable and resilient coastal landscape.



## What Does the Updated Plan Do?

There have been many plans for our coast, but none have had the action-oriented mission of the 2012 Coastal Master Plan. The plan presents a list of specific protection and restoration projects, as well as recommended investments we should make in future decades. The path forward outlined in the 2012 Coastal Master Plan creates an ambitious coastal vision that will guide state and federal action in the coming years.

This vision includes restoring one of the nation's largest natural assets, the Louisiana Gulf Coast wetlands, and providing greater flood protection for all Louisiana citizens. The plan achieves these goals by addressing the root of our coastal crisis (our extensively engineered system of levees and flood control measures that have disconnected the Mississippi River from its delta) and by calling for a series of sediment diversions that will strategically and safely reconnect the river to the sediment starved wetlands. The plan also encourages a new and more comprehensive approach to flood protection including hard and soft infrastructure, elevation, floodproofing, land use planning, and key restoration projects.

Importantly, the plan is also founded on the fact that Louisiana is a dynamic coast and we can't be certain what the future will bring. Our coast is more vulnerable to the effects of climate change and thus the plan incorporated two different future environmental scenarios that captured a range of factors such as sea level rise, storm frequency, storm intensity, rainfall, subsidence and others. Projects were then analyzed on their performance across both of these scenarios to create a more robust strategy.

Finally, while the main goal of the plan is simple—how we can most effectively build land and reduce flood risk—the needs of our coastal communities are complex. The planning framework incorporates the different needs of human and natural systems by incorporating a comprehensive suite of environmental, socioeconomic, and cultural decision criteria.

# Moving Forward: Implementing the Plan

## Coastal Community Resiliency Program

The high water even of 2011 brought massive amounts of sediment to coastal Louisiana. Unfortunately, much of this sediment was not delivered to wetlands but was instead shunted into open water, including the deep Gulf.

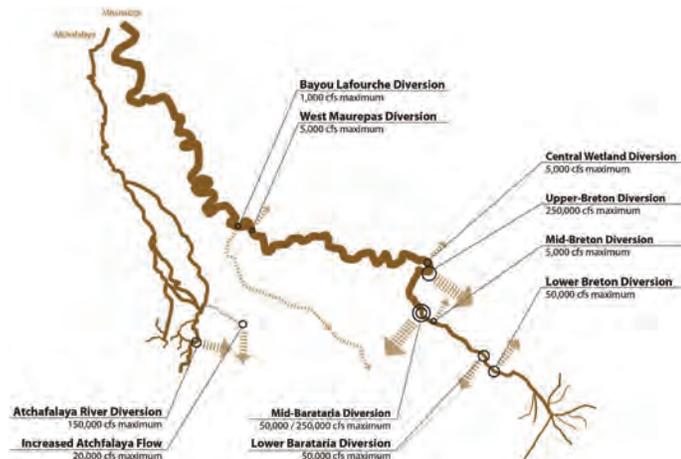


Sediment diversions depicted in the map to the right would be operated in coordination with high river events and seasonal flows.

The Coastal Master Plan is moving forward with the development of the Coastal Community Resiliency Program (formerly titled Nonstructural Program) and with the initial research and conceptual engineering and design of other restoration projects.

The Coastal Master Plan includes the development of a more comprehensive flood risk reduction program beyond building large infrastructure projects such as levees and floodgates alone. This Coastal Community Resiliency Program (referred to as the Nonstructural Program) encourages the development of a wider range approaches to reduce flood risk and create more resilient communities. Recognizing the increasing risks due to flooding, the diverse needs of coastal communities, and the importance of a holistic framework, the Coastal Master Plan dedicates \$10.2 billion, roughly half of all monies budgeted for coastal protection, to nonstructural measures over the next 50 years. Flood risk reduction and community resiliency options include projects such as elevation, floodproofing, and voluntary acquisition as well as programmatic or policy measures like land use planning, education, ordinances, and enforcement of building codes.

The Coastal Community Resiliency Program is moving forward in several ways. First, the determination of the CPRA Coastal Community Resiliency Subcommittee, comprised of different state agencies, will provide interagency collaboration and oversight needed for the program. Second, the creation of two groups of coastal stakeholders (the Coastal Community Resiliency Advisory Group and broader Stakeholder Network) will provide a greater depth of insight and expertise into the wide range of complex coastal issues associated with developing this type of program. Members include local officials, NGOs, community organizers, floodplain managers, insurance agents, and academics with expertise in the hazard mitigation, social sciences, and design fields. The development and refinement of the Coastal Community Resiliency Program will continue over the next two years and will provide coastal stakeholders and communities with updated tools and information that can help guide their future coastal resiliency decisions. We anticipate spending approximately \$800,000 dollars over the next two years on program development, enhanced data collection, the creation of visual communication tools, meeting facilitation, outreach and community workshop events, and the development of an online decision support tool to help determine the most appropriate nonstructural measures for each community.





## New Initiatives

The CPRA is also pleased to announce the establishment of two new programs recently launched to support the advancement of the Coastal Master Plan. The Coastal Innovation Partnership Program was established to foster a culture of innovation focused on identifying, evaluating and implementing concepts, technologies, and techniques to support the implementation of the 2012 Coastal Master Plan. Additionally, the CPRA Applied Research Program will provide Louisiana-based researchers with funds to conduct engineering and science research and tool development activities that will enable the CPRA to more effectively protect and restore coastal resources. This program solicits proposals on general research topics that have a direct link and application of demonstrated outcomes to the CPRA's mission and mandate 'to develop, implement, and enforce a comprehensive protection and restoration master plan for coastal Louisiana.

## Projects in Engineering & Design

Other projects recommended by the Coastal Master Plan have entered preliminary stages of research, engineering, and design. Partnering with the USACE, the CPRA has launched the Mississippi River Hydrodynamic and Delta Management Study to determine how best to reconnect the Mississippi River with surrounding basins. The study will include extensive geomorphic analysis, numerical, one-dimensional, multidimensional, physical, and ecological modeling to understand how to most effectively re-introduce sediment, water, and nutrients to create a more sustainable coastal ecosystem while supporting navigation, flood control, and other important industries.

## Summary

The coastal crisis we are experiencing in south Louisiana means there is no time to waste. People need solutions, and they need them now. The Coastal Master Plan presents coastal residents with more information about what to expect and a strategy to enable citizens to create more resilient communities, manage businesses, take care of their families, and plan for the future.

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**Section 6**  
Appendices

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## **Appendix A**

# Ongoing Protection and Restoration Project Summaries

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**ONGOING PROTECTION AND RESTORATION PROJECT SUMMARIES**

CPRA Program	Name	State Project Number	Project Type	PPL	Federal Sponsor	House District	Senate District	Parish	Acres Benefited	Construction Completion	Total Budget	Project Description	Planning Unit
BERM TO BARRIER	Riverine Sand Mining/Scotfield Island Restoration	BA-40	BI	14	NMFS	105	1	PLAQUEMINES	234	Pending	\$44,544,638	The goal of this project is to transport sediments from the Mississippi River to restore dune and marsh habitat on Scotfield Island. Project was designed under CWPPRA but will be constructed using BERM to Barrier funds.	2
BERM TO BARRIER	Shell Island East	BA-110	BI			105	1	PLAQUEMINES		Pending	\$110,000,000	The purpose of the project is to restore the integrity of Shell Island, reduce wave energies within the bay area and reestablish productive habitat to Bastian Bay and the surrounding area. Shell Island East will be constructed to a length of approximately 2.8 miles, a dune elevation of +8.0 feet NAVD88, a marsh elevation of +2.5 feet NAVD88, and a total fill area of 613 acres. Shell Island West will be constructed to a length of approximately 1.2 miles, a dune elevation of +8.0 feet NAVD88, a marsh elevation of +2.5 feet NAVD88, and a total fill acreage of 345 acres.	2
CDBG	Lafitte Area Levee Repair	BA-82	HP		HUD	105	8	JEFFERSON		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 vehicles used on the levee for flood fighting activities during Ke and Gustav. This project will provide for a 4 inch lift on approximately a 5 mile stretch of levee.	2
CDBG	Rosethorne Wetland Assimilation Project	BA-83	HR		HUD	105	8	JEFFERSON	334	Pending	\$1,000,000	The Rosethorne treatment facility currently discharges treated municipal effluent into Bayou Barataria. This project will utilize secondarily treated municipal effluent diverted from the Rosethorne treatment facility, to restore and sustain coastal wetland habitats.	2
CDBG	Bayou Lafourche Fresh Water District - Walter S. Lemann Memorial Pump Station Renovations	BA-84	FD		HUD	58	18	ASCENSION		Pending	\$2,700,000	This project will replace two of the existing pumps and motors at the Walter S. Lemann Pump Station. This project will also install an emergency generator to operate the pump station during power outages.	2, 3A
CDBG	Madisonville Bulkhead	PO-87	SP		HUD	77	6	ST TAMMANY		Pending	\$1,080,000	This project will provide construction of improvements to the existing bulkhead along the shore of Lake Pontchartrain and the Tchoutouche River at the Madisonville Marina.	1
CDBG	St. Tammany Parish Watershed Management Study	PO-151	HR		HUD	90	11	ST TAMMANY		Pending	\$1,500,000	This project involves a planning study to evaluate the feasibility of watershed management measures in St. Tammany Parish.	1
CDBG	Cut-Off/Pointe Aux Chene Levee	TE-78	HP		HUD	53, 54	20	LAFOURCHE	N/A	Pending	\$8,468,847	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	Flood Control Structure at Boston Canal	TV-58	HP		HUD	47	26	VERMILION		Pending	\$5,800,000	This project will construct a 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.intersection of Boston Canal and the GIWW, that could be closed in the event of a hurricane or tropical storm.	3B
CDBG	Front Ridge Chenier Terracing/Protection	TV-60	TE		HUD	47	26	VERMILION		Pending	\$1,900,000	This project will construct approximately 85,000 linear feet of marsh terraces south east of Pecan Island in Vermilion Parish.	4
CWPPRA	Alchafalaya Sediment Delivery	AT-02	SD	2	NMFS	50	21	ST MARY	2232	1998	\$2,532,147	The objective of this project is to enhance natural delta growth by re-opening Natal Channel and Castille Pass. Natal Channel was re-established with a 120-foot wide, 10-foot deep, 8,800-foot long channel and Castille Pass with a 190-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 lobes.	3B
CWPPRA	Big Island Mining	AT-03	DM	2	NMFS	50	21	ST MARY	1560	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 Alchafalaya River. Construction included dredging of a main stem 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	Castille Pass Channel Sediment Delivery (Deauthorized)	AT-04	SD	9	NMFS	50	21	ST MARY	589	Deauthorized	\$1,717,883	This project will dredge a system of distributary channels to create 589 acres of marsh through sediment placement and natural deposition.	3B
CWPPRA	GIWW (Gulf Intracoastal Waterway) to Clovelly Hydrologic Restoration	BA-02	HR	1	NRCS	54	20	LAFOURCHE	175	2000	\$9,565,153	The project will restore the area to the hydrologic conditions that prevailed historically. The project includes canal plugs, rock weirs, fixed crest weirs with boat bays, one variable crest weir, and the rebuilding of low overflow banks that have eroded away.	2
CWPPRA	Naomi Outfall Management	BA-03C	OM	5	NRCS	105	8	JEFFERSON	634	2002	\$2,181,427	The project will manage the outfall of the existing eight siphons by controlling the movement of the diverted waters. The siphons divert sediment-laden water from the Mississippi River into the west bank wetlands to retard saltwater intrusion and enhance wetland productivity.	2
CWPPRA	West Pointe a la Hache Outfall Management	BA-04C	HR	3	NRCS	105	1	PLAQUEMINES	646	Pending	\$5,370,516	The project goal is to optimize use of fresh water and sediment supplied by existing siphon by reducing channelized flow and routing the diverted flow to nourish marshes.	2
CWPPRA	Lake Salvador Shore Protection Demonstration	BA-15	SP	3	NMFS	105	19	ST CHARLES		1998	\$5,856,506	The objective of this project is to maintain the shoreline along a section of Lake Salvador and help re-establish the natural hydrology of interior marsh. Phase I of the project was constructed to demonstrate the effectiveness of four separate types of segmented breakwaters in a poor 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	Bayou Dupont Sediment Delivery- Marsh Creation 3	BA-164	MC	22	EPA	105	1	PLAQUEMINES, JEFFERSON	302	Pending	\$3,415,930	This project involves dedicated dredging from the Mississippi River to create and nourish 415 acres of marsh.	1
CWPPRA	Fourchon Hydrologic Restoration (Deauthorized)	BA-18	HR	1		54	20	LAFOURCHE		Deauthorized	\$14	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 July of 1994 at the request of the landowner.	2
CWPPRA	Barataria Bay Waterway Wetland Restoration	BA-19	MC	1	USACE	105	8	JEFFERSON	510	1996	\$1,170,000	The project beneficially used dredge material to enlarge Queen Bess Island.	2
CWPPRA	Jonathan Davis Wetland Protection	BA-20	HR, SP	2	NRCS	105	8	JEFFERSON	510	2003, Pending	\$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 water control structures. Construction unit 4 consists of 4,180 lf of rock rip rap revetment, 15,110 lf of concrete sheetpile wall, plugs and marsh creation.	2
CWPPRA	Bayou Perot/Bayou Rigolettes Marsh Restoration (Deauthorized)	BA-21	MC	3	NMFS	105	8	JEFFERSON	1065	Deauthorized	\$3,096	This project was authorized to protect deteriorated intermediate-to-brackish marsh located between Lake Salvador and Little Lake by using dredged material to re-establish the shoreline. Due to an unstable and rapidly eroding site, the project was deemed unfeasible and was officially deauthorized by the CWPPRA Task Force in January of 1998.	2
CWPPRA	Bayou L'Ours Ridge Hydrologic Restoration (Deauthorized)	BA-22	HR	4	NRCS	54	20	LAFOURCHE	737	Deauthorized	\$371,232	This project was proposed to restore natural hydrologic flow to the marsh by reinforcing breached areas of the Bayou L'Ours Ridge through a series of canal closures and two water control structures. The project was officially deauthorized by the CWPPRA Task Force in April 2003 because of landrights issues.	2
CWPPRA	Barataria Bay Waterway West Side Shoreline Protection	BA-23	SP	4	NRCS	105	8	JEFFERSON	1789	2000	\$3,013,365	The project objective is to rebuild the west bank of the Dupree Cut to protect the adjacent marsh from unnatural water exchange and subsequent erosion. A rock dike was constructed along 9,400 linear feet of the west bank of the Barataria Bay Waterway.	2
CWPPRA	Myrtle Grove Siphon (Deauthorized)	BA-24	FD	5	NMFS	105	1,8	PLAQUEMINES		Deauthorized	\$80,436	The goal of the project is to reduce saltwater intrusion and to nourish existing marsh. This will be accomplished by diverting water through a siphon from the Mississippi River to adjacent wetlands. This project was officially deauthorized by the CWPPRA Task Force in October 2007 because a larger diversion was authorized at the same location (see BA-33).	2
CWPPRA	Bayou Lafourche Siphon (Deauthorized)	BA-25a	FD	5	EPA	51, 54, 55, 58, 60	18, 19, 20, 21	LAFOURCHE	428	Deauthorized	\$45,922	The goal of the project is to reduce marsh loss adjacent to Bayou Lafourche by introducing nutrient and sediment laden river water through large siphon pipes. This project was reauthorized on the 11th PPL as BA-25b.	2
CWPPRA	Barataria Bay Waterway East Side Shoreline Protection	BA-26	SP	6	NRCS	105	8	JEFFERSON	217	2001	\$5,224,477	The objective of this project is to rebuild the banks of the BBWW to protect the adjacent marsh from excessive tidal action and saltwater intrusion. The project consists of 17,600 (3.3 miles) of levee constructed with dredged material from the BBWW, and 17,600 (3.3 miles) of rock armor.	2
CWPPRA	Barataria Basin Landbridge Shoreline Protection, Phases 1 and 2	BA-27B	SP	7	NRCS	54, 105	20, 8	JEFFERSON	1304	2009	\$31,288,623	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 Rigolettes. The length of protection is estimated to be approximately 71,000 feet.	2

**ONGOING PROTECTION AND RESTORATION PROJECT SUMMARIES**

CPRA Program	Name	State Project Number	Project Type	PPL	Federal Sponsor	House District	Senate District	Parish	Acres Benefited	Construction Completion	Total Budget	Project Description	Planning Unit
CWPPRA	Barataria Basin Landbridge Shoreline Protection, Phase 3	BA-27C	SP	9	NRCS	105, 54	20, 8	JEFFERSON, LAFOURCHE	5587	1999, 2008, Pending	\$37,100,000	The project tested sections of different shoreline protection types, such as, concrete panel wall, rock and light rock. These projects have constructed over 41,000 feet of shoreline protection.	2
CWPPRA	Barataria Basin Landbridge Shoreline Protection Phase 4	BA-27D-CU6	SP	11	NRCS	105, 54	20, 8	JEFFERSON	589	2006	\$13,177,461	This project will consist of 51,500 feet of foreshore rock dike with a lightweight aggregate core or concrete sheetpile and will incorporate "fish dips" and openings at historic natural channels to eliminate shoreline erosion and deterioration of the Barataria landbridge.	2
CWPPRA	Vegetative Plantings of a Dredged Material Disposal Site on Grand Terre Island	BA-28	VP	7	NMFS	105	8	JEFFERSON	127	2001	\$526,314	This project involved the installation of vegetative plantings on previously constructed marsh and dune platform.	2
CWPPRA	LA Highway 1 Marsh Creation (Deauthorized)	BA-29	MC	9	EPA	54	20	LAFOURCHE	146	Deauthorized	\$293,610	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 infeasible.	2
CWPPRA	East/West Grand Terre Islands Restoration (Transferred)	BA-30	MC	9	NMFS	105	1	JEFFERSON	403	Transferred	\$2,387,837	The goal of this project is to stabilize and benefit 1,575 acres of barrier island habitat and extend the island's life expectancy. Dredged material will be used to create dune and marsh habitat on East Grand Terre Island. This project will be constructed using CIAP 2007 funds.	2
CWPPRA	Delta Building Diversion at Myrtle Grove (Transferred)	BA-33	SD	10	USACE	105	1,8	JEFFERSON, PLAQUEMINES	8891	Transferred	\$327,422	The objective of this project is to divert Mississippi River water and sediment for the creation of new emergent wetlands. The project will involve: installation of gated box culverts on the west bank of the Mississippi River in the vicinity of Myrtle Grove; dedicated dredging from the Mississippi River to create marsh in the vicinity of Bayou Dupont, the Barataria Bay Waterway, and the Wilkinson Canal; or a combination of these actions. This project has been transferred to the LCA Program.	2
CWPPRA	Mississippi River Reintroduction Into Northwest Barataria Basin	BA-34	FD	10	EPA	58, 55	19, 18	ST JOHN THE BAPTIST, ST JAMES, LAFOURCHE	5134	Pending	\$17,098,769	The goal of this project is to restore the natural hydrologic regime and add nutrients to adjacent swamp areas. The project will utilize a freshwater diversion/siphon from the Mississippi River to northwest Barataria Basin wetlands with gapping of spoil banks and placement of culverts under LA Highway 20.	2
CWPPRA	Pass Chalard to Grand Bayou Pass	BA-35	BI	11	NMFS	105	1	PLAQUEMINES	359	2009	\$46,414,530	This project involved the creation of a dune and marsh platform on the north side of the Gulf of Mexico adjacent to Bay Joe Wise. Sand fencing and vegetation were installed.	2
CWPPRA	Dedicated Dredging on the Barataria Basin Landbridge	BA-36	MC	11	USFWS	105	8	JEFFERSON	2800	2010	\$36,281,893	Approximately 5,368,000 cubic yards of material was placed in two contained marsh creation areas to construct approximately 1,211 acres of intertidal marsh at a final elevation of +2.5' NAVD 88. Approximately 3,901,000 cubic yards of material was placed in adjoining fill areas to nourish approximately 1,578 acres of marsh.	2
CWPPRA	Little Lake Shoreline Protection/Dedicated Dredging Near Round Lake	BA-37	MM, SP	11	NMFS	54	20	LAFOURCHE	713	2007	\$44,931,412	This project is designed to protect area wetlands, which currently experience high rates of shoreline erosion. This project will protect approximately 21,000 feet of Little Lake shoreline, create 488 acres of intertidal wetlands, and nourish an additional 532 acres of fragmented, subsiding marsh.	2
CWPPRA	Pelican Island and Pass La Mer to Chalard Pass Restoration	BA-38	BI, VP	11	NMFS	105	1	PLAQUEMINES	1117	Pending	\$77,109,220	The objectives of this project are to create barrier island habitat, enhance storm-related surge and wave protection, prevent overtopping during storms, and increase the volume of sand within the active barrier system. Conceptual project plans envision dedicated dredging of local, nearshore sand sources to directly create beach, dune, and wetland habitats. This project was first authorized on the 9th PPL as Barrier Island Restoration Grande Terre to SW Pass (BA-32). Construction of the Pass La Mer to Chalard Pass Restoration segment was completed in 2007.	2
CWPPRA	Mississippi River Sediment Delivery System - Bayou Dupont	BA-39	MC	12	EPA	105	1, 8	JEFFERSON, PLAQUEMINES	577	2010	\$31,631,908	The goal of this project is to create/restore 493 acres of brackish marsh by delivering via pipeline, dredged material from the Mississippi River to an adjacent area within the Barataria Basin, and planting marsh vegetation.	2
CWPPRA	South Shore of the Pen Shoreline Protection and Marsh Creation	BA-41	SP, MC	14	NRCS	105	8	JEFFERSON	211	Pending	\$22,763,443	Approximately 1,000 feet of concrete pile and panel wall and 10,900 feet of rock revetment would be constructed along the south shore of The Pen and Bayou Dupont. Dedicated dredging would be used to create approximately 74 acres of marsh, and nourish an additional 107 acres of marsh, within the triangular area bounded by the south shore of The Pen, the Barataria Bay Waterway (Dupre Cut) and the Creole Gas Pipeline Canal.	2
CWPPRA	Lake Hermitage Marsh Creation	BA-42	TE, SP, MC	14	USFWS	105	1	PLAQUEMINES	438	Pending	\$38,040,158	The goals of this project are to create approximately 438 acres of wetlands, reduce tidal exchange in marshes surrounding Lake Hermitage using material dredged from the Mississippi River.	2
CWPPRA	West Pointe a la Hache Marsh Creation	BA-47	MC	17	NRCS	105	1	PLAQUEMINES	203	Pending	\$16,136,639	The goal of this project is to create/nourish marsh using sediment hydraulically dredged from the Mississippi River and pumped via pipeline to the project area.	2
CWPPRA	Bayou Dupont Marsh and Ridge Creation Project	BA-48	MC	17	NMFS	105	1	JEFFERSON	317	Pending	\$21,626,768	This marsh and ridge creation project will nourish approximately 118 acres of marsh and create 15 acres of maritime ridge by long distance pumping of Mississippi River sediment.	2
CWPPRA	Grand Liard Marsh and Ridge Restoration	BA-68	BI	18	NMFS	105	1	PLAQUEMINES	502	Pending	\$31,390,699	This project will create 328 about acres of marsh, nourish about 140 acres of marsh and build about 20,000 lf of ridge.	2
CWPPRA	Caernarvon Diversion Outfall Management	BS-03A	OM	2	NRCS	105	1	PLAQUEMINES	802	2002	\$4,536,000	The primary objective is to enhance marsh by increasing the utilization of freshwater, nutrients, and sediments provided by the Mississippi River through the Caernarvon Freshwater Diversion Structure.	1
CWPPRA	White's Ditch Outfall Management (Deauthorized)	BS-04A	OM	3	NRCS	105	1	PLAQUEMINES	N/A	Deauthorized	\$25,341	This project was designed to direct the flow of Mississippi River nutrients and sediment into the deteriorating wetlands in the Breton Sound Basin that are not directly benefited by the Caernarvon Freshwater Diversion project. Because of the failure to secure landrights, the project was officially deauthorized by the CWPPRA Task Force in January of 1998. This project was reauthorized on the 14th PPL as BS-12.	1
CWPPRA	Grand Bay Crevasse (Deauthorized)	BS-07	SD	4	USACE	105	1	PLAQUEMINES	N/A	Deauthorized	\$62,437	Project goals included construction of a rock-lined opening through the rocks at the head of the Jurjevich Canal in order to establish a pathway for freshwater and sediment into Grand Bay and the adjacent marshes to create, restore, and enhance wetlands in the area. The project was officially deauthorized by the CWPPRA Task Force in July of 1998 because of landrights issues.	1
CWPPRA	Upper Oak River Freshwater Siphon (Deauthorized) Phase 1	BS-09	FD	8	NRCS	105	1	PLAQUEMINES	N/A	Deauthorized	\$26,662	The primary goal of this project was to reverse the trend of interior marsh deterioration in the project area due to saltwater intrusion through installation of a freshwater siphon and outfall channel. These strategies would have provided freshwater, nutrients, and sediment to enhance marsh health. The project was officially deauthorized by the CWPPRA Task Force in January of 2003 because of landrights issues.	1
CWPPRA	Delta Building Diversion North of Fort St. Philip	BS-10	SD	10	USACE	105	1	PLAQUEMINES	543	Pending	\$1,444,000	A diversion channel will be constructed along the left descending bank of the Mississippi River up stream from Fort St. Philip. The channel will be constructed mainly through shallow open water and will tie into the Mississippi River.	1
CWPPRA	Delta Management at Fort St. Philip	BS-11	SNT	10	USFWS	105	1	PLAQUEMINES	267	2006	\$3,199,867	The objective of the project is to enhance the delta-building process occurring due to the crevasse at Fort St. Philip. Six artificial crevasses will be constructed to divert freshwater and sediment into areas currently restricted by spoil banks or natural ridges and linear vegetated terraces will be constructed to enhance sediment retention and reduce wave energy in one of the receiving bays.	1
CWPPRA	White Ditch Resurrection and Outfall Management	BS-12	OM, FD	14	NRCS	105	1	PLAQUEMINES	189	Pending	\$14,845,000	The goal of this project is to promote utilization of freshwater, sediments, and nutrients from Mississippi River by renewing operation of existing siphon and adding another.	1
CWPPRA	Bayou Lamoque Freshwater Diversion (Transferred)	BS-13	FD	15	EPA	105	1	PLAQUEMINES	620	Transferred	\$4,183	The goal of this project was to create approximately 620 acres of new marsh, increase the percent cover of aquatic vegetation, increase the area of shallow open water habitat, and decrease mean salinity in the project area. This CWPPRA project was transferred to the CIAP Program.	1
CWPPRA	Bohemia Mississippi River Reintroduction Project	BS-15	FD	17	EPA	105	1	PLAQUEMINES	640	Pending	\$6,923,792	The goal of the project is to reintroduce Mississippi River water into adjacent wetlands through an uncontrolled diversion with a capacity of approximately 10,000 cfs, restoring natural deltaic growth and habitats.	1
CWPPRA	Caernarvon Outfall Management/Lake Lery Shoreline Protection Project	BS-16	VP, MC	17	USFWS	105, 103	1	PLAQUEMINES	652	Pending	\$25,137,149	The project features include dredging sediment to create 396 acres of marsh and restore approximately 32,000 feet of the southern Lake Lery shoreline.	1
CWPPRA	Bertrandville Siphon	BS-18	FD	18	EPA	105	1	PLAQUEMINES	1613	Pending	\$22,460,077	The goal of the project is to create and sustain marsh through a MS River reintroduction (2,000 cfs maximum siphon) into the open water near Bertrandville, LA.	1
CWPPRA	Terracing and Marsh Creation South of Big Mar	BS-24	MC, TE	22	USFWS	105	1&8	PLAQUEMINES	383	Pending	\$2,308,599	Approximately 65,000 linear feet of terraces (37 acres) will be constructed with in-situ material to reduce fetch and turbidity and capture suspended sediment. Sediments will be hydraulically dredged from Lake Lery and pumped via pipeline to create and restore approximately 334 acres of marsh in the project area.	2

**ONGOING PROTECTION AND RESTORATION PROJECT SUMMARIES**

CPRA Program	Name	State Project Number	Project Type	PPL	Federal Sponsor	House District	Senate District	Parish	Acres Benefited	Construction Completion	Total Budget	Project Description	Planning Unit
CWPPRA	Cameron-Creole Maintenance	CS-04A	HR	3	NRCS	36	25	CAMERON	2602	1997	\$22,900,000	The project area falls within the Cameron-Creole watershed management area, which has been adversely impacted by saltwater intrusion and loss of sediments due to channelization and water diversion of the Calcasieu River. The project will provide maintenance for the existing 19 miles of levee and five major structures which make up the Cameron-Creole Watershed Project.	4
CWPPRA	Brown Lake Hydrologic Restoration (Deauthorized)	CS-09	MM	2	NRCS	47, 36	25	CALCASIEU, CAMERON	916	Deauthorized	\$4,002,363	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
CWPPRA	Sweet Lake/Willow Lake Hydrologic Restoration	CS-11B	SP	5	NRCS	47	25	CAMERON	247	2002	\$168,904	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 halt erosion and trap sediment needed to rebuild marsh along the northern and northwestern shorelines of Sweet Lake. This project includes construction of rock embankments on the GIWW to close off the lakes, vegetation plantings to reduce erosion, and construction of earthen terraces combined with vegetation plantings in open water areas to promote revegetation.	4
CWPPRA	Sabine National Wildlife Refuge Erosion Protection	CS-18	SP	1	USFWS	47	25	CAMERON	5542	1995	\$302,783	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 reconstruct 5.5 miles of eroded levee. The project was redesigned to include 1,000 feet of levee reconstruction and 5.5 miles of rock armor. Vegetation plantings were used to reduce erosion from boat traffic.	4
CWPPRA	West Hackberry Vegetative Planting Demonstration	CS-19	VP	1	NRCS	47	25	CAMERON		1994	\$47,089	The goal of this demonstration project is to reduce marsh erosion from interior open water wave energy using vegetation plantings consisting of California bullrush ( <i>Schoenoplectus californicus</i> ). In addition, wave-stilling hay bale fences were utilized to protect the vegetation plantings.	4
CWPPRA	East Mud Lake Marsh Management	CS-20	MM	2	NRCS	36	25	CAMERON	1520	1996	\$4,943,153	The project will create a hydrologic regime conducive to restoration, protection, and enhancement of the Mud Lake area by using various types of water control structures and vegetative plantings. Structural components include culverts with flap gates, two variable crest weirs, three earthen plugs, overflow bank and repair of existing levee.	4
CWPPRA	Highway 384 Hydrologic Restoration	CS-21	MM	2	NRCS	33	27	CAMERON	650	2000	\$1,211,893	The project purpose is to restore the natural hydrology of the project area and eliminate undesirably high salinities and severe water fluctuations, tremendously reduce the potential for future marsh losses.	4
CWPPRA	Clear Marais Bank Protection	CS-22	SP	2	BOEMRE	36	30	CALCASIEU	1067	1997	\$3,696,088	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 of the project area.	4
CWPPRA	Replace Sabine Refuge Water Control Structures at Headquarters Canal, West Cove Canal, and Hog Island Gully	CS-23	MM	3	USFWS	36	25	CAMERON	953	2001	\$5,560,258	The project replaced the existing structures with ones that have substantially greater discharge potential and greater management flexibility.	4
CWPPRA	Perry Ridge Shore Protection	CS-24	SP	4	NRCS	33	30	CALCASIEU	1203	1999	\$2,289,090	The project will reduce tidal scour, wave action from boats, and other excessive energy impacts on interior marshes and the possibility of saltwater intrusion by repairing the northern spoil bank of the GIWW. Rip-rap will be placed along low areas of the northern bank of the GIWW from Perry Ridge to Vinton Drainage Canal.	4
CWPPRA	Plowed Terraces Demonstration	CS-25	SNT	4	NRCS	33, 47	25, 30	CAMERON		2000	\$44,569	This objective of this demonstration project is to develop and demonstrate a non-traditional procedure for constructing earthen terraces in shallow open water areas. Thirty-eight earthen terraces served as wave-stilling, sediment-trapping structures and provided a medium base for the establishment of emergent vegetation.	4
CWPPRA	Compost Demonstration (Deauthorized)	CS-26	MC	4	EPA	36	25	CAMERON		Deauthorized	\$238,738	This project was authorized to evaluate the effectiveness of using tree trimmings as compostable material, using compost amended material in providing a growth medium for emergent vegetation, and determining settlement rates of the compost amended materials and tree trimmings. The project was officially deauthorized by the CWPPRA Task Force in January 2002.	4
CWPPRA	Black Bayou Hydrologic Restoration	CS-27	HR	6	NMFS	33	25	CALCASIEU, CAMERON	3594	2003	\$6,136,285	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 excessive water exchange. This project included the construction of spoil banks, weirs, plugs, and culverts designed to allow freshwater from the Gulf Intracoastal Waterway (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, Cycle 1	CS-28-1	MC	8	USACE	36	25	CAMERON	214	2002	\$3,421,671	The Sabine Refuge Marsh Creation Cycle 1 Project consists of the placement of dredged material from routine maintenance of the Calcasieu River Ship Channel via temporary pipeline into a marsh creation site within the Sabine National Wildlife Refuge.	4
CWPPRA	Sabine Refuge Marsh Creation, Cycle 2	CS-28-2	MC	8	USACE	36	26	CAMERON	234	2010	\$6,636,312	The Sabine Refuge Marsh Creation Cycle 2 Project consists of the placement of dredged material (approximately 750,000 cubic yards) from routine maintenance of the Calcasieu River Ship Channel via pipeline into a marsh creation site within the Sabine National Wildlife Refuge.	4
CWPPRA	Sabine Refuge Marsh Creation, Cycle 3	CS-28-3	MC	8	USACE	36	25	CAMERON	231	2010	\$10,495	The Sabine Refuge Marsh Creation Cycle 3 Project consists of the placement of dredged material from routine maintenance of the Calcasieu River Ship Channel via temporary pipeline into a marsh creation site within the Sabine National Wildlife Refuge.	4
CWPPRA	Black Bayou Culverts Hydrologic Restoration	CS-29	HR	9	NRCS	33	27	CALCASIEU	540	2007	\$5,391,125	The project goal was to construct 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-30	SP	9	NRCS	33	30	CALCASIEU	1132	2001	\$1,776,021	The project consists of installing rock along the bank to prevent further erosion.	4
CWPPRA	Holly Beach Sand Management	CS-31	SP	11	NRCS	47	25	CAMERON	330	2003	\$25,762,396	The purpose of the project is to protect existing coastal wetlands by restoring and maintaining the integrity and functionality of the remaining chenier/beach ridge. This objective was accomplished through beach renourishment, installation of sand fencing, vegetation plantings, and monitoring of the shoreline response. This project was originally authorized on the 9th PPL as the complex project: Holly Beach Project, CS-01.	4
CWPPRA	East Sabine Lake Hydrologic Restoration CU1	CS-32-CU1	TE, HR	10	USFWS	47	25	CAMERON	281	2009	\$5,614,413	The objectives of this project are to protect and restore area 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 salinities. However, design of the water control structures has been discontinued and the remaining construction funds was used to build additional terraces.	4
CWPPRA	Cameron-Creole Freshwater Introduction	CS-49	VP, FD	18	NRCS	47	25	CAMERON	473	Pending	\$12,787,044	The purpose of the project is to restore the function, value and sustainability to approximately 22,247 acres of marsh and open water by improving hydrologic conditions via freshwater input and increasing organic productivity.	4
CWPPRA	Kelso Bayou Marsh Creation and Hydrologic Restoration	CS-53	MC, SP	20	NRCS	47	25	CAMERON	274	Pending	\$16,632,765	The goal 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 Kelso Bayou and provide direct protection to Louisiana State Highway 27, the region's only northward hurricane evacuation route.	4
CWPPRA	Cameron-Creole Watershed Grand Bayou Marsh Creation	CS-54	MC	20	USFWS	47	25	CAMERON	534	Pending	\$23,405,612	Project goals include creating 609 acres of brackish marsh and nourishing 7 acres of brackish marsh with dedicated dredged material from Calcasieu Lake to benefit fish and wildlife resources in the Cameron Prairie National Wildlife Refuge and adjacent brackish marshes of the Calcasieu Lake estuary.	4
CWPPRA	Oyster Bayou Marsh Creation and Terracing	CS-059	MC, SNT	21	NMFS	47	25	CAMERON	489	Pending	\$3,165,322	The project consists of creating/nourishing marsh and associated edge habitat and creating terraces in order to reduce wave/wake erosion.	4
CWPPRA	Cameron Meadows Marsh Creation and Terracing	CS-66	MC, TE	22	NOAA	47	25	CAMERON	401	Pending	\$3,108,025	This project involves constructing 334 acres of marsh, reestablishing Old North Bayou, utilizing 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	Nutria Harvest for Wetland Restoration Demonstration	LA-03A	OTHER	6		N/A	N/A	COASTWIDE		2003	\$869,357	This project will enable 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, by promoting the consumption of nutria meat.	COASTWIDE
CWPPRA	Coastwide Nutria Control Program	LA-03B	MM	11	NRCS	N/A	N/A	COASTWIDE	14963	N/A	\$68,738,156	Project goal is to harvest approximately 400,000 nutria tails annually. Damage inflicted by nutria is estimated to be reduced 25 to 49%, and damaged areas to reduce by 25,000 to 49,000 acres.	COASTWIDE

**ONGOING PROTECTION AND RESTORATION PROJECT SUMMARIES**

CPRA Program	Name	State Project Number	Project Type	PPL	Federal Sponsor	House District	Senate District	Parish	Acres Benefited	Construction Completion	Total Budget	Project Description	Planning Unit
CWPPRA	Floating Marsh Creation Demonstration	LA-05	OTHER	12	NRCS	51	21	TERREBONNE		2006	\$1,080,891	The purpose of this demonstration project was to develop and test unique and previously untested technologies for creating floating marsh made of buoyant vegetated mats or artificial islands.	3A
CWPPRA	Shoreline Protection Foundation Improvements Demonstration	LA-06	SP	13	USACE	47	26	VERMILION	0	2006	\$1,055,000	The purpose of the 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.	4
CWPPRA	Bioengineered Oyster Reef Demonstration	LA-08	SP	17	NMFS	47	25	CAMERON	4.5	Pending	\$2,325,535	This project is intended to evaluate the Oysterbreak structure to prevent beach erosion and increase habitat diversity associated with natural oyster reefs.	4
CWPPRA	Sediment Containment System for Marsh Creation Demonstration	LA-09	MC	17	NRCS	51, 105	21, 20, 8	TERREBONNE, JEFFERSON		Pending	\$1,163,343	This demonstration project utilizes an unconventional sediment containment system for marsh creation.	3A
CWPPRA	Non-rock Alternatives to Shoreline Protection Demo	LA-16	SP	18	NRCS	49, 105, 54	20, 22, 8	IBERIA, JEFFERSON, LAFOURCHE		Pending	\$6,108,699	Project goals are to demonstrate different alternatives to rock shoreline protection methods by testing several different products along highly erosive shorelines in areas that are not conducive to construction with rock.	2, 3B
CWPPRA	Coastwide Planting	LA-39	VP	20	NRCS	N/A	N/A	COASTWIDE	779	Pending	\$11,611,059	The goals of this project are to facilitate a consistent and responsive planting effort in coastal Louisiana that is flexible enough to routinely plant on a large scale and be able to rapidly respond to "hot spots" following storms or other damaging events.	COASTWIDE
CWPPRA	Freshwater Bayou Wetland Protection	ME-04	SP	2	NRCS	47	25	VERMILION	14381	1998	\$3,558,027	The project features include the installation of 10,000 linear feet of rock breakwater (rip-rap) along the west shoreline of Freshwater Bayou Canal, where needed, to protect this shoreline from further erosion; and the installation of gated water control structures on the Acadiana Marina Canal to reduce ponding in the area known as the Freshwater Bayou Wetlands.	4
CWPPRA	Dewitt-Rollover Vegetative Plantings Demonstration (Deauthorized)	ME-08	VP	1	NRCS	47	26	VERMILION	102	1994; Deauthorized	\$1,155	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 vegetation buffer between the Gulf of Mexico and coastal wetlands. This project was officially deauthorized by the CWPPRA Task Force in February 1996 because no plants remained.	4
CWPPRA	Cameron Prairie National Wildlife Refuge Shoreline	ME-09	SP	1	USFWS	36	25	CAMERON	640	1994	\$1,227,123	The project will protect the emergent wetlands of the Cameron Prairie National Wildlife Refuge adjacent to the GIWW, enhance the emergent wetlands protected by constructing approximately 2.5 miles of rock dike parallel to the area.	4
CWPPRA	Humble Canal Hydrologic Restoration	ME-11	HR	8	NRCS	36	25	CAMERON	378	2003	\$1,530,812	The project consists of replacing the existing Humble Canal structure to restore water management capabilities to the area.	4
CWPPRA	Southwest Shore White Lake Demonstration (Deauthorized)	ME-12	SP	3	NRCS	47	25, 26	IBERIA		1996; Deauthorized	\$13,964	The objective of this demonstration project was to stabilize one mile of the White Lake shoreline and prevent breaching into Deep Lake. The project was initiated to determine if California bulrush (Schoenoplectus californicus) is effective at damping high energy wave action. The project was officially deauthorized by the CWPPRA Task Force in October of 1998 and is no longer monitored.	4
CWPPRA	Freshwater Bayou Bank Stabilization	ME-13	SP	5	NRCS	47	25	VERMILION	511	1998	\$2,583,559	The goal of this project is to stop erosion along the bank of Freshwater Bayou Canal and to protect the interior wetlands from saltwater intrusion, increased tidal exchange and wake-induced erosion. This will be achieved by constructing a rock dike along critical areas of the eastern and western banks of the canal.	4
CWPPRA	Pecan Island Terracing	ME-14	TE	8	NMFS	47	26	VERMILION	437	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 earthen terraces to reduce wave action. Terraces were constructed in a staggered gap formation and planted with smooth cordgrass (Spartina alterniflora) and California bulrush (Schoenoplectus californicus).	4
CWPPRA	Freshwater Introduction South of Highway 82	ME-16	HR	9	USFWS	47	25, 26	IBERIA	296	2006	\$6,203,110	The purpose of the project was to move freshwater from White Lake across LA Hw 82 to target marshes and marsh restoration through earthen terraces.	4
CWPPRA	Little Pecan Bayou Hydrologic Restoration	ME-17	HR	9	NRCS	36	25	CAMERON	144	Pending	\$1,245,278	The purpose of the project was to introduce fresh water into brackish marsh habitat south of La. Highway 82 through use of water control structures and conveyance channels.	4
CWPPRA	Rockefeller Refuge Gulf Shoreline Stabilization	ME-18	SP	10	NMFS	47	25	CAMERON	863	Pending	\$738,174	The purpose of the project was to construct a continuous near shore breakwater along the Gulf of Mexico shoreline, approximately 50,691 feet from Beach Prong to Joseph Harbor.	4
CWPPRA	Grand-White Lakes Landbridge Protection	ME-19	SP	10	USFWS	47	25	CAMERON	213	2004	\$9,635,124	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	South Grand Chenier Hydrologic Restoration	ME-20	HR, MC	11	USFWS	47	25	VERMILION	440	Pending	\$29,039,209	The object of the project was a reduction in salinity in target marshes via fresh water introduction from Upper Mud Lake via the Dr. Miller Canal and culverts 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 1.55 M cubic yards of dredged material from a Gulf of Mexico borrow site.	4
CWPPRA	Grand Lake Shoreline Protection, Tebo Point	ME-21	SP	11	USACE	47	25	CAMERON	495	Pending	\$10,055,616	A rock dike was constructed to protect the south shoreline of Grand Lake from Catfish Lake to Tebo Point and perform O&M on this and portion from Superior Canal to Catfish Lake.	4
CWPPRA	South White Lake Shoreline Protection	ME-22	SP	12	USACE	47	26	VERMILION	844	2006	\$19,673,961	A rock dike was constructed to protect the south shoreline of White Lake.	4
CWPPRA	South Pecan Island Freshwater Introduction (Deauthorized)	ME-23	FD	16	NMFS	47	26	CAMERON	98	Deauthorized	\$4,438,693	The purpose of the project was to introduce freshwater from the lakes subbasin 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	Southwest Louisiana Gulf Shoreline Nourishment and Protection	ME-24	OTHER	16	USACE	47	25, 26	IBERIA	888	Pending	\$17,144,234	The goal of the project was to nourish 47,900 linear feet of gulf 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 on hold until the Phase I CSA template is finalized with the COE.	4
CWPPRA	Freshwater Bayou Marsh Creation	ME-31	MC	19	NRCS	47	26	VERMILION	401	Pending	\$25,523,755	The purpose of the project is to create and/or nourish about 400 acres of marsh near Freshwater Bayou north of intersection with Humble Canal.	4
CWPPRA	West Bay Sediment Diversion	MR-03	SD	1	USACE	105	1	PLAQUEMINES	9831	2003	\$33,311,311	The project consists of a conveyance channel for large-scaled uncontrolled diversion of freshwater and sediments from the Mississippi River. The diversion channel would be constructed in two phases: (1) initial construction of an interim channel to accommodate a discharge of 20,000 cubic feet per second (cfs) at the 50% duration stages in the River and marsh development areas, and (2) Modification of the interim diversion channel design to accommodate full-scale diversion of 50,000 cfs at the 50% duration stage on the River after a period of intensive monitoring of diversion operations.	2
CWPPRA	Channel Armor Gap Crevasse	MR-06	SD	3	USACE	105	1	PLAQUEMINES	2097	1997	\$888,985	The project will consist of deepening the invert of the existing 150 foot wide gap in the Mississippi River channel bank armor. The existing invert will be lowered to -4.0 feet NGVD. In addition, an existing earthen channel leading from the armored gap to the open water area beyond the bank will be enlarged. Approximately 125,000 cubic yards of material will be excavated from the outfall channel and cast adjacent to the channel in a manner conducive to marsh nourishment.	1
CWPPRA	Pass-a-Loutre Crevasse (Deauthorized)	MR-07	SD	3	USACE	105	1	PLAQUEMINES	1043	Deauthorized	\$817	The objective of this project was to create and restore marsh in the Mississippi River Delta. This was to be accomplished through construction of a crevasse on the left descending bank of the Mississippi River between Pass-a-Loutre and Raphael Pass. The project 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 Dredged Material Demonstration (Deauthorized)	MR-08	DM	4	USACE	105	1	PLAQUEMINES		Deauthorized	\$13,705	The goal of this project was to utilize dredged material from a hopper dredge to create emergent vegetated marsh in an area that is currently a shallow open-water pond. Due to design problems, the project was officially deauthorized by the CWPPRA Task Force in November of 2000.	2
CWPPRA	Delta Wide Crevasse	MR-09	SD	6	NMFS	105	1	PLAQUEMINES	2386	1999	\$4,617,852	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-Loutre Wildlife Management Area and the Delta National Wildlife Refuge by either cleaning existing splays or creating new ones.	1
CWPPRA	Dustpan Maintenance Dredging Operations for Marsh Creation in the Mississippi River Delta Demonstration	MR-10	DM	6	USACE	105	1	PLAQUEMINES		2002	\$1,900,000	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 that had converted to shallow open water were restored with approximately 222,000 cubic yards of dredged material.	2

**ONGOING PROTECTION AND RESTORATION PROJECT SUMMARIES**

CPRA Program	Name	State Project Number	Project Type	PPL	Federal Sponsor	House District	Senate District	Parish	Acres Benefited	Construction Completion	Total Budget	Project Description	Planning Unit
CWPPRA	Periodic Introduction of Sediment and Nutrients at Selected Diversion Sites Demonstration (Deauthorized)	MR-11	FD	9	USACE	105	1	ST BERNARD		Deauthorized	\$80,000	This demonstration project intends to show the effectiveness of using a hydraulic pipeline dredge to provide increased sediment through a diversion structure or siphon. Monitoring of the project will determine not only the characteristics of the sediment input concentrations, but also the subsequent effects in the outfall area.	1
CWPPRA	Mississippi River Sediment Trap (Deauthorized)	MR-12	MC	12	USACE	105	1	PLAQUEMINES	1920	Deauthorized	\$1,880,000	This project was reauthorized on the 12th PPL to create emergent wetlands through the beneficial use of material dredged from a sediment trap located between miles 5 and 1 above Head of Passes in the Mississippi River. The proposed sediment trap will consist of an area dredged out of the riverbed that will force sediment deposition. The project was officially deauthorized by the Breaux Act Task Force in October of 2009 due to the high cost to implement the project.	1, 2
CWPPRA	Benneys Bay Diversion	MR-13	SD	10	USACE	105	1	PLAQUEMINES	4580	Pending	\$30,200,000	The objective of the project is to create vegetated wetlands in shallow open water areas in Benneys Bay. The project would divert sediment in an effort to create, nourish, and maintain approximately 16,982 acres of fresh to intermediate marsh over the 20-year project life.	1
CWPPRA	Spanish Pass Diversion	MR-14	SD	13	USACE	105	1	PLAQUEMINES	433	Pending	\$13,900,000	The goal of this project is to create emergent marsh by diverting Mississippi River water and sediment from Grand Pass into open water receiving areas.	2
CWPPRA	Venice Ponds Marsh Creation and Crevasse	MR-15	MC	16	EPA	105	1	PLAQUEMINES	511	Pending	\$8,998,008	The goals of the project are to create, maintain, nourish, and replenish existing deteriorating wetlands through dedicated dredging, hydrologic restoration, crevasse construction, and crevasse enhancement.	2
CWPPRA	Fritchie Marsh Restoration	PO-06	HR	2	NRCS	90	11	ST TAMMANY	1040	2001	\$2,201,674	The purpose of the project is to achieve remediation of the causes of wetland loss in the area and to improve habitat for wildlife and fisheries. This will be accomplished by increasing the flow of fresh water into the marsh and managing the outfall.	1
CWPPRA	Violet Freshwater Distribution (Deauthorized)	PO-09A	HR	3	NRCS	103, 104	1,2	ST BERNARD	247	Deauthorized	\$2,422	The objective of the outfall management plan was to optimize the use of freshwater and sediment supplied by the existing siphons by managing water flow through the area. This would be accomplished by reducing 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 October of 2001 because of landrights issues.	1
CWPPRA	Bayou Sauvage National Wildlife Refuge Hydrologic Restoration, Phase 1	PO-16	HR	1	USFWS	100	2	ORLEANS	3800	1996	\$1,680,193	The Lake Pontchartrain Hurricane Protection levee isolates units 3 and 4 of the Bayou Sauvage Wildlife Refuge from the surrounding marsh complex and establishes a large freshwater impoundment. The project will establish a means for removing the excess water during the spring and summer.	1
CWPPRA	Bayou LaBranche Wetland Creation	PO-17	MC	1	USACE	56	6	ST CHARLES	487	1994	\$3,817,929	The project involved dredging sediments from Lake Pontchartrain to create vegetated wetlands in an area roughly bounded by I-10, Lake Pontchartrain, Bayou Labranche.	1
CWPPRA	Bayou Sauvage National Wildlife Refuge Hydrologic Restoration, Phase 2	PO-18	HR	2	USFWS	100	2	ORLEANS	1280	1997	\$1,692,552	The construction of U.S. Highway 90, canals, railroad lines, and Lake Pontchartrain hurricane protection levees has impounded the marsh in the project area. Project features consist of two 36-inch 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-19	MM	3	USACE	103	1	ST BERNARD	755	1999	\$313,145	The objective of this project is to preserve vegetated wetlands by repairing the lateral and rear dikes of the Mississippi River Gulf Outlet (MRGO) disposal areas. Repairs to a 28,000 linear-foot dike, in conjunction with the installation of metal box weirs with a single 40-inch pipe, was used to control and divert water flow to prevent the perched marshes from draining.	1
CWPPRA	Red Mud Demonstration (Deauthorized)	PO-20	MC	3	EPA	56	19	ST JOHN THE BAPTIST		Deauthorized	\$470,500	This project was authorized to determine whether red mud, produced as a by-product of removing alumina from bauxite, could be utilized as marsh-creation material in combination with compost and marsh sediment. Construction of experimental units was initiated in 1997; however, due to unexpected problems with fill material, liners, and contaminants in the water source, the project was officially deauthorized by the CWPPRA Task Force in August 2001.	1
CWPPRA	Eden Isles East Marsh Restoration (Deauthorized)	PO-21	HR	4	NMFS	76	1	CAMERON	1453	Deauthorized	\$374	The project intended to restore 2,536 acres of drained fastlands by actively managing water levels to maximize marsh creation. There was a change in landowners of the project area during the planning phase of this project. Consequently, the project was officially deauthorized by the CWPPRA Task Force in January 1998.	1
CWPPRA	Bayou Chevee Shoreline Protection	PO-22	SP	5	USACE	103	2	ORLEANS	212	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 will create about 150 acres of marsh.	1
CWPPRA	Hopedale Hydrologic Restoration	PO-24	HR	8	NMFS	103	1	ST BERNARD	106	2005	\$2,281,287	This project is designed to abate site-specific wetland loss by replacing collapsed culverts installed in the 1950s near Yscloskey, Louisiana. Replacement of these structures would allow more rapid drainage of the area, improve fisheries access, reduce wetland loss rates, and protect approximately 3,086 acres of marsh.	1
CWPPRA	Bayou Bienvenue Pump Station Diversion and Terracing (Deauthorized)	PO-25	MC	8	NMFS	101, 103	1,2	TERREBONNE	442	Deauthorized	\$185,098	This project intended to combine the use of existing pump stations with the construction of a diversion channel, water control structures, and earthen terraces planted with smooth cordgrass (Spartina alterniflora). This would force the flow of freshwater and nutrients through a deteriorated marsh area to abate site-specific marsh loss. The project was officially deauthorized by the CWPPRA Task Force in April 2002 because construction was determined to be too costly.	1
CWPPRA	Opportunistic Use of the Bonnet Carre Spillway (Deauthorized)	PO-26	FD	9	USACE	56	19	PLAQUEMINES	177	Deauthorized	\$523,306	This project intended to abate high salinity stress on the vegetated wetlands surrounding Lake Pontchartrain. This objective was to be accomplished through the removal of pins from the Bonnet Carre 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 of 2007 due to uncertainty of benefits and lack of landowner support.	1
CWPPRA	Chandeleur Islands Marsh Restoration	PO-27	VP	9	NMFS	103	1	ST BERNARD	88	2001	\$1,139,566	The objective of this project was to accelerate the recovery period of barrier island areas overwashed by Hurricane Georges in 1998 through vegetation plantings. The overwash areas, which encompass 364 acres, are located at 22 sites along the Chandeleur Sound side of the island chain and were planted with smooth cordgrass (Spartina alterniflora).	1
CWPPRA	LaBranche Wetlands Terracing, Planting, and Shoreline Protection (Deauthorized)	PO-28	VP	9	NMFS	56	19	ST CHARLES	489	Deauthorized	\$194,451	Located along Lake Pontchartrain, the 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 of 2007.	1
CWPPRA	River Reinroduction into Maurepas Swamp	PO-29	FD	11	EPA	56, 88, 57	18, 19	ST JOHN THE BAPTIST, ST JAMES	36121	Pending	\$164,000,000	This project intends to restore a natural hydrologic regime and increase nutrient inputs in cypress-tupelo swamp tracts south of Lake Maurepas through the diversion of Mississippi River water into an area of degraded swamp.	1
CWPPRA	Lake Borgne Shoreline Protection	PO-30	SP	10	EPA	103, 104	1	ST BERNARD	229	2008	\$25,543,123	The goal of this project is to maintain the integrity of the narrow strip of marsh that separates Lake Borgne from the Mississippi River Gulf Outlet (MRGO). This land helps protect the communities of Shell Beach, Yscloskey, and Hopedale from direct exposure to lake wave energy and storm surges. The goal will be accomplished through construction of a continuous nearshore rock breakwater.	1
CWPPRA	Lake Borgne and MRGO Shoreline Protection (Deauthorized)	PO-32	SP	12	USACE	103	1	ST BERNARD	93	Deauthorized	\$101,913	The objective of this project is to preserve the marsh between Lake Borgne and the Mississippi River Gulf Outlet (MRGO) by preventing shoreline erosion. A rock dike will be constructed along the lake Borgne shoreline and along the northern bank of the MRGO. The Lake Borgne segment of this project was constructed by the USACE with funds from the 3th supplemental.	1
CWPPRA	Goose Point/Point Platte Marsh Creation	PO-33	MC	13	USFWS	89	11	ST TAMMANY	436	2009	\$20,867,777	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	Alligator Bend Marsh Restoration and Shoreline Protection	PO-34	TE, VP, SP	16	NRCS	103	1	ORLEANS	121	Pending	\$29,716,052	The goal of this project is to provide shoreline protection in Lake Borgne, starting at Alligator Point, using rock dikes and vegetative plantings.	1
CWPPRA	LaBranche East Marsh Creation	PO-75	MC	19	NRCS	56	19	ST CHARLES	715	Pending	\$32,323,291	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 Bonfouca Marsh Creation	PO-104	MC	20	USFWS	89, 90	11	ST TAMMANY	424	Pending	\$23,875,866	The primary goal of the project is to create 533 acres and nourish 42 acres of low salinity brackish marsh in open water areas adjacent to Bayou Bonfouca with sediment pumped from Lake Pontchartrain.	1

**ONGOING PROTECTION AND RESTORATION PROJECT SUMMARIES**

CPRA Program	Name	State Project Number	Project Type	PPL	Federal Sponsor	House District	Senate District	Parish	Acres Benefited	Construction Completion	Total Budget	Project Description	Planning Unit
CWPPRA	Grand Bayou Hydrologic Restoration (Deauthorized)	TE-10	HR	5	USFWS	35	20	LAFOURCHE	199	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 include 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 has been deauthorized.	3A
CWPPRA	North Catfish Lake Marsh Creation	TE-112	MC	22	NRCS	54	20	LAFOURCHE	265	Pending	\$3,216,194	Sediments will be hydraulically dredged from Catfish Lake and pumped via pipeline to create approximately 415 acres of marsh habitat and nourish an additional 251 acres of marsh habitat.	3a
CWPPRA	Falgout Canal Planting Demonstration	TE-17	VP	1	NRCS	51	20	TERREBONNE		1996	\$83,660	For this demonstration project, smooth cordgrass ( <i>Spartina alterniflora</i> ) suited to the salinity and habitat type of the Falgout Canal area was planted along the canal and protected by six types of wave-stilling devices.	3A
CWPPRA	Timbalier Island Planting Demonstration	TE-18	VP	1	NRCS	53	20	TERREBONNE		1996	\$59,633	For this demonstration project, approximately 7,390 linear feet of 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
CWPPRA	Lower Bayou LaCache Hydrologic Restoration (Deauthorized)	TE-19	MM	1	NMFS	53	20	TERREBONNE		Deauthorized	\$46,840	The project would have reduced marsh loss rates and improved fish and wildlife habitat 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 landrights and navigation, the project was officially deauthorized by the CWPPRA Task Force in February of 1996.	3A
CWPPRA	Isles Dernieres Restoration East Island	TE-20	BI	1	EPA	53	20	TERREBONNE	449	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 Pelto and used to build a retaining dune which was then hydraulically filled 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-22	VP, MC	2	NMFS	51	20	TERREBONNE	375	1997	\$5,490,270	This project is intended to reduce saltwater intrusion into the Point au Fer marshes without reducing freshwater back flooding from the Atchafalaya River. Phase I of this project, completed in 1997, involved the plugging of two major natural gas/oil 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 Mobil Canal.	3B
CWPPRA	West Belle Pass Headland Restoration	TE-23	SP	2	USACE	54	20	LAFOURCHE	474	1998	\$6,751,441	The project will reduce the encroachment of Timbalier Bay into the marshes on the west side of Bayou Lafourche with the use of dedicated dredged materials to create 184 acres of marsh on the west side of Belle Pass. A water control structure will be placed in the Evans Canal, and plugs on other canals.	3A
CWPPRA	Isles Dernieres Restoration Trinity Island	TE-24	BI, MC	2	EPA	53	20	TERREBONNE	776	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 integrity of the island, and protect the lower Terrebonne estuary.	3A
CWPPRA	East Timbalier Island Sediment Restoration	TE-25	BI	3	NMFS	54	20	TERREBONNE	1913	2001	\$6,921,279	The objective of this project is to strengthen and thus increase the life expectancy of East Timbalier Island. The project called for the mining of 2.7 million cubic yards of sediment and placement of the material in three embayments along the landward shoreline of East Timbalier Island. The project also included aerial seeding of the dune platform, installation of sand fencing, and dune vegetation plantings.	3A
CWPPRA	Lake Chapeau Sediment Input and Hydrologic Restoration, Point Au Fer Island	TE-26	MC	3	NMFS	51	20	TERREBONNE	509	1999	\$5,932,620	The objectives of this project are to restore the marshes west of Lake Chapeau, re-establish the hydrologic separation of the Locust Bayou and Alligator Bayou watersheds, and re-establish the natural drainage patterns within the Lake Chapeau area. To accomplish this material dredged from Atchafalaya Bay was used to create marsh, oil field access canals were plugged, and spoil banks were gapped. An estimated 850,000 cubic yards of material were hydraulically dredged from Atchafalaya Bay and spread to a thickness of approximately 2 feet to create 160 acres of marsh.	3B
CWPPRA	Whiskey Island Restoration	TE-27	BI, MC	3	EPA	53	20	TERREBONNE	657	2000	\$7,106,586	The project created and restored beaches and back island marshes on Whiskey Island. The project created 523 acres of back island marsh and filling in the breach at Coupe Nouvelle (134 acres). The initial vegetation planting with smooth cordgrass ( <i>Spartina alterniflora</i> ) on the bay shore was completed in July 1998 and additional vegetation seeding/planting was carried out in Spring 2000.	3A
CWPPRA	Brady Canal Hydrologic Restoration	TE-28	HR	3	NRCS	53	20	TERREBONNE	297	2000	\$6,408,530	The objective of the project is to maintain the fragile, highly-fragmented transitional marshes between the fresh and estuarine zones by enhancing freshwater, sediment, and nutrient delivery into the area.	3B
CWPPRA	Raccoon Island Breakwaters Demonstration	TE-29	BI	5	NRCS	53	20	TERREBONNE		1997	\$1,795,388	The project will protect the newly refurbished beaches and wetlands of Raccoon Island and protect back barrier and mainland marshes with six segmented breakwaters.	3A
CWPPRA	East Timbalier Island Sediment Restoration	TE-30	BI	4	NMFS	54	20	TERREBONNE	215	2000	\$13,032,666	The project goal is to strengthen and increase the life expectancy of East Timbalier Island by placing dredged material along its landward shoreline. Additional rock has been placed on the existing breakwater in front of the island, which will help protect the created area from erosion.	3A
CWPPRA	Flotant Marsh Fencing Demonstration (Deauthorized)	TE-31	SP	4	NRCS	51	21	TERREBONNE		Deauthorized	\$206	The purpose of this demonstration project was to determine the effectiveness of different fencing techniques used to conserve and restore floating marshes. There was difficulty in locating an appropriate site for demonstration and in 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 October of 2001.	3A
CWPPRA	North Lake Boudreaux Basin Freshwater Introduction and Hydrologic Management	TE-32A	FD	6	USFWS	51, 52, 53	20	TERREBONNE	603	Pending	\$25,766,765	The project aims to introduce freshwater from the HNC through an enlarged Bayou Pelton channel across Bayou Grand Caillou and through a gated channel.	3A
CWPPRA	Bayou Boeuf Pump Station (Deauthorized)	TE-33	HR	6	EPA	50, 51, 55, 60	21	TERREBONNE		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 Verret Basin, and evaluating a long-term river water delivery strategy from Atchafalaya River to Terrebonne wetlands. The project was officially deauthorized by the CWPPRA Task Force in July of 1998.	3A
CWPPRA	Penchant Basin Natural Resources Plan, Increment 1	TE-34	FD, HR, SP	6	NRCS	53	20	TERREBONNE	675	Pending	\$17,628,814	The objective of the project is to divert freshwater flow from north-western to south-eastern sub project areas coupled with protection measures to reduce inundation of fragile marsh areas in overall Penchant Basin in Terrebonne Parish.	3B
CWPPRA	Marsh Creation East of the Atchafalaya River - Avoca Island (Deauthorized)	TE-35	MC	6	USACE	51	21	ST MARY	434	Deauthorized	\$43	The project consisted of the beneficial use of dredged material from the "Crew Boat Chute" 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 unjustifiable. The project was officially deauthorized by the CWPPRA Task Force in July of 1998.	3B
CWPPRA	Thin Mat Floating Marsh Enhancement Demonstration	TE-36	MC	7	NRCS	51	21	TERREBONNE		2000	\$920,368	The objective of this project is to induce the development of thick-mat, continuously floating marsh from a thin-mat floatant using various combinations of treatments including fertilization, herbivory reduction, and transplanting healthy, thick-mat marsh plugs into the thin-mat floatant. The project will also determine the effects of water movement and sediment availability on these marshes.	3B
CWPPRA	New Cut Dune and Marsh Restoration	TE-37	BI, MC	9	EPA	53	20	TERREBONNE	386	2008	\$13,110,435	The objective of this project was to close the breach between East and Trinity Islands that was originally created by Hurricane Carmen (1974) and subsequently enlarged by Hurricane Juan (1985) and Hurricane Andrew (1992). The project will create barrier island dunes and marsh habitat and lengthen the structural integrity of the eastern Isles Dernieres by restoring the littoral drift and adding sediment into the near-shore system.	3A
CWPPRA	South Lake Decade Freshwater Introduction	TE-39	SP	9	NRCS	51	20	TERREBONNE	202	Pending	\$5,223,806	This project will include the construction of a water control structure in the southern bank of Lake DeCade. This will increase the amount of Atchafalaya River water and sediment introduced into the marshes south of the lake. In addition, shoreline protection will be implemented adjacent to the proposed structure, and a weir in Lapeyrouse Bayou will be removed.	3A
CWPPRA	Timbalier Island Dune and Marsh Restoration	TE-40	BI, MC	9	EPA	53	20	TERREBONNE	663	2004	\$16,527,789	Timbalier Island is migrating rapidly to the west/northwest; therefore, the western end of Timbalier Island is undergoing lateral migration by spit-building processes at the expense of erosion along the eastern end. The objective of this project is to restore the eastern end of Timbalier Island by the direct creation of beach, dunes, and marsh.	3A
CWPPRA	Mandalay Bank Protection Demonstration	TE-41	SP	9	USFWS	51, 52	21, 20	TERREBONNE		2003	\$1,868,659	This demonstration project is intended to develop new techniques for protecting and restoring organic soils, which can be easily eroded. Intact banks and breakthroughs were treated to determine the cost-effectiveness of demonstrated approaches. The project will evaluate several low-cost solutions for restoring habitat in blowout areas and preventing bank erosion.	3A, 3B

**ONGOING PROTECTION AND RESTORATION PROJECT SUMMARIES**

CPRA Program	Name	State Project Number	Project Type	PPL	Federal Sponsor	House District	Senate District	Parish	Acres Benefited	Construction Completion	Total Budget	Project Description	Planning Unit
CWPPRA	GMW Bank Restoration of Critical Areas in Terrebonne	TE-43	SP	10	NRCS	51	21	TERREBONNE	345	Pending	\$13,022,245	The project objective is to restore critical lengths of deteriorated channel banks and stabilize/armored selected critical lengths of deteriorated channel banks with hard shoreline stabilization materials. A portion of this project will be constructed using CIAP 2007 funds and the remainder of the project has received Phase 2 funding through CWPPRA.	3A
CWPPRA	North Lake Mechant Landbridge Restoration	TE-44	SP, MC	10	USFWS	51	20	TERREBONNE	604	2009	\$39,004,428	The project will help to maintain and restore the landbridge (Lake Mechant north shoreline and the Small Bayou La Pointe Ridge) which provides a hydrologic barrier between brackish and low-salinity habitats. Project features include marsh creation, the planting of smooth cordgrass (Spartina alterniflora) on the shoreline, the construction of various plugs, and repairing a fixed-crest weir along Bayou Raccourci.	3A
CWPPRA	Terrebonne Bay Shore Protection Demonstration	TE-45	SP	10	USFWS	53	20	TERREBONNE	0	2007	\$2,718,768	This project is intended to evaluate several different shoreline protection methods, including concrete mats, artificial oyster reefs and A-Jacks.	3A
CWPPRA	West Lake Boudreaux Shoreline Protection and Marsh Creation	TE-46	SP	11	USFWS	51	20	TERREBONNE	145	2008	\$17,893,813	The purpose of this project is to create and nourish about 200 acres of marsh along the western shoreline of Lake Boudreaux to protect the shoreline from erosion due to direct exposure to lake wave energy and to restore interior marsh lost to subsidence and saltwater intrusion.	3A
CWPPRA	Ship Shoal: Whiskey West Flank Restoration	TE-47	BI	11	EPA	53	20	TERREBONNE	500	Pending	\$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 will provide a barrier to reduce wave and tidal energy, thereby protecting mainland shoreline from continued erosion.	3A
CWPPRA	Raccoon Island Shoreline Protection and Marsh Creation	TE-48	BI, MC	11	NRCS	51	20	TERREBONNE	16	2008, Pending	\$17,050,747	The purpose of the project is to protect the existing southern shoreline of the island by constructing 8 more rock breakwaters. Phase B will utilize dredged sediment from the Gulf of Mexico to create marsh on the land side of the island.	3A
CWPPRA	Avoca Island Diversion and Land Building	TE-49	FD, MC	12	USACE	51	21	ST MARY	280	Pending	\$19,157,200	Project features include a small diversion from Bayou Shaffer into Avoca Lake paired with marsh creation through dedicated dredging.	3A
CWPPRA	Whiskey Island Back Barrier Marsh Creation	TE-50	BI	13	EPA	51, 53	20	TERREBONNE	270	2010	\$30,414,083	The goal of this project was to recreate a back barrier marsh platform on which the barrier island can migrate in order to increase the longevity of the previously restored and natural portions of the island. Heavy construction was complete in the fall of 2009. Project features included construction of 316 acres of back barrier marsh, 5,800 linear feet of tidal creeks, three 1-acre tidal ponds, and 13,000 linear feet of sand dune on the gulf side beach shore.	3A
CWPPRA	Madison Bay Marsh Creation and Terracing	TE-51	MC, TE	16	NMFS	53	20	TERREBONNE	1019	Pending	\$32,353,377	The goals of this project are to create and nourish marsh and associated edge habitat and to promote conditions conducive to the growth of submerged 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-52	BI	16	NMFS	54	20	LAFOURCHE	389	Pending	\$39,422,093	This project will reestablish the West Belle headland by rebuilding a large portion of the beach, dune, and back barrier marsh that once existed. Approximately 9,300 feet of beach and dune will be rebuilt.	3A
CWPPRA	Enhancement of Barrier Island Vegetation Demo	TE-53	VP	16	EPA	51, 53	20	TERREBONNE		2010	\$919,264	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 will focus specifically on enhancing the establishment and growth of transplants of both dune vegetation [bitter panicum (Panicum amarum) and sea oats (Uniola paniculata)] and marsh vegetation [smooth cordgrass (Spartina alterniflora) and black mangrove (Avicennia germinans)].	3A
CWPPRA	Central Terrebonne Freshwater Enhancement	TE-66	MC, HR	18	NRCS	51	20	TERREBONNE	456	Pending	\$16,640,120	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-72	HR, MC	19	USFWS	51	20	TERREBONNE	749	Pending	\$22,943,866	Project goals include 1) restore an important feature of structural framework between Lake Pagie 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 water areas via construction of a terrace field.	3A, 3B
CWPPRA	Terrebonne Bay Marsh Creation - Nourishment	TE-83	MC	20	USFWS	53	20	TERREBONNE	353	Pending	\$27,414,401	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 reducing water exchange between Terrebonne Bay and interior lakes during tidal and small storm events and to reduce erosion along 16,000 ft of the northern Terrebonne Bay shoreline.	3A
CWPPRA	Vermilion River Cutoff Bank Protection	TV-03	SP	1	USACE	47	25	VERMILION	202	1996	\$2,022,987	The project design includes protecting the east side of the Vermilion River Cutoff with rock to prevent further erosion; hardening the points on existing land bridges on the west bank of the Cutoff with rock; and constructing sediment trapping fences on the Vermilion Bay side to help stabilize and protect the land bridge from wave action in the Bay.	3B
CWPPRA	Cote Blanche Hydrologic Restoration	TV-04	HR	3	NRCS	51	21	ST MARY	2223	1998	\$8,290,881	The primary objectives of the project are to reduce future shoreline loss from wave erosion, reduce excessive tidal fluctuations and rapid tidal exchange to prevent scouring of interior marsh, develop a hydrologic regime conducive to sediment and nutrient deposition, and to re-establish vegetation in eroded areas.	3B
CWPPRA	Boston Canal/Vermilion Bay Bank Protection	TV-09	SP	2	NRCS	47	22	VERMILION	378	1995	\$1,012,649	The project will stabilize 15 miles of Vermilion Bay shoreline and prevent further regression of the Boston Canal banks. A strip of Vermilion Bay shoreline approximately 25 feet wide by 15 miles long would be planted with single stems of Spartina alterniflora at 3 foot intervals.	3B
CWPPRA	Freshwater Bayou Bank Stabilization - Belle Isle Canal to Lock	TV-11B	SP	9	USACE	47	26	VERMILION	241	Pending	\$35,559,962	The project will construct a rock dike to protect the east shoreline of Freshwater Bayou Canal.	3B
CWPPRA	Little Vermilion Bay Sediment Trapping	TV-12	TE	5	NMFS	50	26	VERMILION, IBERIA	441	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 was placed to create emergent marsh, thereby protecting the existing shoreline from wind-induced wave erosion.	3B
CWPPRA	Oaks/Avery Canal Hydrologic Restoration, Increment 1	TV-13A	HR	6	NRCS	47	22	VERMILION, IBERIA	160	2002	\$2,925,218	The objective of the 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-14	HR	6	USACE	49	22	IBERIA	408	2001	\$5,143,323	The objective of the project is to stabilize the northeastern shoreline of Marsh Island, including the northern shoreline of Lake Sand, and to help to restore the historical hydrology. The project included construction of nine plugs in oil and gas canals at the northeast end of 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-15	TE, VP	6	NMFS	50	21	ST MARY	1999	2005	\$1,653,792	The objective of the project is to induce sedimentation to create emergent vegetated wetlands. This will be achieved by constructing wetland terraces, thereby reducing wave fetch. Distributary channels will be dredged to deliver water and sediment to the project area.	3B
CWPPRA	Cheniere Au Tigre Sediment Trapping Demonstration	TV-16	SNT	6	NRCS	47	25	VERMILION		2001	\$624,999	The objective of the project is to field test a conceptual device designed to trap sediment from the gulf tides, stabilize the on-going erosion on Cheniere au Tigre and build up portions of the coastline that have already eroded away.	3B
CWPPRA	Lake Portage Land Bridge	TV-17	SP	8	NRCS	47	22	VERMILION	1496	2004	\$1,181,129	The objective of this project is to prevent the shoreline south of Lake Portage from breaching and creating another pass from Vermilion Bay to the Gulf. The project consists of backfilling a canal and armoring the beach with rock.	3B
CWPPRA	Four Mile Canal Terracing and Sediment Trapping	TV-18	TE	9	NMFS	49	26	IBERIA	52	2004	\$2,079,048	This project includes construction and planting of terraces with smooth cordgrass (Spartina alterniflora) within Little White Lake and Little Vermilion Bay, along Four Mile Canal, to abate wave-induced shoreline erosion and facilitate sedimentation in the open water areas between the terraces.	3B
CWPPRA	Weeks Bay Marsh Creation and Shore Protection/Commercial Canal Freshwater Redirection	TV-19	SP	9	USACE	49	22	IBERIA	278	Pending	\$30,227	The goal of the project is to create marsh to restore land-bridge separating Weeks Bay and GMW.	3B
CWPPRA	Bayou Sale Shoreline Protection	TV-20	SP	13	NRCS	50	21	ST MARY	131	Pending	\$32,103,020	The goal of the project is to protect an eroding shoreline with approx 35,776 feet of rock dike shoreline protection.	3B

**ONGOING PROTECTION AND RESTORATION PROJECT SUMMARIES**

CPRA Program	Name	State Project Number	Project Type	PPL	Federal Sponsor	House District	Senate District	Parish	Acres Benefited	Construction Completion	Total Budget	Project Description	Planning Unit
CWPPRA	East Marsh Island Marsh Creation	TV-21	MC	14	NRCS	49	22	IBERIA	1159	2010	\$21,215,936	The objective of the project was to create approximately 362 acres of sustainable marsh. The majority of the project area has been converted to open water, primarily because of hurricane Lili (2002). Through the use of approximately \$5 million in unused construction funds, over 500 acres of additional marsh was created/nourished. The sediment for marsh creation was dredged from East Cole Blanche Bay and pumped a maximum of 6 miles.	3B
CWPPRA	Cole's Bayou Marsh Creation	TV-63	MC	21	NMFS	47	26	VERMILION	398	Pending	\$3,136,806	The project consists of creating/nourishing marsh habitat and increasing freshwater and sediment inflow into interior wetlands by improving project area hydrology.	3B
DEEPWATER HORIZON	Mid-Barataria Diversion	BA-153	SD	N/A	N/A	84,105	8	PLAQUEMINES	68,000	Pending	\$40,800,000	A sediment diversion into mid-Barataria in the approximate vicinity of Myrtle Grove to build and maintain land; maximum capacity 50,000 cfs. Over 50 years, this project could divert approximately 210 million metric tons of sediment.	2
DEEPWATER HORIZON	Lower Barataria Diversion	BA-163	SD	N/A	N/A	105	8	PLAQUEMINES	In Development	Pending	In Development	A sediment diversion into lower Barataria Bay in the vicinity of Empire; 50,000 cfs capacity. Over fifty years, this project could divert approximately 206 million metric tons of sediment.	2
DEEPWATER HORIZON	Lower Breton Diversion	BS-23	SD	N/A	N/A	103	1	PLAQUEMINES	In Development	Pending	In Development	A sediment diversion into lower Breton Sound in the approximate vicinity of Black Bay to build and maintain land; 50,000 cfs capacity. Over 50 years, this project could divert approximately 214 million metric tons of sediment.	1
DEEPWATER HORIZON	Calcasieu Ship Channel Salinity Control Measures	CS-65	HR	N/A	N/A	47	25	CAMERON	In Development	Pending	In Development	Construction of measures designed to prevent saltwater from entering Calcasieu Lake through the Calcasieu Ship Channel. Measures would control salinity spikes, provide storm surge benefits, and would be constructed in a manner that would allow for the continued functioning, and, ideally, improvement and increased viability of the Calcasieu Ship Channel and the Port of Lake Charles.	4
DEEPWATER HORIZON	Central Wetlands Diversion	PO-141	FD	N/A	N/A	103	1, 3	ST BERNARD	In Development	Pending	\$97,326,755	The project will provide fresh water to the Central Wetlands area by utilizing the existing Violet Canal. The project will determine what flow can be attained utilizing the existing canal with little or no modifications. The canal should also accommodate a sediment pipeline delivery system if this corridor is necessary for that delivery system. The project will determine if the flow that can be attained will provide a realized benefit to the area.	1
DEEPWATER HORIZON	Mississippi River Sediment Delivery System East	PO-144	MC	N/A	N/A	99, 103	1, 3	ORLEANS, ST BERNARD	In Development	Pending	In Development	The project will create new wetland habitat in the general New Orleans East Landbridge area. Sediment for the marsh creation will be dredged from the Mississippi River and conveyed via sediment pipeline for placement. The project will determine the most viable corridor for the sediment pipeline and which area would provide the greatest benefit from marsh creation.	1
DEEPWATER HORIZON	Increase Atchafalaya Flow to Easter Terrebonne	TE-110	SD	N/A	N/A	51	20	TERREBONNE	In Development	Pending	In Development	This restoration project is intended to provide fresh water and sediment from the Atchafalaya River through the Gulf Intracoastal Waterway into marsh areas of eastern Terrebonne Parish, including Lake Boudreaux and Grand Bayou marsh areas.	3A, 3B
DEEPWATER HORIZON	Houma Navigation Canal Lock Complex		HR	N/A	N/A	53	20	TERREBONNE	In Development	Pending	In Development	Construction of a lock on the Houma Navigation Canal and operation to reduce saltwater intrusion and distribute freshwater to the surrounding wetlands. Project is intended to be constructed as a component of the Morganza to the Gulf hurricane protection project. Costs associated with this project include planning, engineering, and design and operational and maintenance costs to operate the lock for restoration.	3A
ENERGY BILL CIAP	Morgan City Industrial Road	AT-05	OTHER		BOEMRE	51	21	ST MARY		Pending	\$1,655,000	The project is a road alignment that begins at the First Street floodgate in Morgan City, LA. The alignment will proceed along the unprotected side of the floodwall a distance of 1857 feet. And end at the Port of Morgan City's north gate. The project goal is to reduce the truck traffic through the residential neighborhoods by rerouting the traffic through the proposed realigned road. The preliminary 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 areas.	3B
ENERGY BILL CIAP	Atchafalaya Long Distance Sediment Pipeline	AT-15	OTHER, MC	-	USFWS	51, 52, 53	20	TERREBONNE	-	N/A	\$1,500,000	CIAP funds allocated to this project will advance the design of a sediment pipeline which will be used to restore marsh in lower Terrebonne Parish.	3A
ENERGY BILL CIAP	Lake Salvador Shoreline Protection (Phase III)	BA-15X-2 (EB)	SP		BOEMRE	105	19	ST CHARLES	844	2009	\$2,300,000	This project will construct approximately 7,000 linear feet of shoreline protection near the northwest shore of Lake Salvador.	2
ENERGY BILL CIAP	Mississippi River Water Reintroduction into Bayou Lafourche - BLFWD	BA-161	FD	-	USFWS	55, 51, 52, 105, 53, 54	20, 19, 8	ASSUMPTION, LAFOURCHE	-	Pending	\$20,000,000	Project is estimated to allow for the continued dredging of a 1,000 cfs channel for an additional 7 - 12 miles of Bayou Lafourche. Overall project features identified for implementation include a receiving intake structure at the point of diversion in the Mississippi River; a pump/siphon system with a combined discharge capacity of 1,000 cfs; a discharge settling pond/sediment basin in Bayou Lafourche at Donaldsonville; modification of weir structures; bank stabilization along Bayou Lafourche; monitoring stations; and dredging of Bayou Lafourche. The total project has been modeled to benefit approx. 120,000 - 130,000 acres in the Terrebonne and Barataria Basins through reductions in the salinities and/or nourishment of wetlands with the introduction and distribution of sediment and nutrients from the river.	2, 3A
ENERGY BILL CIAP	Shoreline Protection Cat Island	BA-162-CAT	SP	-	USFWS	105	8	PLAQUEMINES	40	Pending	\$5,000,000	This project will construct a series of submerged wave breaks surrounding the existing remnants of the Cat Islands in order to protect the oil damaged shores along the existing island remnants from further wave damage while also collecting sediment in order to naturally rebuild the degraded infrastructure of the islands.	2
ENERGY BILL CIAP	East Grand Terre	BA-30 (EB)	BI	9	BOEMRE	105	8	PLAQUEMINES	683	2010	\$33,312,023	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. Project was designed under the CWPPRA Program and constructed under the CIAP program.	2
ENERGY BILL CIAP	Long Distance MS River Sediment Pipeline	BA-43 (EB)	OTHER, MC		BOEMRE	105, 54	20, 1, 8	LAFOURCHE, JEFFERSON		Pending	\$66,192,104	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 a ridge.	2
ENERGY BILL CIAP	LA 1 Improvements - Fourchon to Leeville Bridge (CIAP)	BA-55	OTHER		BOEMRE	54	20	LAFOURCHE		Pending	\$35,115,290	This project is located 60 miles south of New Orleans in lower Lafourche Parish between Leeville and Port Fourchon. It will construct a 5 mile long, two lane elevated highway (two, 12 ft lanes and two, 8 ft shoulders). The Phase IA project connects to the Phase IB and Phase IC projects (in Leeville) by relocating LA 1 on a new alignment.	2
ENERGY BILL CIAP	Fringe Marsh Repair	BA-58	MC		BOEMRE	105	1	PLAQUEMINES	300	Pending	\$8,756,605	This program will reestablish critical areas of fragile marsh and minimize the continued fragmentation of wetlands system throughout the coast. Through the beneficial use of dredge material and projects to reestablish shorelines, fringe marsh areas will be protected.	2
ENERGY BILL CIAP	Bayou Lamoque Floodgate Removal	BS-13 (EB)	FD		BOEMRE	105	1	PLAQUEMINES	660	Pending	\$1,500,000	This project will remove floodgates to allow unimpeded flow of freshwater through the water control structures.	1
ENERGY BILL CIAP	Fifi Island Restoration	CIAPFIFI	SP		BOEMRE	105	8	JEFFERSON	126	2003	\$751,406	Approximately 100 acres of existing island (Grand Isle & Fifi Island) will be protected by the installation of approximately 10,000 linear feet of rock shore protection. An additional \$999,500 was contributed from the CIAP of 2001 for the construction and design of this project.	2
ENERGY BILL CIAP	Trosclair Road Repairs	CS-47	OTHER		BOEMRE	47	25	CAMERON		Pending	\$2,039,592	The proposed project will overlay Trosclair Road, a parish road that is heavily used by offfield traffic. The project is approximately 8 miles long and connects State Highway 27/82 from Cameron to State Highway 82 to Oak Grove.	4
ENERGY BILL CIAP	Bush Canal and Bayou Terrebonne Bank Stabilization	DNR 2513-0311	SP		BOEMRE	53	20	TERREBONNE	4300	2007	\$3,700,000	This project reconstructed the south bank of Bush Canal using material dredged from the canal. The restored bank-line was then covered with geotextile fabric and armored with stone rip-rap. The rebuilt bank-line will help to diminish storm surge as well as reduce saltwater intrusion. This project was funded by the CIAP of 2001.	3A
ENERGY BILL CIAP	Coastal Forest Conservation Initiative	LA-13	PP, OTHER		BOEMRE	N/A	N/A	COASTWIDE		Pending	\$16,167,036	A program to preserve existing coastal forest via purchase of fee title or conservation servitudes from willing land owners.	COASTWIDE
ENERGY BILL CIAP	Rockefeller Shoreline Protection Demo (CIAP)	ME-18 (EB)	SP		BOEMRE	47	25	CAMERON	23	Pending	\$596,473	The project will construct three types of shoreline protection structures as a demonstration to determine which type(s) of structures are successful in protecting the shoreline. Successful structure(s) will be used in a larger CWPPRA Project.	4
ENERGY BILL CIAP	Grand Lake Shoreline Protection (CIAP)	ME-21(EB)	SP		BOEMRE	47	25	CAMERON	495	Pending	\$10,600,000	This project will construct approximately 37,800 linear feet of shoreline protection on the south shore of Grand Lake from Superior Canal to Tebo Point.	4
ENERGY BILL CIAP	Living Shoreline	PO-148	SP		USFWS	103, 105, 84	1, 8	ST BERNARD, JEFFERSON, ORLEANS	5340	Pending	\$29,000,000	St. Bernard - 21 miles of shoreline protection from Point Eloi along the northern edge of Bay Eloi, around Lydia Point, and along the southern edge of Morgan Harbor and Treasure Bay; Jefferson - shoreline protection along the north eastern edge of Hackberry Bay, south of Mud Lake; Plaquemines - shoreline protection near Joshua's Marina on the west side of the Mississippi River in Buras.	1,2

**ONGOING PROTECTION AND RESTORATION PROJECT SUMMARIES**

CPRA Program	Name	State Project Number	Project Type	PPL	Federal Sponsor	House District	Senate District	Parish	Acres Benefitted	Construction Completion	Total Budget	Project Description	Planning Unit
ENERGY BILL CIAP	Violet Diversion	PO-35 (EB)	FD		USACE	104, 103	2, 1	ST BERNARD	13200	Pending	\$1,170,982	This project will divert freshwater from the Mississippi River into Lake Borgne to freshen Mississippi Sound, Central Wetlands, and Biloxi Marsh areas. The Feasibility Study for this project is being done as part of the MRGO Ecosystem Restoration FS.	1
ENERGY BILL CIAP	Orleans Land Bridge SP & Marsh Creation	PO-36 (EB)	SP		BOEMRE	104, 103	2, 1	ORLEANS	140	Pending	\$41,948,202	This project will provide shoreline protection on the northwest rim of Lake Borgne.	1
ENERGY BILL CIAP	Central Wetlands Demonstration	PO-73	HR		BOEMRE	101, 103, 104	1, 2	ST BERNARD	10-20	Pending	\$3,500,000	Water Assimilation project with New Orleans Sewerage and Water Board.	1
ENERGY BILL CIAP	Central Wetlands - Riverbend	PO-73-1	HR		BOEMRE	103	4	ST BERNARD	346	Pending	\$2,000,000	Wetland Assimilation Project in St. Bernard Parish.	1
ENERGY BILL CIAP	Central Wetlands - EBSTP to A2	PO-73-2	HR		BOEMRE	103	4	ST BERNARD, ORLEANS	473	Pending	\$4,500,000	Wastewater from New Orleans Sewerage and Water Board's East Bank Sewerage Treatment Plant will be pumped to adjacent wetlands in St. Bernard Parish.	1
ENERGY BILL CIAP	Rainey Audubon Wildlife Sanctuary Earthen Terraces	RAINEY	MC			47	26	VERMILION		2005	\$951,869	The project consists of constructing approximately 35,000 linear feet of terraces. The terraces were created by dredging in shallow open water areas and piling the spoil on one side of the borrow area. An additional \$391,763 was contributed from the CIAP of 2001.	3B
ENERGY BILL CIAP	GMWV Bank Restoration of Critical Areas of Terrebonne (CIAP)	TE-43 (EB)	SP		MMS	21	51	TERREBONNE	1,180	2011	\$7,750,000	The project objective is to restore critical lengths of deteriorated channel banks and stabilize/armour selected critical lengths of deteriorated channel banks with hard shoreline stabilization materials.	3B
ENERGY BILL CIAP	Falgout Canal Freshwater Enhancement	TE-63	FD		USFWS	51	20	TERREBONNE	5000	Pending	\$9,351,074	This project would include construction/modification of an inlet structure at a site located on the HNC north of Falgout Canal, modeling of the basin, along with channel improvements, as necessary, to improve efficiency of freshwater flow within the basin area. In addition, existing structures along Falgout Canal would be improved and/or replaced to facilitate operation and maintenance concerns, and facilitate movement of freshwater, nutrients, and sediment to the hydrologic unit south of Falgout Canal.	3A
ENERGY BILL CIAP	Freshwater Bayou Bank Stabilization	TV-11B (EB)	SP		MMS	26	47	VERMILION	223	Pending	\$11,940,547	The goal of this project is to stop erosion along the bank of Freshwater Bayou Canal and to protect the interior wetlands from saltwater intrusion, increased tidal exchange and wake-induced erosion. This will be achieved by constructing a rock dike along critical areas of the eastern and western banks of the canal.	3B
ENERGY BILL CIAP	Port of Iberia Bridge Replacement - Port Road over Commercial Canal	TV-28	OTHER		BOEMRE	49	22	IBERIA		Pending	\$1,000,000	The project is located in Iberia Parish, and will aid the Port of Iberia in its day to day operations. This project will replace the bridge on Port Road over Commercial Canal. The existing bridge is approximately 24 feet wide and 76 feet long. 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
ENERGY BILL CIAP	Port of Iberia Bridge Replacement - David Dubois Road over Commercial Canal	TV-30	OTHER		BOEMRE	49	22	IBERIA		Pending	\$1,020,000	The project is located in Iberia Parish, and will aid the Port of Iberia in its day to day operations. This project will replace the bridge on David Dubois Road over Commercial Canal. The existing bridge is approximately 24 feet wide by 70 feet long. The Port of Iberia handles a substantial amount of OCS produced products and the large equipment used in transporting these products takes a major toll on the port's bridges and roadways.	3B
ENERGY BILL CIAP	Acadiana Regional Airport Street Improvements - Admiral Doyle Drive	TV-31	OTHER		BOEMRE	49	22	IBERIA		Pending	\$653,989	This project will patch and overlay 5,310 feet (about 1 mile) of Admiral Doyle Road around the Acadiana Regional Airport in Iberia Parish from its intersection with LA 3212 to the end of the four lane section. This project will provide improved access to both the airport and the Port of Iberia, both of which support OCS facilities and commerce.	3B
FEDERAL	Lake Pontchartrain Hurricane Mitigation Project	HPL-MIT	SP		USACE	56	19	ST JOHN THE BAPTIST	600	1996	\$2,222,892	This project consisted of a near-shore, segmented breakwater system in Lake Pontchartrain parallel to a five-mile reach of the Manchac Wildlife Management Area. The project specifically mitigated for damages resulting from construction of the Lake Pontchartrain Hurricane Protection project.	1
FEDERAL	MRGO Ecosystem Restoration	PO-65	VP, FD, MM, SP, MC		USACE	104, 103	2, 1	ST BERNARD, ORLEANS	53700	Pending	\$2,900,000,000	This project is intended to restore some of the ecosystem damaged by construction of MRGO.	1
FEDERAL	Lost Lake Vegetation Project	TE-082	VP		USFWS	51	20	TERREBONNE		Pending	\$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	Houma Navigation Canal Levee Maintenance	DSR-81557	SP		FEMA	53	20	TERREBONNE	4000	1995	\$218,165	This FEMA project involved the repair of segments of the western bank of the Houma Navigation Canal damaged by Hurricane Andrew in 1992.	3A
FEMA	Wine Island	DSR-81558	DM		FEMA	53	20	TERREBONNE	25	1995	\$253,579	This FEMA project was a cooperative venture with the USACE in the beneficial use of dredged material from a scheduled Houma Navigational Canal maintenance dredging project. The island was repaired to pre-Hurricane Andrew condition and planted with vegetation to stabilize the sediment.	3A
FEMA	Timbalier Island Repairs	DSR-81559	BI		FEMA	53	20	TERREBONNE	70	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	53	20	TERREBONNE	25	1996	\$633,179	This FEMA project constructed an elevated marsh platform in an area of a Terrebonne Parish project destroyed by Hurricane Andrew in 1992. Vegetation was also planted to stabilize the sand.	3A
FEMA	LaBranche Wetlands	DSR-81768	SP		FEMA	56	19	ST CHARLES		2000	\$43,315	A 700-foot section of a Christmas tree brush fence was repaired. This project was damaged by Hurricane Georges, Hurricane Earl, and Tropical Storm Francis in 1998.	1
FEMA	Timbalier Island	DSR-81784	BI		FEMA	53	20	TERREBONNE		2000	\$181,394	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	Falgout Canal	DSR-81785	SP		FEMA	53	20	TERREBONNE		2000	\$10,761	This FEMA project replaced flap gates on water control structures damaged during tropical storms and hurricanes in the fall of 1998. The installation of the new flapgate culverts was completed by Terrebonne Parish Consolidated Government.	3A
FEMA	East Island	DSR-81786	VP		FEMA	53	20	TERREBONNE		2000	\$168,113	This FEMA project involved the planting of marsh vegetation on the dune and Lake Pelto shoreline of East Island. This area is part of a CWPPRA project damaged by a series of tropical storms and hurricanes in the fall of 1998. A total of 4,280 smooth cordgrass (Spartina alterniflora), 500 black mangrove (Avicennia germinans), and 6,147 roseau cane (Phragmites australis) plants were planted in April 2000.	3A
FEMA	Isle Demieres (Whiskey Island)	DSR-81787	VP		FEMA	53	20	TERREBONNE		2000	\$581,566	This FEMA project involved the installation of sand fencing and the planting of vegetation to repair areas of Whiskey Island 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	49	22	IBERIA		2005	\$885,861	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 Lili in 2002. The project also included minor maintenance work paid for by CWPPRA.	3B
FEMA	Cote Blanche Repairs	PW-1906	HR		FEMA	50	21	ST MARY		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 Lili in 2002. The project also included minor maintenance work paid for by CWPPRA.	3B
FEMA	Cameron Creole Structures	PW-4257	HR		FEMA	47	25	CAMERON		2007	\$325,700	This FEMA project consists of repairs to five structures of the Cameron-Creole Maintenance (CS-04a) project that were damaged by Hurricane Rita in 2005. These structures are located at Grand, Peconi, Lambert, No Name, and Mangrove Bayous.	4
FEMA	Holly Beach Sand Fencing	PW-4403	SP		FEMA	47	25	CAMERON		2006	\$218,473	This FEMA project consists of the replacement of 46,000 linear feet of sand fencing on the Holly Beach Sand Management (CS-31) project that was destroyed by Hurricane Rita in 2005.	4
FEMA	Hopedale Hydrological Structure	PW-8743	HR		FEMA	103	1	ST BERNARD		2007	\$64,900	This FEMA project consists of repairs to the water control structure of the Hopedale Hydrologic Restoration (PO-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	Montegut Wetlands		MM		FEMA	53	20	TERREBONNE		2005	\$1,093,962	This FEMA project repaired damage to the Montegut Wetland (TE-01) project that occurred during Hurricane Lili in 2002. The project consisted of refurbishing and reconstructing 17,000 linear feet of an existing earthen levee using off-site borrow material.	3A
HSDRRS	Grand Isle and Vicinity	BA-73	SP		USACE	105	8	JEFFERSON		Pending	\$25,000,000	The Grand Isle and Vicinity Hurricane Protection Project consists of a 7.5 mile vegetated sand dune extending the length of Grand Isle's gulf shore, a jetty to stabilize the western end of the island at Caminada Pass, and an offshore breakwater system.	2
HSDRRS	Storm-Proofing of Interior Pumping Stations	BA-74	FP		USACE	105,103,73	3, 8, 2, 10, 7, 9, 6, 5, 4	JEFFERSON, ORLEANS	N/A	Pending	\$3,500,000	Addition of various improvement features to the interior pump stations of Orleans and Jefferson Parish under the Hurricane and Storm Damage Risk Reduction System (HSDRRS).	2

**ONGOING PROTECTION AND RESTORATION PROJECT SUMMARIES**

CPRA Program	Name	State Project Number	Project Type	PPL	Federal Sponsor	House District	Senate District	Parish	Acres Benefited	Construction Completion	Total Budget	Project Description	Planning Unit
HSDRRS	HSDRRS Mitigation- WBV	BA-109	MC		USACE	84, 54, 83	8, 20	JEFFERSON, LAFOURCHE	1318	Pending	\$27,000,000	State's involvement with USACE's mitigation projects for West Bank and Vicinity (WBV).	2, 3a
HSDRRS	Risk Reduction- Barataria Basin Landbridge	BA-148	MC, HP		USACE	84	8	JEFFERSON	223	Pending	\$10,100,000	This project is being led by USACE and is 100% federally funded with \$10.1 Million allocated by the U.S. 4th Supplemental Appropriations as 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, with approx. 1.2 million cu yds of dredge material from a 106 acre borrow site and construction of an earthen containment dike approx. 14,130 ft. in length.	2
HSDRRS	Previously Authorized Mitigation WBV	BA-154	MM, VP, PP		USACE	56, 83	19, 9	JEFFERSON, ST. CHARLES	1130	Pending	\$79,000,000	This project is being led by USACE and is 100% federally funded with approximately \$79 Million allocated. It provides for about 1,130 acres of mitigation. Mitigation to be implemented includes: 1) acquisition, improvement, and management of approximately 128 acres of BLH wetland habitat adjacent to Bayou Segnette State Park to mitigate for approximately 45 AAHUs of impact to BLH drained habitat, 2) acquisition of approximately 970 acres of high value wooded wetlands in St. Charles Parish to mitigate for approximately 293 AAHUs of impact to swamp and BLH habitats, 3) acquisition, improvement, and management of approximately 350 acres of high quality wooded lands in St. Charles Parish to mitigate for approximately 113 AAHUs of impact to swamp and BLH habitats.	2
HSDRRS	Plaquemines TFU Mitigation - Braithwaite to Scarsdale - Big Mar	BA-156	MC		USACE	103	1	PLAQUEMINES	24	Pending	\$2,800,000	This project is being led by USACE and is 100% federally funded with approximately \$2.8 Million allocated. It provides for the creation of approximately 24 acres of Marsh. Also, Plaquemines Parish will be combining a neighboring local project of 16 acres of marsh creation to this project with supplemental funding for a total of 40 acres.	1
HSDRRS	New Orleans to Venice Mitigation - Plaquemines Non-Federal	BA-158	MC		USACE	105, 103	8, 1	PLAQUEMINES	342	Pending	\$14,500,000	State's involvement with USACE's mitigation projects for the New Orleans to Venice (NOV) Plaquemines Non-Federal Levee projects. This project is being led by USACE and is 100% federally funded with approximately \$14.5 Million allocated. It provides for about 180 acres of mitigation, which includes approximately 50 acres of BLH wet/dry combined, 50 acres of swamp, 60 acres of freshwater marsh, and 20 acres of brackish marsh.	2, 1
HSDRRS	New Orleans to Venice Mitigation - Federal	BA-159	MC		USACE	105, 103	8, 1	PLAQUEMINES	410	Pending	\$30,000,000	State's involvement with USACE's mitigation projects for the New Orleans to Venice (NOV) Federal Levee projects. This project is being led by USACE and is 100% federally funded with approximately \$30 Million allocated. It provides for about 700 acres of mitigation, which includes approximately 130 acres of BLH wet/dry combined, 140 acres of intermediate marsh, 70 acres of freshwater marsh, 76 acres of brackish marsh, and 280 acres of saline marsh.	2, 1
HSDRRS	Risk Reduction Via Modification to the Caernarvon Freshwater Diversion	BS-03B	FD, SD, HP		USACE	103	1	PLAQUEMINES	65	Pending	\$10,100,000	This project is being led by USACE and is 100% federally funded with \$10.1 Million allocated by the U.S. 4th Supplemental Appropriations as a Hurricane Risk Reduction project. It provides for redirecting water from the Caernarvon Diversion into the 40 Arpent Canal to enhance the movement of fresh, sediment-laden water into the marsh north of Lake Lery in order to halt and reverse marsh deterioration. This project was originally included as a shunt under CWWPRA BS-16 but removed to allow USACE to fund it as a marsh creation project.	1
HSDRRS	SELA	PO-57	OTHER		USACE	103, 87, 81	5, 8, 2, 4, 9	JEFFERSON, ORLEANS	20,000,000	Pending	\$1,262,800,000	Drainage and Pump Station projects within Jefferson Parish and Orleans Parish, on both the east bank and west bank of the Mississippi River.	1, 2
HSDRRS	Permanent Closure of Canals and Pumps	PO-60	HP		USACE	97, 96, 95, 94, 93, 82, 81, 99	3, 2	ORLEANS, JEFFERSON		Pending	\$807,000,000	In June 2006, Congress passed Public Law 109-234 giving the Corps authorization and appropriations of approximately \$800 million to design and construct a permanent protection system for the outfall canals - specifically to, "...modify the 17th Street, Orleans Avenue, and London Avenue drainage canals and install pumps and closure structures at or near the lakefront..."	1
HSDRRS	West Shore Lake Pontchartrain	PO-62	HP		USACE	59, 58, 57, 56, 88	19, 18	ST JOHN THE BAPTIST, ST CHARLES, ST JAMES, ASCENSION		Pending	\$6,982,089	Feasibility Study to assess hurricane and storm reduction measures in a study area bounded by the Bonnet Carne Spillway to the east, The Mississippi River to the south, Lakes Pontchartrain and Maurepas to the north, and the St. James Parish/Ascension Parish line to the west.	1
HSDRRS	HSDRRS Mitigation- LPV	PO-121	MC		USACE	103, 76, 77	11, 1	ST TAMMANY, ORLEANS	1089	Pending	\$85,000,000	State's involvement with USACE's mitigation projects for Lake Pontchartrain and Vicinity (LPV).	1
HSDRRS	LPV Task Force Guardian Mitigation- Bayou Sauvage	PO-145	MM, VP		USACE	103	1	ORLEANS	58	Pending	\$782,335	This project is being led by USACE and is 100% federally funded with approximately \$2 Million allocated. This project is mitigating approximately 147 acres due to emergency levee work that utilized 2 borrow pits of about 57 acres. It provides for the elimination of non-native trees with spraying and mechanical clearing, and then the replanting of up to 89,000 trees and shrubs of native species, including butternuts, pecans, cypresses and oaks.	1
HSDRRS	Previously Authorized Mitigation LPV- Manchac	PO-146	MC, SP		USACE	73	6	ST JOHN THE BAPTIST	1329	Pending	\$21,000,000	This project is being led by USACE and is 100% federally funded with approximately \$21.3 Million allocated. It provides for containment dikes with rock and fill areas with dredge material (to match the CPRA Turtle Cove project success). The project is intended to create marsh and reduce erosion.	1
LOUISIANA COASTAL AREA	LCA Small Bayou Lafourche Reintroduction	BA-70	FD			51, 54, 55, 58, 60	18, 19, 20, 21	ASSUMPTION, LAFOURCHE		Pending	\$133,500,000	The project will use a small diversion (less than 5000 cfs) to reintroduce flow from the Mississippi River into Bayou Lafourche. Project goals include providing freshwater, sediment and nutrients needed to reduce salinity, stimulating plant productivity, and reducing wetland loss between Bayous Lafourche and Terrebonne. Funds from the budget surplus of 2008 will be used for the state's cost-share requirement. *Construction cost taken from WRDA 2007 legislation.	3A
LOUISIANA COASTAL AREA	LCA Medium Diversion with Dedicated Dredging at Myrtle Grove	BA-71	FD		USACE	105	8, 1	PLAQUEMINES		Pending	\$278,300,000	Authorized by WRDA 2007 as a sediment diversion between 2,500 and 15,000 cfs. Ongoing modeling effort to examine potential for modification of the WRDA authority for a larger sediment diversion to promote infilling of shallow open water areas through deposition and marsh expansion. *Fully funded Phase 2 cost taken from WRDA 2007 legislation.	2
LOUISIANA COASTAL AREA	LCA Modification of Davis Pond Diversion	BA-72	FD		USACE	56, 83, 105, 54, 87, 84	3, 20, 1, 7, 19, 8	ST CHARLES, JEFFERSON, PLAQUEMINES, LAFOURCHE		Pending	\$68,277,885	This modification project is authorized to study and design the modification of the diversion structure and/or outfall of the diversion to increase wetland restoration outputs within the Barataria Basin.	2
LOUISIANA COASTAL AREA	LCA Modification of Caernarvon Diversion	BS-19	FD		USACE	105, 103	1	ST BERNARD, PLAQUEMINES		Pending	\$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 increase wetland restoration outputs south of Caernarvon, west of the Mississippi River.	1
LOUISIANA COASTAL AREA	LCA Medium Diversion at White's Ditch	BS-20	FD		USACE	105	1	PLAQUEMINES		Pending	\$126,686,400	A medium diversion from the Mississippi River into the central River aux Chenes area using a controlled structure to provide additional freshwater, nutrients, and fine sediment to the area between the Mississippi River and River aux Chenes ridges.	1
LOUISIANA COASTAL AREA	LCA Barataria Basin Barrier Shoreline - 2007	LA-10	MC, BI		USACE	105, 54	20, 1, 8	JEFFERSON, PLAQUEMINES, LAFOURCHE	2749	Pending	\$363,900,000	The purpose of this project is to provide beach/dune restoration and marsh creation on Caminada Headlands and Shell Island.	2
LOUISIANA COASTAL AREA	LCA Beneficial Use Feasibility Study	LA-19	DM		USACE	N/A	N/A	COASTWIDE		Pending	\$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-16	OTHER		USACE	105	1	PLAQUEMINES		Pending	\$26,000,000	OCPR will coordinate 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 its Deltaic Plain.	1, 2
LOUISIANA COASTAL AREA	LCA Small Diversion at Convent / Blind River	PO-68	FD		USACE	58, 57	18	ST JAMES, ASCENSION	21369	Pending	\$124,230,000	A small diversion of up to 5,000 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 Diversion Canal Modification	PO-69	VP, HR		USACE	88	18	LIVINGSTON, ASCENSION	3111	Pending	\$10,760,000	The goal of this project is to reestablish hydrologic connectivity between Maurepas Swamps and natural waterbodies.	1
LOUISIANA COASTAL AREA	LCA Maintain Land Bridge Between Caillou Lake and Gulf of Mexico	TE-67	MC		USACE	51	20	TERREBONNE	2,800	Pending	\$62,600,000	The goals of this project are to prevent connection between the gulf and Caillou Lake by constructing shoreline protection on the gulf and Grand Bayou du Large, marsh creation, and closure of newly opened channels and to minimize saltwater intrusion, prevent gulf shore erosion and increase freshwater influence on marshes in project area.	3A

**ONGOING PROTECTION AND RESTORATION PROJECT SUMMARIES**

CPRA Program	Name	State Project Number	Project Type	PPL	Federal Sponsor	House District	Senate District	Parish	Acres Benefited	Construction Completion	Total Budget	Project Description	Planning Unit
LOUISIANA COASTAL AREA	LCA Point Au Fer	TE-68	SP		USACE	51	20	TERREBONNE		Pending	\$48,300,000	The goal of the project is to stabilize gulf shoreline of 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-70	BI		USACE	51, 53, 54	20	TERREBONNE	1272	Pending	\$133,300,000	This project provides for the restoration of the Timbalier and Isles Dernieres barrier island chains. This would simulate historical conditions by reducing the current number of breaches, enlarging (width and dune crest) of the Isles Dernieres (Raccoon Island, East Island, Trinity Island, Wine Island, and Whiskey Island), Timbalier Island, and East Timbalier Island.	3A
LOUISIANA COASTAL AREA	LCA Convey Atchafalaya River Water to Northern Terrebonne Marshes	TE-71	HR		USACE	52, 51, 50, 53, 54	20, 21	TERREBONNE		Pending	\$349,995,500	The project would increase existing Atchafalaya River influence to central (Lake Boudreaux) and eastern (Grand Bayou) Terrebonne marshes via the Gulf Intracoastal Waterway (GIWW).	3A
NRDA	Cheniere Ronquelle Barrier Island Restoration	BA-76	BI, MC	19	NMFS	105	1	PLAQUEMINES	408	Pending	\$43,828,286	The objective of this project is to prevent breaching of the barrier shoreline by restoring the dune and marsh platform. Project was designed under CWPBRA but will seek NRDA funds for construction.	2
NRDA	Shell Island West- NRDA	BA-111	BI	N/A	N/A	105	8	PLAQUEMINES	347	Pending	\$113,000,000	Restore the integrity of the Shell Island barrier island, reduce wave energies within the bay area and reestablish productive habitat to Bastian Bay and the surrounding area.	2
NRDA	Lake Hermitage Marsh Creation Increment 2	BA-141	MC	N/A	N/A	105	1	PLAQUEMINES	101	Pending	\$139,000,000	To create 101 acres of marshbuilding off of the BA-42 Lake Hermitage CWPBRA project utilizing NRDA early restoration funds.	2
NRDA	Caminada Headland Beach and Dune Restoration Increment 2	BA-143	BI	NA	N/A	54,84	20,8	JEFFERSON, LAFOURCHE	532	Pending	\$118,860,000	The proposed project will restore beach and dune habitat along the Caminada Headland from approximately Bayou Moreau east to Caminada Pass. The target beach elevation is +4.5 ft NAVD88 and the target dune elevation is +7 ft NAVD 88	2
NRDA	NRDA Caillou Lake Headlands	TE-100	BI	N/A	N/A	53	20	TERREBONNE	1272	Pending	\$110,000,000	Restore coastal landforms of the Whiskey Island barrier island in order to retain its geomorphologic form and ecological function.	3a
SECTION 204/1135	MRGO, Breton Island Restoration, Mile -2.3 to 4.0		DM		USACE	105	1	PLAQUEMINES	26	1999	\$1,050,000	This Section 204 project utilized material from maintenance dredging activities along the Mississippi River Gulf Outlet (MRGO) to repair Breton Island.	1
SECTION 204/1135	MRGO, Breton Island Berm, Mile -2 to -3		DM		USACE	105	1	PLAQUEMINES		1999	\$150,000	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.	1
SECTION 204/1135	Mississippi River Gulf Outlet Berm, Mile 14 to 11		DM		USACE	103	1	ST BERNARD		1999	\$350,000	This Section 204 project provided for the unconfined placement 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 miles 14.0 to 11.0 of the Mississippi River Gulf Outlet (MRGO) navigation channel and placed to an elevation conducive to marsh vegetation establishment.	1
SECTION 204/1135	Mississippi River Gulf Outlet, Mile 14 to 12 (2002)		DM		USACE	103	1	ST BERNARD		2002	\$290,000	The project involved pumping approximately 1.6 million cubic yards to create some 50 acres of marsh behind the MRGO jetty. This project was fast tracked due to the impact of Hurricane Lili and Tropical Storm Isidore in 2002.	1
SECTION 204/1135	Mississippi River Gulf Outlet, Mile 14 to 12 (2003)		DM		USACE	103	1	ST BERNARD	113	2003	\$580,000	This project involved pumping 4.3 million cubic yards of sediments to create 113 acres of marsh. The material was dredged from miles 14.0 to 12.0 of the Mississippi River Gulf Outlet (MRGO) navigation channel and placed at an elevation conducive to marsh vegetation establishment.	1
SECTION 204/1135	Barataria Bay Waterway, Mile 31 to 24.5		DM		USACE	105	8	JEFFERSON	125	1999	\$140,000	This Section 204 project utilized dredged material taken from a zone between miles 31 and 24.5 of the Barataria Bay Waterway (BBWW) to create marsh habitat.	2
SECTION 204/1135	Barataria Waterway Grand Terre Island Ph 2		DM		USACE	105	8	JEFFERSON		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 (BBWW) to create wetlands on the bay side of Grand Terre Island.	2
SECTION 204/1135	Calcasieu River and Pass (Sabine NWR) Phase I, II, III		DM		USACE	47	25	CAMERON	480	1999	\$1,560,804	This Section 204 project provides for the disposal of dredged material removed from the area between mile 7.5 and 11.5 of the Calcasieu Ship Channel. A total of 4 million cubic yards of material was deposited in three phases within the Sabine National Wildlife refuge at an elevation conducive to marsh creation.	4
SECTION 204/1135	Wine Island Restoration	DSR-81558	DM		USACE	20	53	TERREBONNE	37	1991, 2003	\$1,007,000	This Section 204/1135 project was a cooperative effort with the USACE and included the use of beneficial dredging from a scheduled Houma Navigational Canal maintenance dredging project to restore Wine Island.	3A
SECTION 204/1135	Barataria Bay Waterway, Grand Terre Island (Phase I)		DM		USACE	105	8	JEFFERSON	115	1996	\$1,370,000	This Section 204 project provides for the beneficial placement of 500,000 cubic yards of dredged material from the Barataria Bay Waterway (BBWW) to create wetlands on Grand Terre Island.	2
SECTION 204/1135	Houma Navigation Canal, Wine Island Barrier Island Restoration		DM		USACE	53	20	TERREBONNE	50	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 project area is approximately 35 miles south of Houma, Louisiana at the mouth of the navigation channel in Terrebonne Bay. 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		MC, DM		USACE	47	25	CAMERON	315	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	NRCS Vegetative Planting		VP			N/A	N/A	COASTWIDE	609	N/A	\$399,858	This is a coastal vegetative planting program that is implemented annually and involves the installation of vegetative plantings in selected areas where vegetation is needed.	COASTWIDE
STATE	NRCS Biomass Production Program		VP			N/A	N/A	COASTWIDE		N/A	\$1,552,100	This multi-year cooperative agreement will study productivity of endemic wetland plants, with the goal of identifying specific environmental conditions for maximum growth of a number of varieties (i.e., cultivars) within four plant species. The information obtained will facilitate matching plant species and varieties to expected environmental conditions at restoration sites, thereby increasing the likelihood of successful revegetation efforts.	COASTWIDE
STATE	Naomi Siphon Diversion	BA-03	FD			105	1, 8	PLAQUEMINES, JEFFERSON	8200	1992	\$9,602,381	This project involves 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 a la Hache Siphon Diversion	BA-04	FD			105	1	PLAQUEMINES	9200	1992	\$9,845,693	This project involves 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 a la Hache, Louisiana. The maximum discharge of the siphons is 2,100 cfs.	2
STATE	Queen Bess	BA-05B	SP, DM			105	8	JEFFERSON	145	1993	\$1,475,176	The purpose of this project is to restore Queen Bess Island as a brown pelican (Pelecanus occidentalis) rookery. Dredged material was added to the island to increase its size in 1991, and a rock dike was installed around the perimeter of the original island in 1992 to armor the shoreline. The area has become vegetated and the number of pelican nests on the island increased after project construction.	2
STATE	Baie de Chactas	BA-05C	SP			105	19	ST CHARLES		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 Salvador and Baie de Chactas and Baie du Cabanage.	2
STATE	Lake Salvador Shoreline Protection Extension	BA-15-X1	SP			105	19	ST CHARLES	2035	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. The shoreline protection project was built on the land to avoid dredging in an area with cultural resources. This project was designed as an extension of the BA-15 Phase II CWPBRA project.	2
STATE	Bayou Segnette	BA-16	SP			84	8	JEFFERSON	88	1994, 1998	\$1,373,151	This project involved the construction of a 6,800-foot limestone rock berm to reinforce the bank between Lake Salvador and Bayou Segnette and the installation of a timber piling fence across an abandoned access canal that connects the two water bodies. The fence is designed to reduce wave energies and erosive forces from the lake while still allowing exchange of sediment and aquatic organisms. Additional CWPBRA 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 \$300,000.	2
STATE	New Orleans to Venice	BA-67	HP		USACE	105	1	PLAQUEMINES		Pending	\$2,400,000,000	The NOV project consists of 24 areas of work covered by projects NOV 1-2, NOV 5-16, NOV-NF-W-4 to 6, NF-02, and Taskforce Guardian (TFC) Continuing Projects P13- 15, P17, and P24 that includes the section of the Plaquemines Parish Hurricane Protection System.	1,2
STATE	Bayou LaFourche Salt Water Control Structure	BA-091	OTHER			58	20	LAFOURCHE		Pending	\$4,437,715	This project will allow salinity levels in Bayou Lafourche to be more effectively managed through operation of the saltwater control structure.	2
STATE	Brannon Ditch	BD	SP			36	30	CALCASIEU	480	1991	\$12,440	This project included the construction of wooden breakwater fences along 2,200 feet of the GIWW across from Brannon Ditch in Calcasieu Parish. This area has experienced shoreline erosion in excess of 25 feet/year. The breakwaters will reduce wave action from boats and the current from Brannon Ditch during periods of high discharge. Smooth cordgrass (Spartina alterniflora) was also planted behind the breakwaters in order to enhance accretion and increase the stability of this site.	4

**ONGOING PROTECTION AND RESTORATION PROJECT SUMMARIES**

CPRA Program	Name	State Project Number	Project Type	PPL	Federal Sponsor	House District	Senate District	Parish	Acres Benefitted	Construction Completion	Total Budget	Project Description	Planning Unit
STATE	Brown Marsh	BRM-01	MC			54	20	LAFOURCHE		2002	\$473,365	The project features consisted of a thin layer marsh creation/nourishment covering 44 acres in Lafourche Parish.	3A
STATE	Lake Lery Hydrologic Restoration	BS-06	FD			103	1	ST BERNARD	100	1997	\$1,000,000	This project involved the construction of a pumping station located along the south-central edge of the St. Bernard Parish Ridge. This will discharge collected rainfall into the marsh north of Lake Lery and help prevent saltwater intrusion. The project was built in partnership with the Lake Borgne Basin Levee District and was completed in May of 1997.	1
STATE	Cheniere Au Tigre	CAT-01	SP		BOEMRE	47	26	VERMILION		2005	\$1,802,271	The primary objective of the project is to protect the Cheniere au Tigre shoreline from additional erosion and protect local infrastructure. This project will use segmented rock breakwater structures to help reduce the rate of shoreline erosion and promote sediment deposition along the beach north of the breakwater structures. The proposed series of segmented breakwaters will be placed just east of the CWP/PRA funded TV-16 project with up to nine additional structures. The structures will cover approximately 2,800 linear feet with an approximate distance of 240 feet from the existing shoreline.	3B
STATE	Holly Beach	CS-01	SP			47	25	CAMERON		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 from 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 Holly Beach, Louisiana. Eighteen of the existing breakwaters were raised and/or extended in 2003 utilizing marine mattress foundations and armor stone.	4
STATE	Rycade Canal Marsh Management	CS-02	MM			47	25	CAMERON	6575	1994	\$2,005,857	The project was designed to stabilize salinities and water levels by reducing water flows through Rycade canal and Black Lake.	4
STATE	Cameron-Creole Structure Automation	CS-04A-1	HR			47	25	CAMERON	110000	1999	\$700,000	This project consists of automating three existing water control structures along the east shore of Calcasieu Lake. These structures are remotely located and are difficult to manipulate. Automation of these structures will improve management capabilities in the Sabine National Wildlife Refuge.	4
STATE	Blind Lake	CS-BL	SP			47	25	CAMERON	480	1989	\$173,433	The purpose of this project was to prevent the Gulf Intracoastal Waterway from breaching into Blind Lake. The project consisted of placing 2,339 linear feet of limestone breakwater along the south side of the GWW adjacent to Blind Lake. The second phase of this project included planting giant cutgrass ( <i>Zizaniopsis miliaeae</i> ) along the inside of the breakwater to enhance the accretion process.	4
STATE	Sabine Terraces	CS-ST	SNT			47	25	CAMERON	110	1990	\$190,047	A total of 128 earthen terraces were constructed in a checkerboard pattern and planted with smooth cordgrass ( <i>Spartina alterniflora</i> ) in open water areas of the Sabine National Wildlife Refuge. This will increase the length of marsh-water interface, re-establish emergent marsh vegetation, reduce marsh fringe retreat by reducing wind-generated wave energy, increase overall primary productivity, and promote the deposition of suspended sediment.	4
STATE	Fisheries Habitat Restoration on West Grand Terre Island at Fort Livingston	FTL-01	SP			105	8	JEFFERSON		2003	\$2,076,816	This project consists of a rock dike built to protect the Gulf shoreline of West Grand Terre Island and Fort Livingston. This project was expedited because erosion rates along West Grand Terre rapidly accelerated due to the impacts of tropical storms in 2002. Fort Livingston, which is listed on the National Register of Historic Places, was constructed in the 19th century by the U.S. Army Corps of Engineers as part of the nation's coastal defense system.	2
STATE	Grand Isle Bay Side Breakwaters	GIBSB	SP			105, 54	8	JEFFERSON	50	1995	\$500,000	The purpose of this project was to reduce erosion on the bay side of Grand Isle. Fifteen 300-foot breakwaters were constructed on the back-bay side of Grand Isle.	2
STATE	Dedicated Dredging Program - Lake Salvador	LA-01a	MC, DM			105	19	ST CHARLES	28	1999	\$342,276	Two sites were filled utilizing dredged material adjacent to Baie du Cabanage on the Salvador Wildlife Management Area. This project is part of the coastwide 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.	2
STATE	Dedicated Dredging Program - Bayou Dupont	LA-01b	DM, MC			105	8	JEFFERSON	66	2000	\$1,080,017	Three sites were filled utilizing dredged material adjacent to Bayou Dupont and The Pen. This project is part of the coastwide 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.	2
STATE	Pass a Loutre Site - Dedicated Dredging Program	LA-01C	DM			105	1	PLAQUEMINES		2005	\$450,000	The project created approximately 26 acres of sustainable freshwater marsh in the vicinity of Pass a Loutre, Louisiana. This project is part of the coastwide 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.	1
STATE	Terrebonne School Board Site - Dedicated Dredging	LA-01D	DM			51	20	TERREBONNE		2006	\$2,599,587	This project created approximately 40 acres of marsh just north of Lake DeCade along the western bank of Minors Canal. This project is part of the coastwide 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.	3B
STATE	Grand Bayou Blue Site - Dedicated Dredging	LA-01E	DM, MC			53	20	LAFOURCHE		2007	\$1,831,534	This project created approximately 38 acres of marsh near Catfish Lake using dredged material from Grand Bayou Blue. This project is part of the coastwide 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.	3A
STATE	Dedicated Dredging - Point au Fer	LA-01F	DM			51	20	TERREBONNE		2007	\$2,469,250	This project created approximately 67 acres of marsh on Point Au Fer Island adjacent to the CWP/PRA TE-26 project using material dredged from Achafalaya Bay. This project is part of the coastwide 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.	3B
STATE	Pecan Island Freshwater Introduction	ME-01	FD			47	26	VERMILION	39000	1992	\$487,152	The purpose of this project is to introduce freshwater from the north to counteract the saltwater intrusion from the south. The project consists of two water control structures and approximately 5,700 linear feet of earthen embankment needed to channel water from White Lake to the south marshes.	4
STATE	Small Sediment Diversions	MR-01B	SD			105	1	PLAQUEMINES	6719	1993	\$1,010,500	This project involved the excavation of 13 crevasses through the levees of Mississippi River distributary channels within the Balize Delta in order to create self-sustaining emergent marsh.	1
STATE	North Grand Isle Breakwaters	NGI	SP			54	8	JEFFERSON	50	1995	\$160,000	This project was authorized to construct segmented rock breakwaters on the bay side of Grand Isle to protect camps located between Caminada Bay and the west side of Louisiana Hwy 1. The Louisiana Department of Natural Resources (LDNR) contributed no construction funds and was involved in construction inspection only. The local Levee District supplied construction funds.	2
STATE	Violet Siphon Diversion	PO-01	FD			104, 103	1	ST BERNARD	84	1992	\$380,584	The purpose of this project is to return into operation the existing siphon, and to enlarge the size of the diversion so that more sediment and freshwater are available to offset marsh subsidence and saltwater intrusion.	1
STATE	Bayou Chevee	PO-02c	SP			103	2	ORLEANS	75	1994	\$62,000	This project installed 2,000 feet of brush fences at the mouth of Bayou Chevee.	1
STATE	LaBranche Shoreline Stabilization and Canal Closure	PO-03	SP			56	19	ST CHARLES	1750	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 LaBranche wetlands.	1
STATE	LaBranche Shoreline Protection	PO-03B	SP			56	19	ST CHARLES	50	1996	\$1,290,851	A rock breakwater was constructed along the Lake Pontchartrain shoreline, east of Bayou LaBranche, to protect the hydrologic boundary between the lake and the wetlands from being breached.	1
STATE	Central Wetlands Pump Outfall	PO-08	FD			104, 103	1, 2	ST BERNARD	300	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 Violet Siphon (PO-01).	1
STATE	Turtle Cove Shore Protection	PO-10	SP			56	19	ST JOHN THE BAPTIST	184	1994	\$366,000	A 1,640 foot rock-filled gabion breakwater was constructed to maintain and protect the Lake Pontchartrain shoreline that shelters "The Prairie" (an 800-acre expanse of shallow, open water marsh bordered by organic freshwater marsh) from high wave energies and to encourage sediment deposition behind the gabion structure. An additional \$195,600 was used for maintenance in 2001.	1

**ONGOING PROTECTION AND RESTORATION PROJECT SUMMARIES**

CPRA Program	Name	State Project Number	Project Type	PPL	Federal Sponsor	House District	Senate District	Parish	Acres Benefited	Construction Completion	Total Budget	Project Description	Planning Unit
STATE	Hydrologic Restoration of the Armitte River Diversion Canal	PO-142	HR, VP	N/A	N/A	81	18	ASCENSION, LIVINGSTON	1600	Pending	\$4,120,000	The purpose of this project is to reestablish hydrologic connectivity between Maurepas Swamps and natural water/bodies, plant vegetation in highly degraded swamp habitat.	1
STATE	Fontainebleau State Park Mitigation	PO-4355NP4	SP			89	11	ST TAMMANY	6	1999	\$476,104	This project repaired a section of breached shoreline by depositing approximately 9,000 cubic yards of sand for a feeder berm on the easternmost end of Fontainebleau State Park.	1
STATE	MRGO and Lake Borgne (Bayou Dupre Segment)	PO-93	SP		USACE	103	1	ST BERNARD		Pending	\$0	This project will construct approximately 17,650 linear feet of stone foreshore dike along the southwest shoreline of Lake Borgne in the vicinity of Bayou Dupre. OCPR is acquiring portions of the two oyster leases that are impacted by this project.	1
STATE	MRGO and Lake Borgne (Bayou Bienvenue Segment)	PO-94	SP		USACE	103	1	ST BERNARD		Pending	\$0	This project will construct approximately 14,440 linear feet of stone foreshore dike along the southwest shoreline of Lake Borgne in the vicinity of Bayou Bienvenue. OCPR is acquiring portions of the three oyster leases that are impacted by this project.	1
STATE	MRGO and Lake Borgne (Shell Beach Segment)	PO-95	SP		USACE	103	1	ST BERNARD		Pending	\$0	This project will construct approximately 15,700 linear feet of stone foreshore dike along the southern shoreline of Lake Borgne, west of Shell Beach. OCPR is acquiring portions of the four oyster leases that are impacted by this project.	1
STATE	Raccoon Island Repair	RI	DM			53	20	TERREBONNE	197	1994	\$1,400,000	This project was a cooperative effort that utilized dredged material and vegetation to repair storm damage to Raccoon Island. Cooperators include the Louisiana Department of Natural Resources/Coastal Restoration Division, Louisiana Department of Wildlife and Fisheries/Fur and Refuge Division, Terrebonne Parish Consolidated Government, South Terrebonne Tidewater Management and Conservation District, T. Baker Smith & Son, Inc., Coastal Engineering & Environmental Consultants, Inc., and Bean Dredging. Federal grant money was also utilized for this project by LDWF and TPCG.	3A
STATE	Spoilbank along the GIWW	SBG	VP			52	21	TERREBONNE	1	1993	\$9,400	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 nutria exclusion devices was also tested.	3A
STATE	Sabine Shellbank Stabilization	SSB	SP			47	25	CAMERON	10	1990	\$66,000	The purpose of this project was to provide natural shoreline protection by using tidal currents to deposit clam shell on the shoreline. The benefits of this design over the use of permanent structures are lower cost, less disturbance of the natural habitat during construction, and allowing natural distribution of sediment and organisms without impediment.	4
STATE	Montegut Wetland	TE-01	MM			53	20	TERREBONNE	4200	1993	\$5,537,036	The objective of the Montegut Wetland project is to protect and enhance 4,200 acres of degraded wetland habitat in the Pointe au Chein Wildlife Management Area southeast of Montegut, Louisiana.	3A
STATE	Falgout Canal Wetland	TE-02	MM			51	20	TERREBONNE	1300	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 by moderating water flux and tidal energy in the deteriorating wetland community.	3A
STATE	Bayou LaCache Wetland	TE-03	MM			53	20	TERREBONNE	4374	1991, 1996, Pending	\$2,047,222	The goal of the project is 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.	3A
STATE	Pointe Aux Chien Hydrologic Restoration	TE-06	MM			53	20	TERREBONNE	4700	2006	\$2,771,819	This cooperative coastal restoration project will benefit approximately 4,700 acres of brackish-intermediate marsh within the Pointe Aux Chenes 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.	3A
STATE	Lower Petit Caillou	TE-07B	HR			53	20	TERREBONNE	3465	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 Lashbrook pumping station through the project area prior to entry into Lake Boudreaux.	3A
STATE	Point Farm Refuge Planting	TE-14	VP			53	20	TERREBONNE		1995	\$226,931	This project was developed to create bottomland hardwood forests in former farmlands within the Point Farm Refuge Area (PFR). Approximately 108,900 seedlings of bitter pecan (Carya aquatica), water oak (Quercus nigra), and cow oak (Quercus michauxii) (with nutria exclusion devices) were planted on 300 acres of former farmland within the PFR.	3A
STATE	HNC Deepening Section 203 Study	TE-108	OTHER	N/A	USACE			TERREBONNE	N/A	Pending	TBD	Feasibility Study and EIS preparation for investigating deepening 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 fabrication operations along the HNC. This project is being managed by DOTD with interim funding being provided by CPRA.	3a
STATE	Yellow Bayou	TV-02b	SP			50	21	ST MARY	126	1992	\$194,500	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 7,465 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-06	MM			49	22	IBERIA	643	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-gated/stoplog culverts and earthen canal plugs were installed in October of 1993 at the northeast and southeast 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-11	SP			49, 47	26	VERMILION	241	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 24,000 linear feet of rock dike, extending north to the confluence of Belle Isle Bayou and Freshwater Bayou. The original project was constructed in 1994; however, repairs were made to the structure in 1996 and 2001.	3B
STATE	Oaks/Avery Structures	TV-13B	SP			49	22, 26	VERMILION, IBERIA	160	2000	\$3,107,738	This project enhanced the adjacent CWPPRA-funded TV-13a project by installing low-sill structures at the outfall of Oaks and Avery Canals to redirect more water flow through the portion of Bayou Petite Anse south of the GIWW.	3B
STATE	Quintana Canal/Cyremont Point	TV-4355NP1	SP			50	21	ST MARY	26	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 intersect and the south bank of the Quintana Canal.	3B
SURPLUS	Alexandria to the Gulf	AT-12	OTHER		USACE	26	29	RAPIDES		Pending	\$970,000	Alexandria to the Gulf or ATOG is currently in Feasibility Study phase. The study will evaluate options and alternates for providing urban drainage and flood reduction to the City of Alexandria and irrigation and flood reduction benefits to agricultural areas south and southeast of the city.	3B
SURPLUS	Atchafalaya Basin Natural Resources Inventory and Assessment	AT-13	OTHER			49, 31, 48, 43, 46, 44, 45, 60	21, 22, 17	ST MARY, IBERIA, ST MARTIN		Pending	\$1,450,000	This project assesses and inventories the natural resources in the Atchafalaya Swamp.	3B
SURPLUS	Grand Isle East End Breakwater/ Jetty Design	BA-092	SP			54	8	JEFFERSON		Pending	\$1,000,000	This project includes construction of breakwaters/jetties work for Grand Isle State Park.	2
SURPLUS	Bayou Lafourche Freshwater Introduction	BA-25	FD			55, 51, 52, 105, 53, 54	20, 19, 8	LAFOURCHE		Pending	\$20,000,000	The Mississippi River diversion into Bayou Lafourche will restore coastal marshes and provide drinking water to over 300,000 residents. The current project will dredge the fist 6.2 miles of the bayou.	2
SURPLUS	Caminada Headlands	BA-45	BI		BOEMRE	54	20	LAFOURCHE	730	Pending	\$70,000,000	The proposed project will restore and protect beach and dune habitat across the Caminada Headland through the direct placement of sediment (sandy material for the beach and dune habitat) from offshore borrow areas.	2
SURPLUS	Plaquemines Parish - Southeast Louisiana Strategic Restoration	BA-46 SF	MC			105	8	PLAQUEMINES		Pending	\$4,500,000	Plaquemines parish dredging design project with OCPR Funding.	2
SURPLUS	West Bank and Vicinity	BA-66	HP		USACE	56, 83, 105, 102, 86, 87, 84, 85	3, 7, 19, 8	ST CHARLES, ORLEANS, JEFFERSON, PLAQUEMINES		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 T-Walls and other structures to the 2057 protection levels.	2
SURPLUS	Jean Lafitte Tidal Protection	BA-75-1	HP			105	8	JEFFERSON	425	Pending	\$7,000,000	This project will provide flood protection improvements by raising 15,840 linear feet of existing earthen levee. The project will also include approximately 7600 liner feet of concrete capped, steel sheet pile floodwall and flood gates to 8.0 NAVD.	2
SURPLUS	Rosethorne Tidal Protection	BA-75-2	HP			105	8	JEFFERSON	610	Pending	\$1,500,000	This project will provide flood protection improvements consisting of new earthen levees, approximately 8,010 linear feet of reinforced concrete floodwall and flood gates to 8.0 NAVD.	2

**ONGOING PROTECTION AND RESTORATION PROJECT SUMMARIES**

CPRA Program	Name	State Project Number	Project Type	PPL	Federal Sponsor	House District	Senate District	Parish	Acres Benefitted	Construction Completion	Total Budget	Project Description	Planning Unit
SURPLUS	Lafitte Tidal Protection	BA-75-3	HP			105	8	JEFFERSON	375	Pending	\$1,500,000	This project will provide flood protection improvements consisting of new earthen levees, sheet pile flood walls, concrete flood walls and flood gates to 8.0 NAVD.	2
SURPLUS	Lafitte Hurricane Protection	BA-75-4	HP			105	8	JEFFERSON		Pending	\$7,730,000	This will provide continued funding of current hurricane flood control projects in the Lafitte area.	2
SURPLUS	Donaldsonville to the Gulf of Mexico Hurricane Protection	BA-115	HP		USACE	58, 56, 105, 83, 105, 54, 102, 86, 60, 87, 84, 85	21, 20, 1, 7, 19, 5, 18, 8	ASSUMPTION, JEFFERSON, LAFOURCHE, ST JOHN THE BAPTIST, ST CHARLES, ST JAMES		Pending	\$10,269,987	The study activities will be conducted to determine the feasibility of providing flood protection to the populated areas between Bayou Lafourche and the Mississippi River, from Donaldsonville to the Gulf of Mexico.	2
SURPLUS	Cameron Parish Shoreline Restoration	CS-33	OTHER			47	25	CAMERON	523	Pending	\$45,800,000	The project will re-establish the dunes and beachhead for 8.7 miles extending from the western Calcasieu River Jetty to the eastern-most breakwater at the Holly Beach – Constance Beach breakwater field.	4
SURPLUS	Black Lake Supplemental Beneficial Use Disposal Area	CS-34	DM		USACE	47	25	CAMERON	440	2010	\$21,034,329	The project beneficially used dredged sediment from maintenance dredging of the Calcasieu River Ship Channel from mile 14 thru mile 17 for delivery by sediment pipeline to the Black Lake/Marcantel Beneficial Use site.	4
SURPLUS	Southwest Coastal Louisiana Feasibility Study	LA-20	DM, TE, SP, MC		USACE	47, 35, 36, 33, 34	30, 25, 26, 27	CALCASIEU, VERMILION, CAMERON		Pending	\$8,800,000	The project integrates ecosystem restoration and hurricane protection alternatives to address the coastal issues of Southwest Louisiana. It includes shoreline stabilization, marsh creation, salinity control, hurricane protection, and chenier restoration measures. Project was authorized December 7, 2005.	4
SURPLUS	MRGO Closure Structure	PO-38SF	OTHER		USACE	103	1	ST BERNARD		2009	\$14,116,500	This is a 100% Federal Project. Design review of the closure structure as the State will be responsible for O&M. The state acquired Real Estate interests for structure.	1
SURPLUS	Lake Pontchartrain & Vicinity, Lake Borgne Surge Barrier LPV-IHNC-02	PO-55	FD		USACE	97, 79, 94, 56, 92, 104, 81, 103, 101, 100	3, 2, 1, 10, 6, 19, 4, 9	ST BERNARD, ORLEANS		Pending	\$1,204,000,000	This project will construct a Hurricane Surge Barrier across the tip of Lake Borgne connecting the MRGO levees south of Bayou Bienvenue with the GIWW levees East of Michoud Canal with floodgates at Bayou Bienvenue and GIWW.	1
SURPLUS	Lake Pontchartrain and Vicinity (HPO)	PO-56	FD		USACE	97, 79, 94, 56, 92, 104, 81, 103, 101, 100	3, 2, 1, 10, 6, 19, 4, 9			Pending	\$2,935,344,422	To build and/or restore the hurricane protection system (levees, floodwalls, and structures) in Orleans and St. Bernard Parishes for the purpose of reducing the risk of flooding the area against a 1% storm event.	1
SURPLUS	St. Bernard Parish 40 Arpent Levee Repairs	PO-61	HP			104, 103	1	ST BERNARD		Pending	\$5,000,000	This project is in the Lake Borgne Levee District and calls for raising low reaches of the Forty Arpent Levee.	1
SURPLUS	Lake Pontchartrain and Vicinity	PO-63	OTHER		USACE	79, 78, 81, 56,	10, 6, 19, 9	ST CHARLES, JEFFERSON		2010	\$852,293,218	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
SURPLUS	Lake Pontchartrain & Vicinity, Seabrook Lock LPV-IHNC-01	PO-64	FD		USACE	97, 79, 94, 56, 92, 104, 81, 103, 101, 100	3, 2, 1, 10, 6, 19, 4, 9	ORLEANS		Pending	\$157,156,414	This project will construct 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 IHNC Borgne Surge Barrier.	1
SURPLUS	Biloxi Marsh	PO-72	SP			103	1	ST BERNARD	300	Pending	\$22,000,000	This project will construct 5 - 7 miles of shoreline protection along the southeastern shoreline of Lake Borgne.	1
SURPLUS	North Shore Hurricane/Flood Protection and Restoration Plan	PO-74	OTHER			73, 76, 77, 89, 90, 103	1, 6, 11, 12	ST TAMMANY, TANGIPAHOA		Pending	\$960,000	This project will develop a hurricane protection plan for the North Shore.	1
SURPLUS	Emergency Reserve 2007 - Chabert Hospital Levee	TE-084	OTHER			51	21	TERREBONNE		Pending	\$500,000	These funds were used to partially fund a levee around the Chabert Hospital in Terrebonne Parish.	3A
SURPLUS	Morganza to the Gulf	TE-64	HP		USACE	51, 52, 53, 54	21, 20	LAFOURCHE, TERREBONNE		Pending	\$97,763,455	The project is currently being designed to provide protection to Terrebonne and portions of Lafourches parishes to provide protection against the project storm event. Project will consist of the construction of 66 miles of levees and l-walls, navigation structures, water control structures, and floodgates.	3A
SURPLUS	Larose to Golden Meadow - Flood Protection	TE-65	HP			54	20	LAFOURCHE		Pending	\$19,820,000	This project includes levee modifications and improvements. The project was allocated \$15 million in '08 Surplus and \$4.82 million in '09 Surplus.	2, 3A
SURPLUS	Acadiana to the Gulf of Mexico Access Channel (AGMAC)	TV-11B.1	OTHER		USACE	104, 103	22, 26	VERMILION, IBERIA		Pending	\$1,000,000	Surplus funds will be used for mitigation of additional work required by 2007 WRDA legislation.	4
SURPLUS	Franklin Floodgate Sinkable Barge and Pump Station	TV-52	HP		HUD	50	21	ST MARY		Pending	\$5,775,000	This project will construct a sinkable barge structure on Franklin Canal to prevent storm surge from inundating the town of Franklin.	3B
SURPLUS	South Central Coastal Plan	TV-54	CPX		USACE	49, 48, 50	21, 22	ST MARY, IBERIA, ST MARTIN		Pending	\$970,000	The South Central Coastal project was authorized \$970,000 in 2009 surplus funds. The project team, which includes the Office of Coastal Protection and Restoration, St. Mary Parish, St. Martin Parish and Iberia Parish, have initiated a data gathering effort. We anticipate completing this phase of the project by the end of 2010. 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
SURPLUS	Morgan City/ St Mary Flood Protection	TV-55	HP			50,51	21	ST MARY		Pending	\$3,870,000	This project will provide flood protection improvements by raising or improving over seven miles of the current levee system in the Morgan City area.	3B
SURPLUS	Four-Mile Canal Storm Surge Reduction Construction	TV-56	HP			49	26	VERMILION		Pending	\$6,280,000	This project will provide flood protection improvements for Southern Vermilion Parish. This project consists of design, engineering, and construction of a swing barge flood control structure on Four-Mile Canal, just south of the Intracoastal Waterway.	3B
SURPLUS	Delcambre-Avery Canal (E&D)	TV-57	HP			49	22	IBERIA		Pending	\$970,000	This project will design and engineer a flood control structure for the Delcambre-Avery Canal just south of the Intracoastal Waterway. When constructed this project will provide flood protection improvements by allowing the closure of the Delcambre-Avery Canal to reduce the impact of storm surge from Vermilion Bay.	3B
SURPLUS	Beneficial Use of I-10 Twin Span Debris (Deauthorized)		OTHER			103	2	ORLEANS	2.3	Deauthorized	\$1,500,000	Use of Twin Span Debris as a form of shoreline protection for the Bayou Sauvage area.	1
WRDA	Davis Pond Freshwater Diversion	BA-01	FD		USACE	56, 83, 105, 54, 87, 84	3, 20, 1, 7, 19, 8	ST CHARLES	33000	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 divert up to 10,650 cfs.	2
WRDA	Caernarvon Freshwater Diversion	BS-08	FD		USACE	105, 103	1	PLAQUEMINES		1991	\$24,818,800	This project diverts freshwater and its accompanying nutrients and sediment from the Mississippi River to coastal bays and marshes in Breton Sound for fish and wildlife enhancement. This project can divert up to 8,000 cubic feet per second.	1

**Notes:**

Program: CWPPRA=Coastal Wetlands Planning, Protection and Restoration Act; State=Restoration projects funded primarily by the State of Louisiana; SECTION 204/1135= Water Resource Development Act Sections 204 and 1135 beneficial use of dredged material projects; WRDA=Water Resources Development Act; LCA=Louisiana Coastal Area; FEMA= Federal Emergency Management Agency funded projects; CIAP 2007= Coastal Impact Assistance Program; Surplus 07, Surplus 08, Surplus 09=State surplus-funded projects; Other=funded by programs not otherwise listed.

Project Type: BI=Barrier Island; DM=Beneficial Use of Dredged Material; FD=Freshwater Diversion; HP=Hurricane Protection; HR=Hydrologic Restoration; MC=Marsh Creation; MM=Marsh Management; OM=Outfall Management; OTHER=other project types (infrastructure, etc.); PP=Property Purchase; SD=Sediment Diversion; SNT=Sediment and Nutrient Trapping; SP=Shoreline Protection; TE=Terraces; VP=Vegetation Planting.

Agency/Sponsor: BOEMRE=Bureau of Ocean Energy Management, Regulation, and Enforcement; EPA=Environmental Protection Agency; FEMA=Federal Emergency Management Agency; HUD=Housing and Urban Development; NMFS=National Marine Fisheries Service; NRCS=Natural Resources Conservation Service; NWRC=National Wetlands Research Center; USFWS=U.S. Fish and Wildlife Service; USACE=U.S. Army Corps of Engineers; USGS=U.S. Geological Survey.

PPL: Priority Project List (as authorized each year by the CWPPRA Task Force).

**Appendix B**  
Three-Year Expenditure  
Projections

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**Table B-1. Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) Projected Expenditures<sup>1</sup>**

Project ID	Project Name	FY 2014	FY 2015	FY 2016	Project Total (FY 2014 - FY 2016)
<b>Engineering and Design (P1)</b>					
BA-34-2	Hydrologic Restoration and Vegetative Planting in the Lac des Allemands Swamp	\$187,793	\$0	\$0	\$187,793
BA-47	West Point a la Hache Marsh Creation	\$139,348	\$0	\$0	\$139,348
BA-125	Northwest Turtle Bay Marsh Creation	\$264,224	\$0	\$0	\$264,224
BA-164	Bayou Dupont Sediment Delivery- Marsh Creation 3	\$200,525	\$200,525	\$100,263	\$501,313
BS-18	Bertrandville Siphon <sup>2</sup>	\$20,000	\$0	\$0	\$20,000
BS-24	Terracing and Marsh Creation South of Big Mar	\$260,000	\$86,290	\$0	\$346,290
CS-49	Cameron-Creole Freshwater Introduction <sup>3</sup>	\$1,049,995	\$0	\$0	\$1,049,995
CS-53	Kelso Bayou Marsh Creation and Hydrologic Restoration	\$84,369	\$84,369	\$10,864	\$179,602
CS-54	Cameron-Creole Watershed Grand Bayou Marsh Creation <sup>3</sup>	\$754,617	\$0	\$0	\$754,617
CS-59	Oyster Bayou Marsh Creation and Terracing	\$214,875	\$0	\$0	\$214,875
CS-66	Cameron Meadows Marsh Creation and Terracing	\$186,481	\$186,481	\$93,241	\$466,203
ME-31	Freshwater Bayou Marsh Creation	\$240,172	\$0	\$0	\$240,172
PO-75	LaBranche East Marsh Creation	\$78,695	\$78,695	\$49,589	\$206,979
PO-133	LaBranche Central Marsh Creation	\$260,543	\$246,267	\$0	\$506,810
TE-51	Madison Bay Marsh Creation and Terracing <sup>3</sup>	\$1,848,505	\$0	\$0	\$1,848,505
TE-66	Central Terrebonne Freshwater Enhancement	\$90,523	\$86,803	\$0	\$177,326
TE-083	Terrebonne Bay Marsh Creation - Nourishment <sup>2</sup>	\$124,326	\$72,523	\$0	\$196,849
TE-112	North Catfish Lake Marsh Creation	\$192,972	\$192,972	\$96,486	\$482,429
TV-20	Bayou Sale Shoreline Protection	\$131,272	\$23,377	\$0	\$154,649
TV-063	Cole's Bayou Marsh Restoration	\$165,799	\$63,140	\$0	\$228,939
<b>Construction (P2)</b>					
BA-04C	West Pointe a la Hache Outfall Management	\$135,992	\$162,815	\$0	\$298,807
BA-27C	Barataria Basin Landbridge Shoreline Protection Phase 3-CU7 and CU8 <sup>3</sup>	\$2,258,782	\$1,505,855	\$0	\$3,764,637
BA-42	Lake Hermitage Marsh Creation	\$1,605,953	\$0	\$0	\$1,605,953
BA-48	Bayou Dupont Marsh and Ridge Creation	\$4,007,507	\$1,335,836	\$0	\$5,343,343
BA-68	Grand Liard Marsh and Ridge Restoration	\$3,445,504	\$2,297,004	\$0	\$5,742,508
BS-16	South Lake Lery Shoreline and Marsh Restoration	\$2,553,371	\$1,280,184	\$0	\$3,833,555
CS-28	Sabine Refuge Marsh Creation	\$135,195	\$540,780	\$540,780	\$1,216,756
LA-039	Coastwide Planting	\$20,369	\$0	\$0	\$20,369
ME-21	Grand Lake Shoreline Protection, Tebo Point <sup>4</sup>	\$269,004	\$135,996	\$0	\$405,000
PO-104	Bayou Bonfouca Marsh Creation	\$1,552,533	\$4,657,662	\$0	\$6,210,195
TE-32A	North Lake Boudreaux Basin Freshwater Introduction and Hydrologic Management	\$1,260,151	\$1,161,397	\$0	\$2,421,548
TE-43	GIWW Bank Restoration of Critical Areas in Terrebonne	\$1,261,067	\$117,469	\$0	\$1,378,536
TE-72	Lost Lake Marsh Creation and Hydrologic Restorator	\$1,728,977	\$2,593,466	\$0	\$4,322,443
<b>Demonstration Projects (P1 &amp; P2)</b>					
LA-09	Sediment Containment System for Marsh Creation Demonstration	\$93,026	\$0	\$0	\$93,026
LA-16	Non-rock Alternatives to Shoreline Protection Demonstration <sup>5</sup>	\$603,000	\$0	\$0	\$603,000
<b>Subtotal</b>		\$27,425,466	\$17,109,906	\$891,222	\$45,426,594
<b>Adjustment for Outlying Years<sup>6</sup></b>		N/A	\$7,890,094	\$24,108,778	\$31,998,872
<b>Total Expenditures</b>		\$27,425,466	\$25,000,000	\$25,000,000	\$77,425,466
<b>Surplus Expenditures<sup>7</sup></b>		(\$618,683)	\$0	\$0	(\$618,683)
<b>Federal Reimbursement (see Note 3)</b>		(\$6,036,225)	(\$1,578,378)	\$0	(\$7,614,603)
<b>Trust Fund Expenditures</b>		\$20,770,557	\$23,421,622	\$25,000,000	\$69,192,180

Notes:

1- Unless otherwise indicated, expenditures represent the State's portion of project cost share only (15% of total cost). Actually expenditures may vary and in some cases exceed the State's cost share; however, any exceedance of the State's cost share for a given project is ultimately reimbursed by the Federal sponsor.

2- Project currently on hold.

3- State has already expended its cost share for project implementation; remaining expenditures will be subsequently reimbursed by Federal partners.

4- Project transferred from USACE to NRCS; final schedule and expenditure rates to be determined upon transfer of federal funds to new sponsor.

5- Projected expenditures based on the State's requirement to meet its 15% cost share agreement of the revised project construction budget approved by CWPPRA Task Force in FY 2013.

6- Because CWPPRA projects compete for funding annually, CWPPRA expenditures as presented in Appendix C (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 2015 - FY 2016 are therefore based on prior years' expenditures.

7- See Table B-7.

**Table B-2. Louisiana WRDA Projected Expenditures**

Project ID	Project Name	FY 2014	FY 2015	FY 2016	Project Total (FY 2014 - FY 2016)
<b>Initial LCA Projects</b>					
BA-71	Medium Diversion with Dedicated Dredging at Myrtle Grove <sup>1,2</sup>	\$2,847,102	\$0	\$0	\$2,847,102
LA-10	Barataria Basin Barrier Shoreline Restoration <sup>2</sup>	\$330,000	\$0	\$0	\$330,000
<b>Additional LCA Projects</b>					
BS-20	Medium Diversion at White Ditch <sup>2</sup>	\$241,964	\$31,000	\$0	\$272,964
PO-68	Small Diversion at Convent/ Blind River <sup>2</sup>	\$1,612,000	\$1,612,000	\$806,000	\$4,030,000
<b>Long term, Large Scale Studies</b>					
MR-16	Mississippi River Hydrodynamic and Delta Management Study <sup>2,3</sup>	\$2,386,316	\$3,371,006	\$1,000,000	\$6,757,322
<b>Other Projects</b>					
BA-115	Donaldsonville to the Gulf <sup>1</sup>	\$100,000	\$0	\$0	\$100,000
LA-20	Southwest Coastal Louisiana <sup>1</sup>	\$1,500,000	\$500,000	\$0	\$2,000,000
<b>Total Expenditures</b>		<b>\$9,805,213</b>	<b>\$5,514,006</b>	<b>\$1,806,000</b>	<b>\$17,125,219</b>
<b>Surplus Expenditures for WRDA</b>		<b>(\$4,447,102)</b>	<b>(\$946,960)</b>	<b>\$0</b>	<b>(\$5,394,062)</b>
<b>CIAP Expenditures for WRDA</b>		<b>(\$2,386,316)</b>	<b>(\$3,371,006)</b>	<b>\$0</b>	<b>(\$5,757,322)</b>
<b>Credit Applied</b>		<b>(\$2,971,795)</b>	<b>(\$1,196,040)</b>	<b>(\$1,806,000)</b>	<b>(\$5,973,835)</b>
<b>Trust Fund Expenditures for WRDA</b>		<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>

## Notes:

- 1- All or a portion of project expenditures are funded with Surplus revenues (see Table B-7).
- 2- All or a portion of project expenditures will be covered with accrued credit.
- 3- All or a portion of project expenditures are funded through CIAP (see Table B-3).

**Table B-3. Coastal Impact Assistance Program (CIAP) Projected Expenditures<sup>1</sup>**

Project ID	Project Name	FY 2014	FY 2015	FY 2016	Project Total (FY 2014 - FY 2016)
<b>Restoration Projects</b>					
AT-015	Atchafalaya Long Distance Sediment Pipeline	\$750,000	\$0	\$0	\$750,000
BA-43 (EB)	Mississippi River Long Distance Sediment Pipeline <sup>2</sup>	\$5,447,802	\$19,343,406	\$0	\$24,791,208
BA-45 (EB)	Caminada Headland Beach and Dune Restoration <sup>2</sup>	\$27,000,000	\$0	\$0	\$27,000,000
BA-58	Fringe Marsh Repair	\$1,840,000	\$0	\$0	\$1,840,000
BA-161	Mississippi River Reintroduction into Bayou Lafourche	\$2,000,000	\$14,520,000	\$3,750,000	\$20,270,000
BA-162-CAT	Shoreline Protection Cat Island	\$1,200,000	\$0	\$0	\$1,200,000
BS-13 (EB)	Bayou Lamoque Floodgate Removal	\$1,014,712	\$0	\$0	\$1,014,712
LA-12.2	Performance Evaluation - Barataria Land Bridge Biological Monitoring	\$97,630	\$0	\$0	\$97,630
LA-12.3	Performance Evaluation - Freshwater Bayou	\$284,094	\$0	\$0	\$284,094
LA-12.5	Performance Evaluation - Barrier Island Studies	\$561,046	\$0	\$0	\$561,046
LA-12.6	Performance Evaluation - Caminada Moreau Subsidence Study	\$145,176	\$0	\$0	\$145,176
LA-12.7	Performance Evaluation Borrow Area Management and Monitoring	\$813,512	\$0	\$0	\$813,512
LA-13	Coastal Forest Conservation Initiative	\$11,667,035	\$0	\$0	\$11,667,035
MR-16	Mississippi River Hydrodynamic and Delta Management Study <sup>3,4</sup>	\$11,462,154	\$6,637,846	\$0	\$18,100,000
PO-36 (EB)	Orleans Land Bridge Shoreline Protection and Marsh Creation <sup>5</sup>	\$170,000	\$0	\$0	\$170,000
PO-73	Central Wetlands Demonstration	\$590,085	\$0	\$0	\$590,085
PO-73-1	Central Wetlands - Riverbend	\$1,268,340	\$368,340	\$0	\$1,636,680
PO-73-2	Central Wetlands - EBSTP to A2	\$2,625,546	\$1,316,370	\$0	\$3,941,916
PO-148	Living Shoreline	\$7,169,669	\$12,166,667	\$7,163,664	\$26,500,000
TE-63	Falgout Canal Freshwater Enhancement	\$3,300,000	\$0	\$0	\$3,300,000
TV-11B (EB)	Freshwater Bayou Bank Stabilization and Marsh Creation	\$11,300,000	\$0	\$0	\$11,300,000
<b>Infrastructure Projects</b>					
AT-05	Morgan City Industrial Road	\$215,000	\$0	\$0	\$215,000
TV-31	Acadiana Regional Airport	\$602,500	\$0	\$0	\$602,500
<b>CIAP Program Management</b>		\$1,000,000	\$1,000,000	\$1,000,000	\$3,000,000
<b>Total Expenditures</b>		<b>\$92,524,301</b>	<b>\$55,352,629</b>	<b>\$11,913,664</b>	<b>\$159,790,594</b>

Notes:

- 1- Funding shown in table represents State CIAP expenditures only. Some projects have multiple funding sources (see other footnotes).
- 2- Project to receive supplemental funding from surplus funds.
- 3- Project authorized through WRDA; CIAP funds used to supplement WRDA expenditures (see Table B-2).
- 4- Expenditures include funding for Mississippi River Delta Strategic Planning- SSPM Expansion (MR-16-SSPM).
- 5- Expenditures represent contingency funds to cover post-construction activities.

**Table B-4. CDBG Projected Expenditures**

<b>Project ID</b>	<b>Project Name</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>Project Total (FY 2014 - FY 2016)</b>
BA-82	Lafitte Area Levee Repair	\$106,212	\$0	\$0	\$106,212
BA-83	Rosethorne Wetland Assimilation Project	\$634,254	\$0	\$0	\$634,254
BA-84	Bayou Lafourche Freshwater District - Walter S. Lemann Memorial Pump Station Renovations	\$1,653,001	\$63,403	\$0	\$1,716,404
PO-87	Madison Bulkhead Project <sup>1</sup>	\$464,654	\$0	\$0	\$464,654
PO-151	St. Tammany Parish Watershed Management Study <sup>2</sup>	\$1,310,496	\$0	\$0	\$1,310,496
TE-78	Cut-Off/Pointe Aux Chene Levee	\$4,335,246	\$2,245,941	\$0	\$6,581,187
TV-52	Franklin Floodgate Sinkable Barge and Pump Station <sup>1</sup>	\$2,259,570	\$191,908	\$0	\$2,451,478
TV-58	Flood Control Structure at Boston Canal <sup>3</sup>	\$2,586,541	\$2,586,541	\$0	\$5,173,081
TV-60	Front Ridge Chenier Terracing/Protection	\$1,210,411	\$166,659	\$0	\$1,377,070
<b>Total Expenditures</b>		<b>\$14,560,385</b>	<b>\$5,254,452</b>	<b>\$0</b>	<b>\$19,814,836</b>

## Notes:

- 1- Project to receive supplemental funding from surplus funds (see Table B-7).
- 2- Project newly approved; expenditures to be distributed according to final project schedule.
- 3- Project currently on hold; expenditures will be distributed according to final schedule.

**Table B-5. Berm to Barrier Projected Expenditures**

<b>Project ID</b>	<b>Project Name</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>Project Total (FY 2014 - FY 2016)</b>
BA-40	Riverine Sand Mining/Scofield Island Restoration	\$16,036,150	\$0	\$0	\$16,036,150
BA-110	Shell Island East- BERM <sup>1</sup>	\$28,539,887	\$0	\$0	\$28,539,887
<b>Total Expenditures</b>		<b>\$44,576,037</b>	<b>\$0</b>	<b>\$0</b>	<b>\$44,576,037</b>

Notes:

1- Portion of project to be funded initially with remaining Berm to Barrier funds; remaining funds for project completion are anticipated from NRDA (see Table B-16).

**Table B-6. State-Only Project Expenditures (Non-Surplus)**

Project ID	Project Name	FY 2014	FY 2015	FY 2016	Project Total (FY 2014 - FY 2016)
BA-091	Bayou Lafourche Salt Water Control Structure	\$4,091,400	\$200,000	\$0	\$4,291,400
PO-29	River Reintroduction into Maurepas Swamp	\$1,850,000	\$47,800,000	\$35,600,000	\$85,250,000
PO-142	Hydrologic Restoration of the Amite River Diversion Canal	\$3,064,105	\$0	\$0	\$3,064,105
<b>HSDRSS (Federal-Only) Projects<sup>1</sup></b>					
BA-74	Stormproofing of Interior Pumping Stations	\$10,000	\$0	\$0	\$10,000
BA-148	Risk Reduction- Barataria Basin Landbridge	\$10,000	\$10,000	\$0	\$20,000
BS-03B	Risk Reduction via Modification of Caernarvon Freshwater Diversion	\$10,000	\$10,000	\$0	\$20,000
PO-57	SELA- Overall	\$96,000	\$96,000	\$96,000	\$288,000
PO-62	West Shore Lake Pontchartrain, Louisiana Hurricane Protection Feasibility Study	\$10,000	\$10,000	\$0	\$20,000
<b>Other Federal-Only Projects</b>					
TE-108	HNC Deepening Section 203 Study	\$10,000	\$0	\$0	\$10,000
<b>Total State Expenditures</b>		<b>\$9,151,505</b>	<b>\$48,126,000</b>	<b>\$35,696,000</b>	<b>\$92,973,505</b>

Notes:

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

**Table B-7. Surplus Projected Expenditures (2007, 2008, 2009)**

Project ID	Project Name	FY 2014	FY 2015	FY 2016	Project Total (FY 2014 - FY 2016)
<b>Project Surplus Expenditures</b>					
BA-25	Bayou Lafourche Freshwater Introduction <sup>1</sup>	\$703,560	\$0	\$0	\$703,560
BA-115	Donaldsonville to the Gulf	\$100,000	\$0	\$0	\$100,000
BA-43 (EB)	Mississippi River Long Distance Sediment Pipeline <sup>2</sup>	\$8,116,003	\$24,348,011	\$0	\$32,464,014
BA-45	Caminada Headland Beach and Dune Restoration <sup>2</sup>	\$26,000,000	\$996,952	\$0	\$26,996,952
BA-71	Medium Diversion with Dedicated Dredging at Myrtle Grove <sup>3</sup>	\$4,823,418	\$0	\$0	\$4,823,418
BA-75-1	Jean Lafitte Tidal Protection	\$9,677,408	\$0	\$0	\$9,677,408
BA-85	St. Charles Parish West Bank	\$2,416,574	\$0	\$0	\$2,416,574
CS-04	Cameron Creole Levee	\$151,427	\$2,168,014	\$151,850	\$2,471,291
CS-33	Cameron Parish Shoreline	\$41,541,304	\$0	\$0	\$41,541,304
LA-20	Southwest Coastal Louisiana	\$1,500,000	\$946,960	\$0	\$2,446,960
PO-61	Forty Arpent Levee	\$1,154,010	\$0	\$0	\$1,154,010
PO-63	Lake Pontchartrain and Vicinity	\$36,824,400	\$0	\$0	\$36,824,400
PO-72	Biloxi Marsh	\$15,460,412	\$1,524,862	\$0	\$16,985,274
ME-25 (SF)	Marsh Creation near Freshwater Bayou <sup>4</sup>	\$3,665,502	\$0	\$0	\$3,665,502
TV-54	South Central Coastal Plan	\$550,000	\$420,000	\$0	\$970,000
TV-55	Morgan City/ St Mary Flood Protection	\$689,435	\$2,290,595	\$778,175	\$3,758,205
TV-56	Four-Mile Canal Storm Surge Reduction Construction	\$1,000,000	\$5,280,000	\$0	\$6,280,000
TV-57	Delcambre-Avery Canal (E&D)	\$718,316	\$0	\$0	\$718,316
N/A	Houma Navigation Canal Lock Complex <sup>5</sup>	\$16,200,000	\$2,000,000	\$0	\$18,200,000
N/A	East of Harvey Canal	\$161,399	\$0	\$0	\$161,399
N/A	Southeast Louisiana LERRDS <sup>6</sup>	\$100,000,000	\$59,837,318	\$10,775,970	\$170,613,288
<b>Programmatic and Non-Project Surplus Expenditures</b>					
AT-13	Atchafalaya Basin Natural Resources Inventory and Assessment	\$449,503	\$0	\$0	\$449,503
LA-26	Rehabilitation and Repair of State Restoration Projects	\$1,098,240	\$0	\$0	\$1,098,240
LA-27	Barrier Island Maintenance Program	\$3,390,000	\$0	\$0	\$3,390,000
LA-28	Conservation/ Restoration Partnership	\$1,012,432	\$0	\$0	\$1,012,432
LA-037	Science, Technology, and Education	\$10,606,274	\$0	\$0	\$10,606,274
N/A	Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) <sup>7</sup>	\$618,683	\$0	\$0	\$618,683
N/A	Innovative Coast-Wide Initiatives	\$11,258,655	\$0	\$0	\$11,258,655
N/A	Beneficial Use	\$7,000,000	\$698,955	\$0	\$7,698,955
N/A	Reserve <sup>8</sup>	\$9,834,936	\$0	\$0	\$9,834,936
N/A	Innovative Programs	\$1,060,824	\$0	\$0	\$1,060,824
N/A	University Partnerships	\$1,500,000	\$430,000	\$0	\$1,930,000
<b>Total Expenditures</b>		<b>\$319,282,714</b>	<b>\$100,941,667</b>	<b>\$11,705,995</b>	<b>\$431,930,376</b>

Notes:

1- Expenditures represent contingency funds to cover post-construction activities.

2- Project to receive supplemental funding from CIAP (see Table B-3).

3- Includes funding for Mid-Barataria Diversion (BA-153; see Table B-17).

4- Surplus funds for project are supplemented by a \$900,000 allocation of mitigation funds from LDNR (see Tables 4-1 and 4-2).

5- Includes funding for both Morganza to the Gulf (TE-64) and Houma Navigation Canal Lock (see Table B-17).

6- Includes expenditures for West Bank and Vicinity (BA-66), HSDRRS Mitigation- West Bank and Vicinity (BA-109), HSDRRS Mitigation- Lake Pontchartrain and Vicinity (PO-121), SELA (PO-57), Permanent Closure of Canals and Pump Stations (PO-60), LPV Task Force Guardian Mitigation- Bayou Sauvage (PO-145), Previously Authorized Mitigation LPV- Manchac (PO-146), Previously Authorized Mitigation- WBV (BA-154), New Orleans to Venice (BA-67), New Orleans to Venice Mitigation- Plaquemines Non-Fed (BA-158), New Orleans to Venice Mitigation- Fed (BA-159), Plaquemines TFU Mitigation- Braithwaite to Scarsdale (BA-156), Valentine to Larose (TE-111), and \$2 million in supplemental funding for St. Charles Parish West Bank (BA-85).

7- Used to partially fund construction of CWPPRA projects (see Table B-1).

8- Used to partially fund construction of CDBG projects (see Table B-4) and Other Deepwater Horizon Oil Spill Related Projects (see Table B-17).

**Table B-8. CWPRA Monitoring Projected Expenditures**  
(amounts shown are 100% state; the cost share is 85% federal:15% state)

Project ID	Project Name	FY 2014	FY 2015	FY 2016	Project Total (FY 2014 - FY 2016)
BA-02	GIWW (Gulf Intracoastal Waterway) to Clovelly Hydrologic Restoration	\$5,775	\$15,251	\$7,102	\$28,128
BA-03c	Naomi Outfall Management	\$2,274	\$794	\$815	\$3,883
BA-20	Jonathan Davis Wetland Protection	\$8,606	\$2,625	\$0	\$11,231
BA-27c	Barataria Landbridge Shoreline Protection (Phase 3)	\$11,114	\$0	\$2,550	\$13,664
BA-35	Chaland Pass to Grand Bayou	\$12,825	\$2,250	\$0	\$15,075
BA-36	Dedicated Dredging on the Barataria Basin Landbridge	\$3,946	\$11,590	\$2,250	\$17,786
BA-37	Little Lake Shoreline Protection/Dedicated Dredging Near Round Lake	\$1,598	\$0	\$0	\$1,598
BA-38	Barataria Barrier Island Complex Project: Pelican Island and Pass La Mer to Chaland Pass Restoration	\$13,038	\$0	\$25,245	\$38,283
BA-39	Mississippi River Sediment Delivery (Bayou Dupont)	\$5,423	\$1,587	\$243	\$7,253
BA-40	Riverine Sand Mining/Scofield Island Restoration (Berm-Funded)	\$13,200	\$12,004	\$11,843	\$37,047
BA-42	Lake Hermitage Marsh Creation	\$1,200	\$0	\$4,899	\$6,099
BA-68	Grand Liard Marsh and Ridge Restoration	\$0	\$12,428	\$3,750	\$16,178
BA-76	Cheniere Ronquille Barrier Island Restoration	\$11,344	\$0	\$13,819	\$25,163
BA-110	Shell Island East - Berm Funded	\$14,423	\$750	\$11,280	\$26,453
BS-03a	Caernarvon Diversion Outfall Management	\$3,600	\$150	\$150	\$3,900
BS-16	South Lake Lery Shoreline and Marsh Restoration	\$3,610	\$0	\$2,540	\$6,150
CS-18	Sabine National Wildlife Refuge Erosion Protection	\$1,500	\$0	\$0	\$1,500
CS-20	East Mud Lake Marsh Management	\$7,650	\$9,503	\$10,013	\$27,166
CS-23	Replace Sabine Refuge Water Control Structures at Headquarters Canal, West Cove Canal, and Hog Island Gully	\$3,750	\$1,275	\$0	\$5,025
CS-24	Perry Ridge Shore Protection	\$675	\$2,250	\$750	\$3,675
CS-27	Black Bayou Hydrologic Restoration	\$1,350	\$2,775	\$5,400	\$9,525
CS-28	Sabine Refuge Marsh Creation, Cycles 1-3	\$0	\$3,900	\$0	\$3,900
CS-30	GIWW - Perry Ridge West Bank Stabilization	\$0	\$0	\$1,200	\$1,200
CS-31	Holly Beach Sand Management	\$2,250	\$0	\$0	\$2,250
CS-32	East Sabine Lake Hydrologic Restoration	\$3,150	\$0	\$3,000	\$6,150
LA-03b	Coastwide Nutria Control Program	\$21,750	\$21,750	\$21,750	\$65,250
LA-08	Bioengineered Oyster Reef Demonstration	\$13,950	\$7,860	\$14,700	\$36,510
LA-039	Coastwide Planting Project	\$6,320	\$6,320	\$9,663	\$22,303
LA-16	Non-Rock Alternatives to Shoreline Protection Demonstration Project	\$90,000	\$32,000	\$10,000	\$132,000
ME-04	Freshwater Bayou Wetland Protection	\$0	\$3,000	\$0	\$3,000
ME-09	Cameron Prairie National Wildlife Refuge Shoreline Protection	\$1,500	\$0	\$0	\$1,500
ME-11	Humble Canal Hydrologic Restoration	\$3,900	\$1,500	\$1,650	\$7,050
ME-13	Freshwater Bayou Bank Stabilization	\$0	\$0	\$750	\$750
ME-16	Freshwater Introduction South of Highway 82	\$1,350	\$1,500	\$3,900	\$6,750
ME-19	Grand-White Lakes Landbridge Protection	\$1,875	\$2,250	\$0	\$4,125
MR-03	West Bay Sediment Diversion	\$27,074	\$2,250	\$0	\$29,324
MR-15	Venice Ponds Marsh Creation and Crevasses	\$0	\$10,500	\$1,260	\$11,760
PO-06	Fritch Marsh Restoration	\$1,500	\$0	\$2,700	\$4,200
PO-16	Bayou Sauvage National Wildlife Refuge Hydrologic Restoration, Phase 1	\$9,577	\$0	\$0	\$9,577
PO-17	Bayou LaBranche Wetland Creation	\$12,831	\$2,369	\$0	\$15,200
PO-18	Bayou Sauvage National Wildlife Refuge Hydrologic Restoration, Phase 2	\$7,731	\$0	\$0	\$7,731
PO-22	Bayou Chevee Shoreline Protection	\$3,066	\$2,540	\$0	\$5,606
PO-24	Hopedale Hydrologic Restoration	\$7,790	\$2,025	\$2,100	\$11,915
PO-33	Goose Point/Point Platte Marsh Creation	\$0	\$1,500	\$0	\$1,500
PO-104	Bayou Bonfouca Marsh Creation	\$0	\$2,833	\$0	\$2,833
TE-20	Isles Dernieres Restoration - East Island	\$4,500	\$0	\$0	\$4,500
TE-23	West Belle Pass Headland Restoration	\$1,073	\$0	\$0	\$1,073
TE-26	Lake Chapeau Sediment Input and Hydrologic Restoration, Point Au Fer Island	\$5,701	\$3,871	\$4,354	\$13,926
TE-28	Brady Canal Hydrologic Restoration	\$4,500	\$7,427	\$3,738	\$15,665
TE-37	New Cut Dine/Marsh Restoration	\$4,500	\$0	\$0	\$4,500
TE-40	Timbalier Island Dune/Marsh Restoration	\$0	\$2,561	\$0	\$2,561
TE-44	North Lake Mechant Landbridge Restoration	\$5,088	\$1,874	\$0	\$6,962
TE-45	Terrebonne Bay Shore Protection Demonstration	\$9,911	\$3,967	\$14,744	\$28,622
TE-46	West Lake Boudreaux Shoreline Protection and Marsh Creation	\$5,774	\$1,874	\$0	\$7,648
TE-48	Raccoon Island Shoreline Protection/Marsh Creation	\$6,113	\$0	\$0	\$6,113
TE-50	Whiskey Island Back Barrier Marsh Creation	\$10,424	\$1,805	\$14,173	\$26,402
TE-52	West Belle Pass Barrier Headland Restoration	\$3,000	\$1,775	\$1,991	\$6,766
TV-03	Vermilion River Cutoff Bank Protection	\$2,250	\$0	\$750	\$3,000
TV-04	Cote Blanche Hydrologic Restoration	\$1,275	\$3,000	\$0	\$4,275
TV-09	Boston Canal/Vermillion Bay Bank Restoration	\$1,275	\$2,250	\$0	\$3,525
TV-13a	Oaks/Avery Canal Hydrologic Restoration, Increment 1	\$0	\$2,250	\$1,500	\$3,750
TV-14	Marsh Island Hydrologic Restoration	\$1,200	\$2,250	\$675	\$4,125
TV-15	Sediment Trapping at "The Jaws"	\$0	\$0	\$2,250	\$2,250
TV-21	East Marsh Island Marsh Creation	\$5,520	\$0	\$0	\$5,520
CRMS	Coastwide Reference Monitoring System (CRMS) - Wetlands	\$1,200,000	\$1,200,000	\$1,200,000	\$3,600,000
<b>Total Expenditures</b>		<b>\$1,614,619</b>	<b>\$1,414,233</b>	<b>\$1,419,497</b>	<b>\$4,448,349</b>

**Table B-9. Projected Expenditures for Monitoring of State Only Projects**  
(amounts shown are 100% state)

Project ID	Project Name	FY 2014	FY 2015	FY 2016	Project Total (FY 2014 - FY 2016)
BA-04	West Point a la Hache Siphon	\$2,715	\$2,786	\$0	\$5,501
CS-02	Rycade Canal	\$0	\$10,000	\$0	\$10,000
<b>Total Expenditures</b>		<b>\$2,715</b>	<b>\$12,786</b>	<b>\$0</b>	<b>\$15,501</b>

**Table B-10. Projected Expenditures for Monitoring of WRDA Projects**  
(amounts shown are 100% state; the cost share is 75% federal:25% state)

Project ID	Project Name	FY 2014	FY 2015	FY 2016	Project Total (FY 2014 - FY 2016)
BA-01	Davis Pond Freshwater Diversion	\$291,297	\$311,688	\$333,506	\$936,491
BS-08	Caernarvon Freshwater Diversion	\$184,902	\$197,846	\$211,695	\$594,443
<b>Total Expenditures</b>		<b>\$476,199</b>	<b>\$509,534</b>	<b>\$545,201</b>	<b>\$1,530,934</b>

**Table B-11. CWPRA Projects with O&M Budget Project Expenditures**  
(amounts shown are 100% State; the cost share is 85% federal:15% State)

Project No.	Project Name	Federal Sponsor	FY 2014	FY 2015	FY 2016	Project Total (FY 2014 - FY 2016)
ADMIN (USACE)	Administrative Costs - Cash Flow Projects	USACE	\$2,210	\$3,050	\$3,750	\$9,009
AT-02	Atchafalaya Sediment Delivery	NMFS	\$48,750	\$448	\$0	\$49,198
AT-03	Big Island Mining	NMFS	\$48,750	\$448	\$0	\$49,198
BA-02	GIWW (Gulf Intracoastal Waterway) to Clovelly Hydrologic Restoration	NRCS	\$3,518	\$3,547	\$3,577	\$10,642
BA-03c	Naomi Outfall Management	NRCS	\$1,592	\$35,477	\$1,620	\$38,689
BA-04c	West Point a la Hache Outfall Management	NRCS	Not Constructed	\$969	\$994	\$1,962
BA-20	Jonathan Davis Wetland Protection	NRCS	\$857	\$32,732	\$902	\$34,492
BA-27	Barataria Basin Landbridge Shoreline Protection, Phases 1 and 2	NRCS	\$629	\$4,548	\$661	\$5,838
BA-27c	Barataria Basin Landbridge Shoreline Protection, Phase 3	NRCS	\$629	\$4,038	\$661	\$5,328
BA-27d	Barataria Basin Landbridge Shoreline Protection Phase 4	NRCS	\$650	\$5,529	\$661	\$6,840
BA-35	Pass Chalard to Grand Bayou Pass Barrier Shoreline Restoration	NMFS	\$1,429	\$987	\$34,345	\$36,761
BA-37	Little Lake Shoreline Protection/ Dedicated Dredging Near Round Lake	NMFS	\$1,102	\$1,138	\$1,045,598	\$1,047,839
BA-38	Pelican Island and Pass La Mer to Chalard Pass Restoration	NMFS	\$1,755	\$53,726	\$4,584	\$60,064
BA-39	Mississippi River Sediment Delivery System	EPA	\$998	\$10,688	\$1,118	\$12,804
BA-41	South Shore of the Pen Shoreline Protection and Marsh Creation	NRCS	\$163,058	\$893	\$45,916	\$46,809
BA-42	Lake Hermitage Marsh Creation	FWS	Not Constructed	\$870	\$893	\$1,763
BA-47	West Point a la Hache Outfall Management	NRCS	Not Constructed	\$987	\$0	\$987
BA-48	Bayou Dupont Marsh and Ridge Creation	NMFS	Not Constructed	Not Constructed	\$21,928	\$21,928
BA-68	Grand Liard Marsh and Ridge Restoration	NMFS	Not Constructed	\$4,673	\$1,114	\$5,786
BA-76	Cheniere Ronquille Barrier Island Restoration	NMFS	Not Constructed	\$80,289	\$1,114	\$81,403
BS-03a	Caernarvon Diversion Outfall Management	NRCS	\$10,520	\$10,540	\$10,560	\$31,620
CS-04A	Cameron-Creole Maintenance	NRCS	\$22,719	\$325,202	\$22,778	\$370,698
CS-11B	Sweet Lake/Willow Lake Hydrologic Restoration	NRCS	\$969	\$998	\$1,028	\$2,994
CS-17	Cameron Creole Plugs	FWS	\$969	\$998	\$1,028	\$2,994
CS-18	Sabine National Wildlife Refuge Erosion Protection	FWS	\$969	\$998	\$1,028	\$2,994
CS-20	East Mud Lake Marsh Management	NRCS	\$4,194	\$4,223	\$4,253	\$12,669
CS-21	Highway 384 Hydrologic Restoration	NRCS	\$20,431	\$2,888	\$2,978	\$26,296
CS-22	Clear Marais Bank Protection	USACE	\$9,969	\$998	\$1,028	\$11,994
CS-23	Replace Sabine Refuge Water Control Structures at Headquarters Canal, West Cove Canal, and Hog Island Gully	FWS	\$2,469	\$2,498	\$2,528	\$7,494
CS-24	Perry Ridge Shore Protection	NRCS	\$969	\$998	\$1,028	\$2,994
CS-27	Black Bayou Hydrologic Restoration	NMFS	\$31,719	\$1,748	\$1,778	\$35,244
CS-28-2	Sabine Refuge Marsh Creation, Increment 2	USACE	\$26,025	\$3,525	\$26,806	\$56,356
CS-29	Black Bayou Culverts Hydrologic Restoration	NRCS	\$750,000	\$2,618	\$2,648	\$755,265
CS-30	GIWW - Perry Ridge West Bank Stabilization	NRCS	\$8,469	\$45,998	\$1,028	\$55,494
CS-31	Holly Beach Sand Management	NRCS	\$15,969	\$998	\$1,028	\$17,994
CS-32	East Sabine Lake Hydrologic Restoration	FWS	\$8,469	\$998	\$1,028	\$10,494
CS-49	Cameron-Creole Freshwater Introduction - Vegetative Plantings	NRCS	\$67,945	\$998	\$1,028	\$69,970
LA-03b	Coastwide Nutria Control Program	NRCS	\$515,013	\$515,054	\$515,054	\$1,545,121
LA-16	Non-Rock Alternatives to Shoreline Protection Demonstration Project	NRCS	\$5,000	\$0	\$0	\$5,000
LA-39	Coastwide Plantings Program	NRCS	\$180,000	\$180,000	\$180,000	\$540,000
ME-04	Freshwater Bayou Wetland (Phases 1 & 2)	NRCS	\$362,049	\$998	\$1,028	\$364,074
ME-09	Cameron Prairie National Wildlife Refuge Shoreline Protection	FWS	\$969	\$998	\$1,028	\$1,028
ME-11	Humble Canal Hydrologic Restoration	NRCS	\$2,769	\$3,023	\$3,353	\$9,144
ME-13	Freshwater Bayou Bank Stabilization	NRCS	\$461,001	\$998	\$1,028	\$463,026
ME-14	Pecan Island Terracing	NMFS	\$24,909	\$256,358	\$1,028	\$282,294
ME-16	Freshwater Introduction South of Highway 82	FWS	\$51,690	\$2,498	\$2,528	\$56,715
ME-19	Grand-White Lakes Landbridge Protection	FWS	\$13,719	\$450,998	\$1,028	\$465,744
ME-21b	Grand Lake Shoreline Protection, O&M Only (CIAP)	USACE	\$969	\$998	\$1,028	\$2,994
ME-22	South White Lake Shoreline Protection	USACE	\$969	\$998	\$1,028	\$2,994
PO-06	Fritchie Marsh Restoration	NRCS	\$599	\$615	\$631	\$1,246
PO-16	Bayou Sauvage National Wildlife Refuge Hydrologic Restoration, Phase 1	FWS	\$3,103	\$3,183	\$3,267	\$9,553
PO-18	Bayou Sauvage National Wildlife Refuge Hydrologic Restoration, Phase 2	FWS	\$2,699	\$2,769	\$2,841	\$8,309
PO-24	Hopedale Hydrologic Restoration	NMFS	\$1,934	\$4,136	\$2,035	\$8,105
PO-30	Lake Borgne Shoreline Protection	EPA	\$510,000	\$916	\$13,561	\$524,477
PO-33	Goose Point/Point Platte Marsh Creation	FWS	\$38,540	\$1,065	\$1,095	\$40,700
PO-34	Alligator Bend Marsh Restoration and Shoreline Protection	NRCS	\$957	\$987	\$1,016	\$2,960
TE-22	Point au Fer Canal Plugs	NMFS	\$1,348	\$1,388	\$1,419	\$1,419
TE-23 (USACE)	West Belle Pass Headland Restoration	USACE	\$1,338	\$0	\$1,418	\$1,418
TE-26	Lake Chapeau Sediment Input and Hydrologic Restoration, Point Au Fer Island	NMFS	\$1,356	\$1,396	\$1,427	\$4,179

**Table B-11. CWPPRA Projects with O&M Budget Project Expenditures**  
**(amounts shown are 100% State; the cost share is 85% federal:15% State)**

Project No.	Project Name	Federal Sponsor	FY 2014	FY 2015	FY 2016	Project Total (FY 2014 - FY 2016)
TE-28	Brady Canal Hydrologic Rest.	NRCS	\$3,893	\$3,923	\$3,953	\$11,768
TE-32a	North Lake Boudreaux Basin Freshwater Introduction & Hydrologic Management	FWS	Not Constructed	\$16,638	\$14,688	\$31,326
TE-34	Penchant Basin Natural Resources Plan Increment 1	NRCS	\$6,750	\$6,773	\$22,200	\$28,973
TE-37	New Cut Dune and Marsh Restoration	EPA	\$34,681	None	\$26,153	\$60,834
TE-39	South Lake Decade Freshwater Introduction	NRCS	\$750	\$2,988	\$795	\$3,783
TE-43	GIWW Bank Restoration of Critical Areas in Terrebonne	NRCS	None	\$885	\$912	\$1,797
TE-44	North Lake Mechant Landbridge Restoration	FWS	\$644	\$44,720	\$8,082	\$53,446
TE-46	West Lake Boudreaux Shoreline Protection and Marsh Creation	FWS	\$25,577	\$870	\$899	\$1,770
TE-48	Raccoon Island Shoreline Protection/Marsh Creation	NRCS	\$2,316	\$805	\$831	\$1,636
TE-50	Whiskey Island Back Barrier Marsh Creation	EPA	\$947	None	\$1,011	\$1,958
TE-52	West Belle Pass Barrier Headland Restoration	NMFS	\$51,216	\$94,685	\$915	\$95,600
TV-03	Vermilion River Cutoff Bank Protection	USACE	\$969	\$998	\$1,028	\$2,994
TV-04	Cote Blanche Hydrologic Restoration	NRCS	\$211,500	\$1,748	\$1,778	\$215,025
TV-09	Boston Canal/Vermilion Bay Bank Protection	NRCS	\$12,219	\$998	\$1,028	\$1,028
TV-12	Little Vermilion Bay Sediment Trapping	NMFS	\$23,794	\$304,548	\$1,028	\$329,369
TV-13a	Oaks/Avery Canal Hydrologic Restoration, Increment 1	NRCS	\$30,219	\$998	\$1,028	\$32,244
TV-14	Marsh Island Hydrologic Restoration	USACE	\$969	\$998	\$1,028	\$2,994
TV-15	Sediment Trapping at "The Jaws"	NMFS	\$969	\$998	\$1,028	\$2,994
TV-17	Lake Portage Land Bridge	NRCS	\$969	\$998	\$1,028	\$2,994
TV-18	Four Mile Canal Terracing and Sediment Trapping	NMFS	\$59,451	\$779,158	\$1,028	\$839,637
TV-21	East Marsh Island Marsh Creation	EPA/NRCS	\$126,661	\$998	\$100,904	\$228,563
<b>Total State Share</b>			<b>\$4,476,504</b>	<b>\$3,347,178</b>	<b>\$2,251,688</b>	<b>\$9,292,127</b>

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
2. State share is based on CWPPRA cost share of 85% Federal/15% State.
3. Projects that the USACE is responsible for O&M are indicated by (USACE) after the project number.

**Table B-12. O&M Projected Expenditures for CWPPRA Projects without Federal Cost Share  
(all amounts shown are 100% state)**

Project ID	Project Name	FY 2014	FY 2015	FY 2016	Project Total (FY 2014 - FY 2016)
TE-20	Isles Dernieres Restoration East Island	\$3,190	\$3,290	\$3,390	\$9,870
TE-24	Isles Dernieres Restoration Trinity Island	\$3,190	\$3,290	\$3,390	\$9,870
TE-27	Whiskey Island Restoration	\$3,190	\$3,290	\$3,390	\$9,870
TE-25	East Timbalier Island Sediment Restoration, Phase 1	\$3,190	\$3,290	\$3,390	\$9,870
TE-30	East Timbalier Island Sediment Restoration, Phase 2	\$3,190	\$3,290	\$3,390	\$9,870
TE-40	Timbalier Island Dune and Marsh Restoration	\$3,190	\$3,290	\$3,390	\$9,870
<b>Total Expenditures</b>		<b>\$19,140</b>	<b>\$19,740</b>	<b>\$20,340</b>	<b>\$59,220</b>

**Table B-13. Projected Expenditures for Maintenance for State Only Projects  
(all amounts shown are 100% state)**

Project ID	Project Name	FY 2014	FY 2015	FY 2016	Project Total (FY 2014 - FY 2016)
TVxx	Quintana Canal	\$213,625	\$1,868,650	\$0	\$2,082,275
CS-02	Rycade Canal	\$1,200,000	\$4,442,200	\$0	\$5,642,200
TV-13b	Avery Canal	\$75,000	\$0	\$0	\$75,000
PO-01	Violet Siphon	\$24,000	\$24,000	\$24,000	\$72,000
N/A	Maintenance Surveys	\$50,000	\$50,000	\$50,000	\$150,000
N/A	GPS Network (continued development & maintenance)	\$75,000	\$75,000	\$75,000	\$225,000
<b>Total Expenditures</b>		<b>\$1,637,625</b>	<b>\$6,459,850</b>	<b>\$149,000</b>	<b>\$8,246,475</b>

**Table B-14. Projected Expenditures for Structural Operations/Inspections of State Projects  
(all amounts shown are 100% state)**

Project ID	Project Name	FY 2014	FY 2015	FY 2016	Project Total (FY 2014 - FY 2016)
CS-02	Rycade Canal Marsh Management	\$15,000	\$15,000	\$15,000	\$45,000
PO-01	Violet Siphon	\$24,000	\$24,000	\$24,000	\$72,000
PO-36	Orleans Landbridge	\$3,190	\$3,290	\$3,390	\$9,870
PO-72	Biloxi Marsh	\$3,190	\$3,290	\$3,390	\$9,870
TE-03	Bayou LaCache Wetlands	\$75,000	\$75,000	\$75,000	\$225,000
FTL01	Fort Livingston (Navigation Aids Inspection & Maintenance)	\$5,000	\$5,000	\$5,000	\$15,000
TVxx	Quintana Canal	\$5,000	\$5,000	\$5,000	\$15,000
TV-13b	Oaks Avery Structures (Navigation Aids Inspection & Maintenance)	\$5,000	\$5,000	\$5,000	\$15,000
	Periodic Inspection of Projects (15 projects)	\$47,850	\$49,350	\$50,850	\$148,050
<b>Total Expenditures</b>		<b>\$183,230</b>	<b>\$184,930</b>	<b>\$186,630</b>	<b>\$554,790</b>

**Table B-15. Projected Expenditures for O&M of WRDA Projects  
(all amounts shown are 100% state)**

Project ID	Project Name	FY 2014	FY 2015	FY 2016	Project Total (FY 2014 - FY 2016)
BA-01	Davis Pond Freshwater Diversion	\$120,973	\$129,441	\$138,502	\$388,916
BS-08	Caernarvon Freshwater Diversion	\$76,876	\$82,258	\$88,016	\$247,150
<b>Total Expenditures</b>		<b>\$197,849</b>	<b>\$211,699</b>	<b>\$226,518</b>	<b>\$636,066</b>

**Table B-16. NRDA Projected Expenditures<sup>1,2</sup>**

Project ID	Project Name	FY 2014	FY 2015	FY 2016	Project Total (FY 2014 - FY 2016)
<b>Projects with Active Schedules</b>					
BA-141	Lake Hermitage Marsh Creation Increment 2 <sup>3</sup>	\$7,909,719	\$0	\$0	\$7,909,719
BA-111	Shell Island West- NRDA <sup>4</sup>	\$9,200,000	\$96,400,000	\$5,400,000	\$111,000,000
TE-100	NRDA Caillou Lake Headlands <sup>4</sup>	\$6,050,000	\$95,500,000	\$7,300,000	\$108,850,000
<b>Other Projects</b>					
BA-76	Cheniere Ronquille Barrier Island Restoration <sup>5</sup>	\$29,348,000	\$14,652,000	\$0	\$44,000,000
BA-143	Caminada Headland Beach and Dune Restoration Increment 2 <sup>5</sup>	\$7,500,000	\$67,500,000	\$56,957,000	\$131,957,000
PO-134	NRDA Biloxi Marsh Increment 2 <sup>6</sup>	\$45,000,000	\$0	\$0	\$45,000,000
N/A	Bay Side Segmented Breakwater at Grand Isle <sup>6</sup>	\$3,300,000	\$0	\$0	\$3,300,000
N/A	Chandeleur Islands Restoration <sup>6</sup>	\$6,500,000	\$58,500,000	\$0	\$65,000,000
N/A	West Grand Terre Beach Nourishment <sup>6</sup>	\$9,000,000	\$0	\$0	\$9,000,000
N/A	West Grand Terre Stabilization <sup>6</sup>	\$3,000,000	\$0	\$0	\$3,000,000
N/A	Oyster Reestablishment Program <sup>7</sup>	\$0	\$0	\$0	\$0
N/A	Salt Water Hatchery <sup>7</sup>	\$0	\$0	\$0	\$0
N/A	NRDA Restoration Planning	\$5,000,000	\$3,000,000	\$0	\$8,000,000
<b>Total Expenditures</b>		<b>\$131,807,719</b>	<b>\$335,552,000</b>	<b>\$69,657,000</b>	<b>\$537,016,719</b>
<b>Project Generated Adaptive Management (7.5%)</b>		<b>\$9,885,579</b>	<b>\$25,166,400</b>	<b>\$5,224,275</b>	<b>\$40,276,254</b>
<b>Project Generated Administrative (2%)</b>		<b>\$2,636,154</b>	<b>\$6,711,040</b>	<b>\$1,393,140</b>	<b>\$10,740,334</b>

Notes:

- 1- Projects may be initiated with Trust Fund revenue if available to be reimbursed with oil spill revenues.
- 2- Expenditures represent early restoration under the Early Restoration Framework Agreement announced on April 21, 2011 and are based on the Louisiana Plan announced by Governor Jindal in July 2011. Negotiations with BP are ongoing and Louisiana expects to receive additional (early and long-term) NRDA funds, but the timing of these funds is highly uncertain. During negotiations it may be determined to advance these projects with oil spill related funding.
- 3- Project has received early restoration funding and is currently in implementation; expenditures based on implementation schedule.
- 4- State is using Trust Fund dollars to initiate implementation and is receiving reimbursements from NRDA.
- 5- Project has undergone planning and/or design in another coastal program. Expenditures are based on preliminary schedules developed during planning or design phase. Final schedules would likely be refined upon procurement of NRDA funds. Expenditures would be distributed according to final schedules.
- 6- Project has not undergone planning and/or design in another coastal program. Expenditures projections are preliminary because no schedule currently exists. Expenditures would be distributed according to final project schedule, which would be developed upon procurement of NRDA funding.
- 7- Project to be implemented by Louisiana Department of Wildlife and Fisheries (no CPRA funds to be allocated).

**Table B-17. Other Deepwater Horizon Oil Spill Related Projected Expenditures<sup>1</sup>**

<b>Project ID</b>	<b>Project Name</b>	<b>FY 2014</b>	<b>FY 2015</b>	<b>FY 2016</b>	<b>Project Total (FY 2014 - FY 2016)</b>
BA-153	Mid-Barataria Diversion <sup>2</sup>	\$24,480,000	\$6,120,000	\$0	\$30,600,000
BA-163	Lower Barataria Diversion	\$2,000,000	\$6,000,000	\$10,000,000	\$18,000,000
BS-23	Lower Breton Diversion	\$2,000,000	\$6,000,000	\$10,000,000	\$18,000,000
CS-65	Calcasieu Ship Channel Salinity Control Measures	\$5,000,000	\$7,500,000	\$10,000,000	\$22,500,000
PO-141	Central Wetlands Diversion	\$1,661,721	\$1,661,721	\$3,098,883	\$6,422,325
PO-144	Mississippi River Sediment Delivery System- East	\$6,000,000	\$8,000,000	\$8,000,000	\$22,000,000
TE-110	Increase Atchafalaya Flow to Eastern Terrebonne	\$2,000,000	\$5,000,000	\$7,500,000	\$14,500,000
	Houma Navigation Canal Lock Complex	\$5,000,000	\$7,500,000	\$10,000,000	\$22,500,000
<b>Total Expenditures</b>		<b>\$48,141,721</b>	<b>\$47,781,721</b>	<b>\$58,598,883</b>	<b>\$154,522,325</b>
<b>Surplus Expenditures<sup>3</sup></b>		<b>(\$8,111,252)</b>	<b>\$0</b>	<b>\$0</b>	<b>(\$8,111,252)</b>
<b>Total State Expenditures</b>		<b>\$40,030,469</b>	<b>\$47,781,721</b>	<b>\$58,598,883</b>	<b>\$146,411,073</b>
<b>Project Generated Adaptive Management (7.5%)</b>		<b>\$3,610,629</b>	<b>\$3,583,629</b>	<b>\$4,394,916</b>	<b>\$11,589,174</b>
<b>Project Generated Administrative (2%)</b>		<b>\$962,834</b>	<b>\$955,634</b>	<b>\$1,171,978</b>	<b>\$3,090,447</b>

Notes:

1- Projects may be initiated with Trust Fund revenue if available to be reimbursed with oil spill revenues.

2- Project partially funded with surplus funds allocated for Medium Diversion with Dedicated Dredging at Myrtle Grove (BA-71) (see Table B-7).

3- Includes Reserve surplus funds (see Table B-7).

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## **Appendix C**

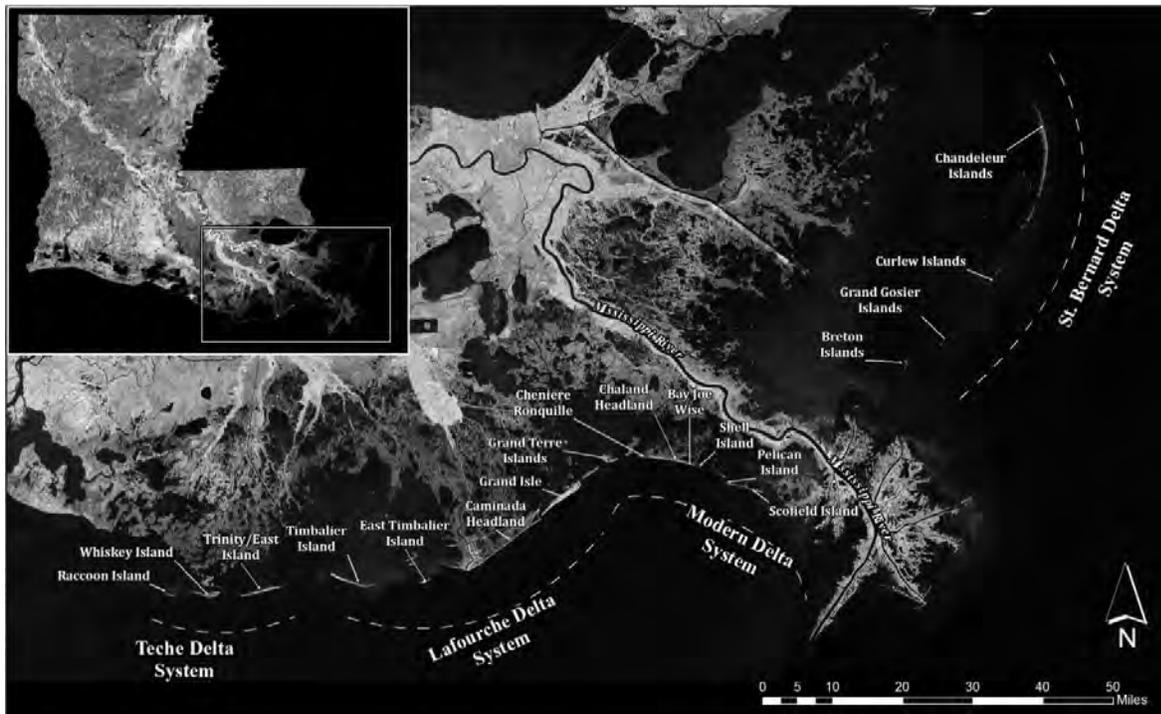
# Barrier Island Status Report

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# BARRIER ISLAND STATUS REPORT

## Fiscal Year 2014 Annual Plan

In compliance with Act 297 of the 2006 Regular Legislative Session, the Coastal Protection and Restoration Authority (CPRA) produces a barrier island status report as part of the Annual Plan, which will be submitted to each member of the Louisiana Legislature. The current Barrier Island Status Report is available electronically on the CPRA website. Please visit [www.coastal.la.gov](http://www.coastal.la.gov) to download and review the current report.



Location of barrier island systems in Louisiana.

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**Appendix D**

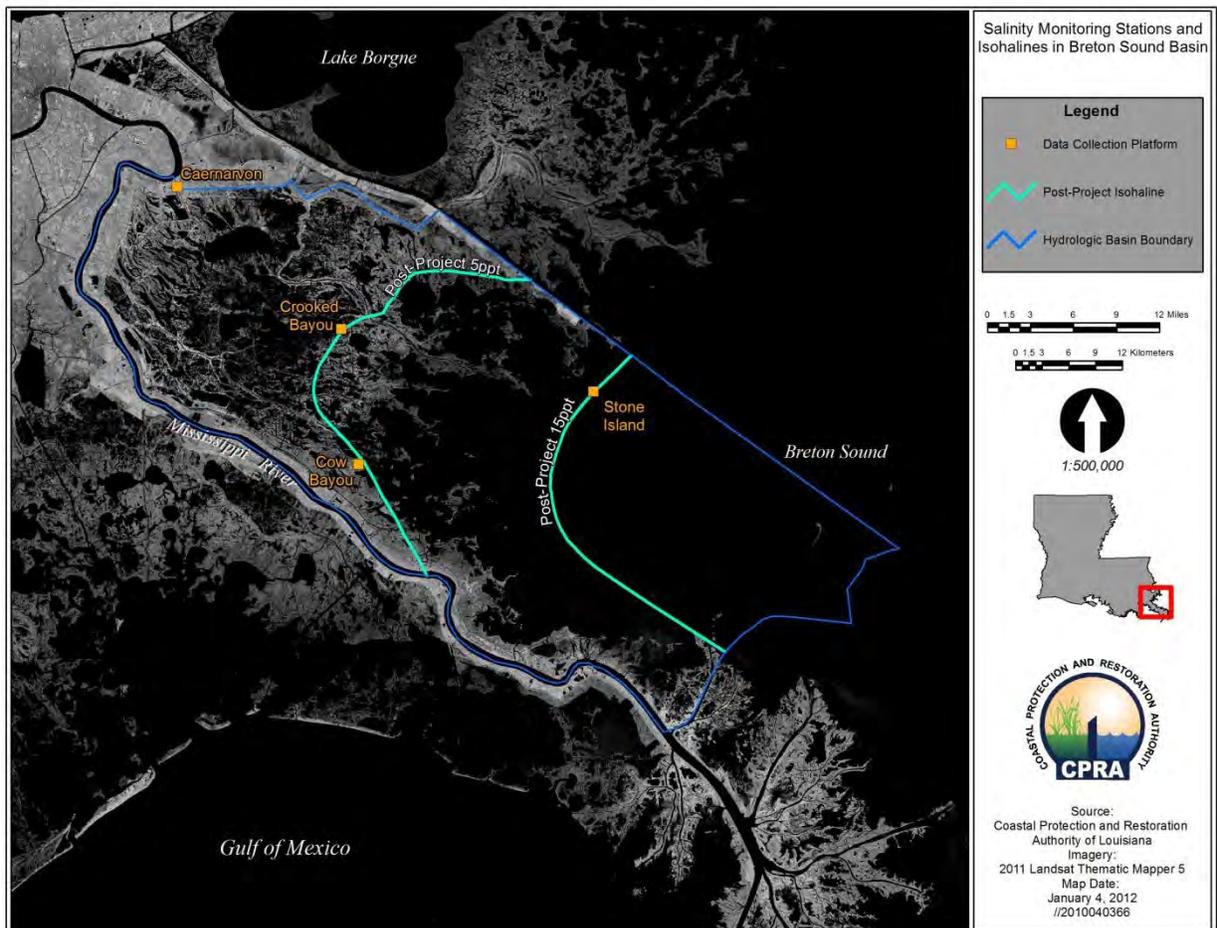
Caernarvon & Davis Pond  
Operational Plans for 2013

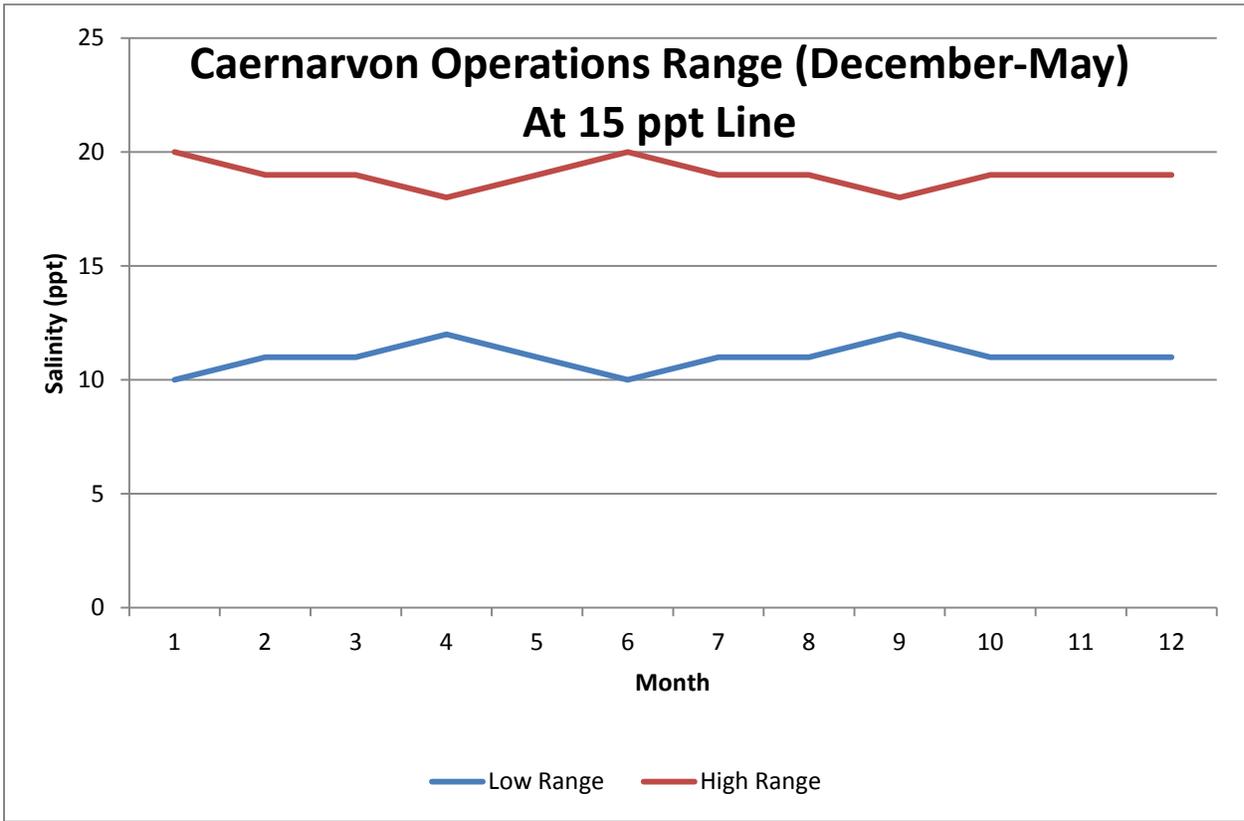
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# CAERNARVON OPERATIONAL PLAN 2013

The goals of the Caernarvon project are to reduce marsh loss, enhance marsh vegetation, and increase wildlife and fisheries productivity. Recent research and analysis indicated greater wetland benefits from increased freshwater and sediment distribution.

From December through May, Caernarvon operations will be based on the monthly salinity range at the 15 parts per thousand (ppt) line specified by the graph and map below. From June through November, Caernarvon operations will be based on the monthly salinity range at the 5 ppt line specified by the graph and map below.

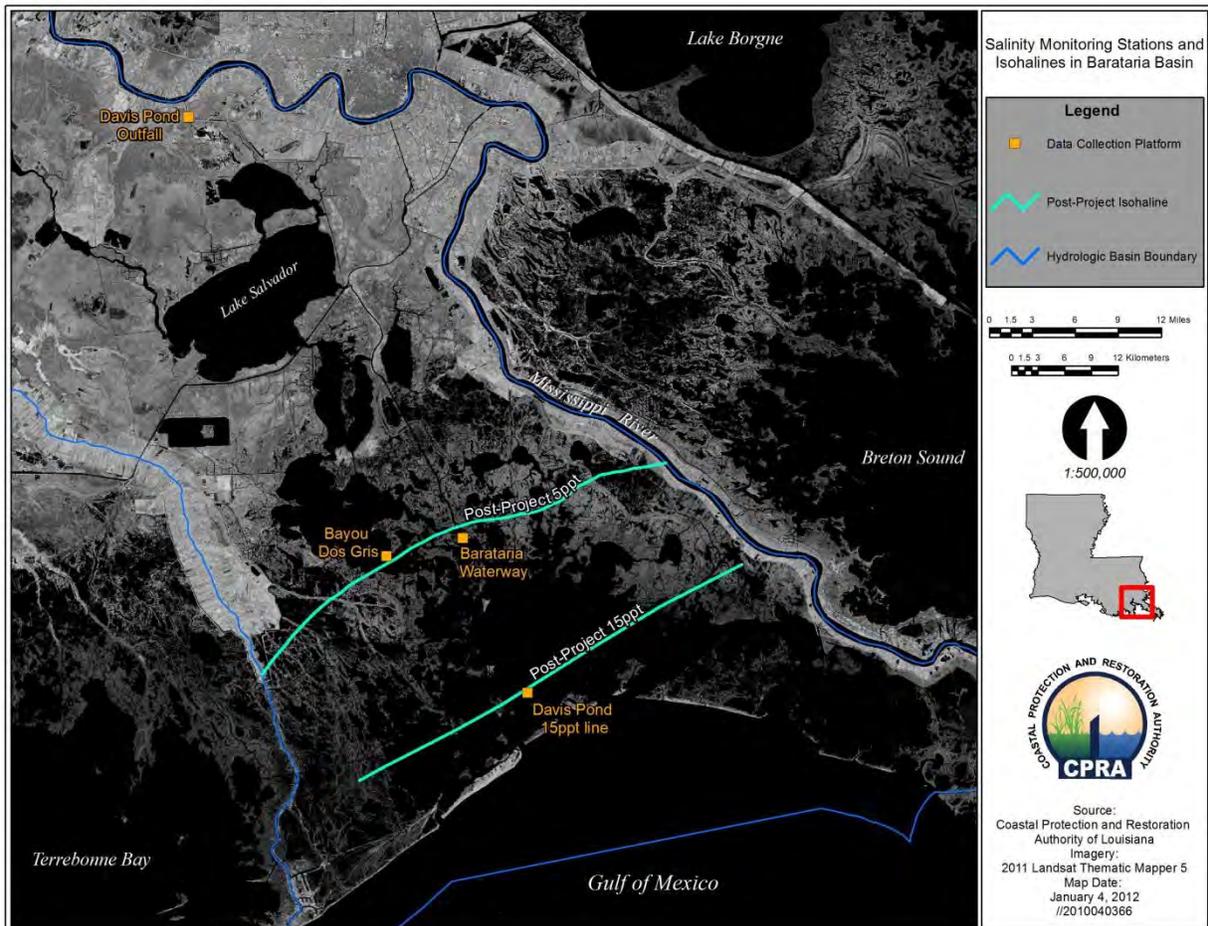


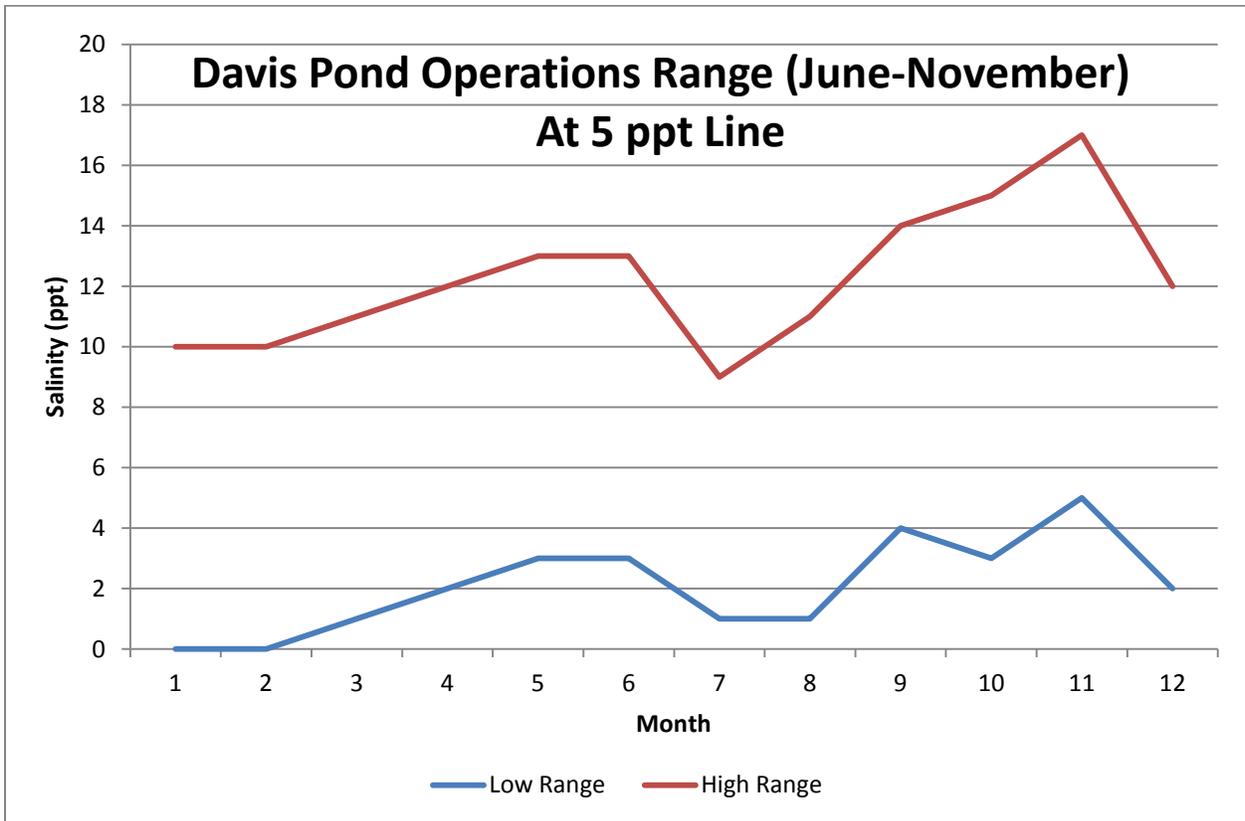
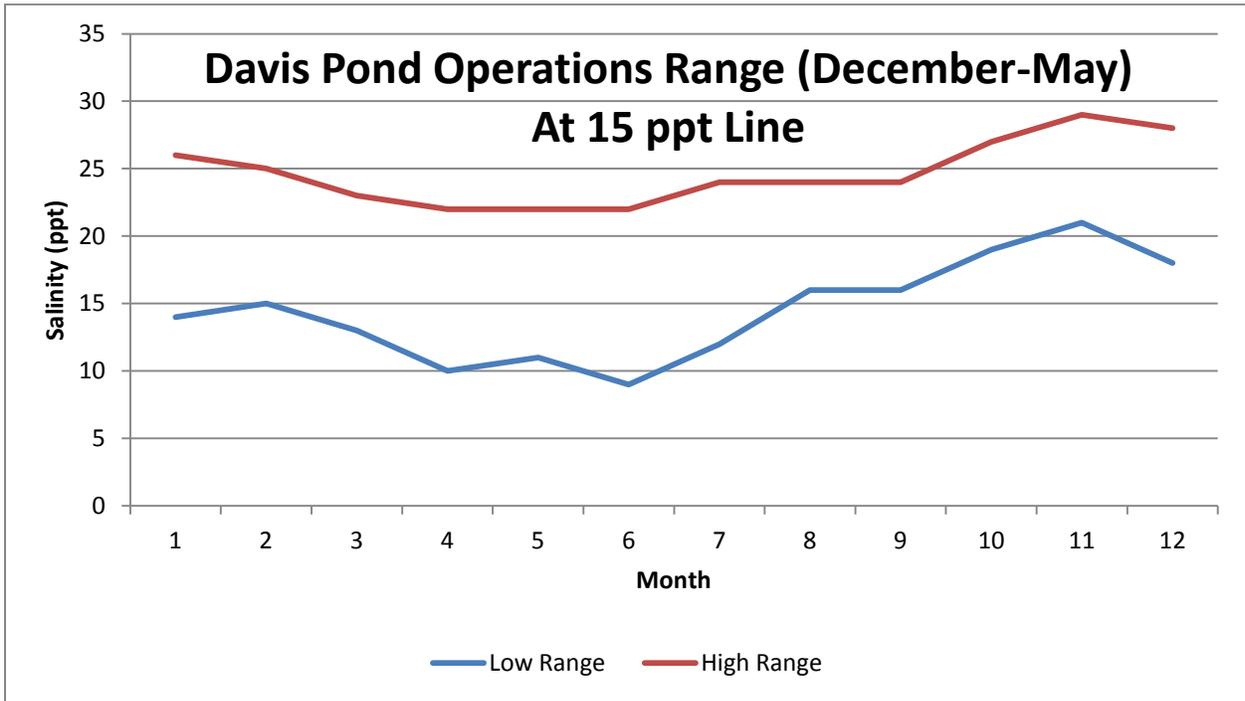


# DAVIS POND OPERATIONAL PLAN 2013

The goals of the Davis Pond project are to reduce marsh loss, enhance marsh vegetation, and increase wildlife and fisheries productivity. Recent research and analysis indicated greater wetland benefits from increased freshwater and sediment distribution.

From December through May, Davis Pond operations will be based on the monthly salinity range at the 15 ppt line specified by the graph and map below. From June through November, Davis Pond operations will be based on the monthly salinity range at the 5 ppt line specified by the graph and map below.





**Appendix E**  
Inventory of Non-State  
Projects

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**Appendix E**  
Inventory of Non-State  
Projects

**A. Parish CIAP Projects**

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PARISH CIAP PROJECTS

Program	State Project Number (Federal)	Project Name	Project Type	Agency/Sponsor	Senate District	House District	Parish	Acres Benefitted	Construction Completion Date	Feasibility Cost	Engineering, Design, & Landrights Cost	Construction Cost	Project Summary	Planning Unit
CIAP	BS-17	Lake Lery Rim Re-Establishment and Marsh Creation	MC	BOEMRE/FWS	1	103	StB.	300	Pending	N/A	\$497,417	\$8,188,293	The project proposes to dredge a waterway through Lake Lery historically used for navigation. The waterway is located approximately along the St. Bernard and Plaquemines Parish line. The project will utilize the dredged material and borrow areas in Lake Lery to create marsh in the open water areas north and east of the lake. It will also re-establish the lake rim by armoring the northern and eastern shoreline of Lake Lery using a rock dike.	1
CIAP	PO-39	Bald Cypress/Tupelo Coastal Forest Protection	LA	BOEMRE/FWS	18	88	Liv.	1,762	2011	N/A	\$260,443	\$2,774,290	The project location is within Livingston Parish, in the Maurepas Swamp of southeast Louisiana. The project area includes 2,590.4 contiguous acres of coastal wetland forest, specifically bald cypress-tupelo swamp, with roughly 200 acres fronting the western edge of Lake Maurepas.	1
CIAP	PO-40	Hydrologic Restoration in the West Lake Maurepas Swamps	HR	BOEMRE/FWS	18	88	Liv.	6,458	Pending	N/A	\$863,185	\$2,594,680	The Amite River is located southwest of Lake Maurepas and east of I-10. The objective of this project is to allow floodwaters to introduce additional fresh water, nutrients, and sediment into the western Maurepas Swamp. The exchange of flow would occur during flood events on the river and from runoff of localized rainfall events, and would in turn provide nutrients and sediment to facilitate organic sediment deposition in the swamp, some fluctuation of water levels, improve biological productivity, and prevent further swamp deterioration.	1
CIAP	PO-41	Update of St. Bernard Parish Coastal Zone Management Plan	PL	BOEMRE/FWS	1	103	StB.	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
CIAP	PO-42	West LaBranche Shoreline Protection	SP	BOEMRE/FWS	19	56	StC.	N/A	Pending	N/A	N/A	\$3,600,000	This project involves the continuation of the rock shoreline protection project on the south shore of Lake Pontchartrain 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
CIAP	PO-43	East LaBranche Shoreline Protection	SP	BOEMRE/FWS	19	56	StC.	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 Pontchartrain in St. Charles Parish. The project will consist of installing approximately 15,300 linear feet of rock dike.	1
CIAP	PO-45	East Bank Wastewater Assimilation Plant	MM	BOEMRE/FWS	18	57	StJa.	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 pond area that will discharge into seven acres of forested wetland areas that will directly affect 2,400 acres of wetlands.	1
CIAP	PO-46	Reserve Relief Canal Shoreline Protection Project	SP	BOEMRE/FWS	19	57	StJo.	N/A	Pending	N/A	\$283,015	\$1,730,042	The proposed project will consist of approximately 1,400 linear feet of shoreline protection extending in an easterly and westerly direction in St. John the Baptist Parish, where the Reserve Relieve Canal enters Lake Maurepas and entrance protection lining. The proposed feature consists of a foreshore rock dike with gaps for fish and public access to the lake shoreline.	1
CIAP	PO-48	Green Property Preservation Project	LA	BOEMRE/FWS	11	90	StT.	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
CIAP	PO-49	French Property Preservation Project	LA	BOEMRE/FWS	11	90	StT.	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 savannas, which lies between the I-12 Service Road and Bayou Liberty 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
CIAP	PO-51	Mandeville Aquatic Ecosystem Restoration Project	MM	BOEMRE/FWS	11	89	StT.	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 force 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
CIAP	PO-52	Lake Pontchartrain Shoreline Protection	SP	BOEMRE/FWS	6	73	Tang.	N/A	Pending	N/A	\$699,400	\$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 foreshore protection.	1

PARISH CIAP PROJECTS

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CIAP	PO-53	Wetland Wastewater Assimilation Process Planning	PL	BOEMRE/FWS	18	58	StJa.	N/A	2009	N/A	\$49,994	N/A	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's loading and assimilation capacities, and capabilities of the wetlands and preliminary engineering and cost analyses.	1
CIAP	PO-70	Northshore Beach Marsh Creation/Restoration	MC	BOEMRE/FWS	11	90	StT.	600	Pending	N/A	N/A	\$1,860,558	This project is located in the Pontchartrain 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 Pontchartrain, the Highway 11 Canal, and Bayou Bonfouca 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 Pontchartrain shoreline.	1
CIAP	PO-71	Waterline Booster Pump Station, East Bank	INF	BOEMRE/FWS	18	58	StJa.	N/A	2011	N/A	N/A	\$265,100	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 10 inch PVC waterline at two locations in order to establish a loop and by-pass system. The station will have a metal building with a concrete floor to enclose the pump and electrical equipment.	1
CIAP	BA-50	Bayside Segmented Breakwaters at Grand Isle	SP	BOEMRE/FWS	8	105	Jef.	N/A	2012	N/A	\$307,709	\$2,989,653	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.	2
CIAP	BA-51	Goose Bayou Ridge Creation and Shoreline Protection	PL	BOEMRE/FWS	8	105	Jef.	1,200	2011	N/A	\$165,935	N/A	This project located in Lafitte, Jefferson Parish Louisiana, will improve shoreline protection 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 Goose Bayou. This project will help establish a wetland ridge which will function as habitat for native species of plants and animals.	2
CIAP	BA-52	Lower Lafitte Shoreline Stabilization at Bayou Rigolettes	SP	BOEMRE/FWS	8	105	Jef.	N/A	Pending	N/A	\$387,986	\$7,642,385	This project located within Lafitte, Louisiana will help protect the integrity of wetlands 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.	2
CIAP	BA-53	Maritime Forest Ridge Restoration	VP	BOEMRE/FWS	20	54	Laf.	60	N/A	N/A	\$700,000	N/A	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.	2
CIAP	BA-54	Northwest Little Lake Marsh Creation and Enhancement	DM MC VP	BOEMRE/FWS	20	54	Laf.	100	2011	N/A	\$222,430	\$2,209,910	This project, located in Lafourche Parish, will use dedicated 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.	2
CIAP	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	Funds will be allocated to the Parish so that they may update their coastal management plan.	2
CIAP	BA-57	Tidewater Road Flood Protection	INF	BOEMRE/FWS	1	105	Plaq.	N/A	2010	N/A	N/A	\$3,364,310	Tidewater 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 Tidewater Road's length there is open water in canals and ponds that abut the road shoulder. Tidewater 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 Tidewater Road.	2

PARISH CIAP PROJECTS

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CIAP	BA-59	Waterline Booster Pump Station, West Bank	INF	BOEMRE/FWS	18	58	StJa.	N/A	2009	N/A	N/A	\$256,700	This project would construct a waterline booster pump station in Welcome, Louisiana. The proposed site is located near Section 43, T-11-S, R-3-E, along LA Highway 18. The proposed construction includes the installation of a 40 hp electric motor with a 1,100 gpm high-service pump. The booster pump will be built along the existing waterline and be tied in at two places in order to establish a loop and by-pass system with 10-inch in-line valves. The station will have metal building with a concrete floor to fully enclose and protect the pump and electrical equipment.	2
CIAP	BA-61	West Bank Wetland Conservation and Protection	LA	BOEMRE/FWS	18	58	StJa.	235	2010	N/A	N/A	\$718,620	The St. James Parish Council would like to purchase several large tracts of existing wetlands to prohibit the destruction of, and aid in the protection of, the parish's coastal wetland areas. This project proposes to purchase approximately 235 acres of existing wetlands from the Bayou Chevreuil Land Co., LLC.	2
CIAP	BA-62	West Bank Wastewater Assimilation Plant	MM	BOEMRE/FWS	18	58	StJa.	2,400	Pending	N/A	N/A	\$1,757,026	The St. James Parish Council plans to construct a wetland assimilation treatment plant on property owned by the Parish Council in Vacherie, Louisiana. The plant will collect wastewater from secondary treatment modules and pump the wastewater to a sediment pond area. The nine acre pond will discharge into 2,400 acres of forested wetland areas that will directly affect the swamp's composition and structure.	2
CIAP	BA-63	Small Dredge Program	DM MC	BOEMRE/FWS	20	54	Laf.	175	2010	N/A	\$160,250	\$2,789,031	This program involves the use of a small dredge to hydraulically dredge borrow canals and other open water areas to restore approximately 175 acres of marsh apron along levees, cheniers and roadways in Lafourche Parish.	2
CIAP	BA-64	Jump Basin Dredging and Marsh Creation	MC	BOEMRE/FWS	1	105	Plaq.	7	Pending	N/A	N/A	\$800,000	The proposed project is located in the Venice area of Plaquemines Parish, and more specifically in the Jump Basin Marina and along the west side of Tidewater Road. The proposed project would use material dredged from the marina to create marsh on the west side of Tidewater Road. Based on preliminary surveys, it is predicted that approximately 65,000 cubic yards of material could be dredged from the marina. Based on water depths in the target area, an initial estimate of 4 to 7 acres of marsh could be created.	2
CIAP	BA-65	Fifi Island Restoration Extension	BI	BOEMRE/FWS	8	105	Jef.	6	Pending	N/A	\$208,251	\$2,338,605	The project is located at the eastern tip of Fifi Island, adjacent to Bayou Rigaud, on the northern side of Grand Isle. The project would provide approximately 2,200 linear feet of rock dike protection and create approximately 6 acres of marsh. Additionally, the project will provide protection to the bay side of Grand Isle.	2
CIAP	NA	Culvert Installation Through Existing Berms and Board Roads	LA	BOEMRE/FWS	18	58	StJa.	N/A	Pending	N/A	N/A	\$90,686	The St. James Parish Council will install 24 inch plastic pipe through existing spoil banks and earthen berms to allow water exchange through these man-made barriers. The culvert installations will allow present ingress and egress into these areas to continue and enhance the water quality and nutrient exchange in the project area. It is estimated that approximately 100 sites would each need three sets of culverts to be installed along this 20 mile stretch of canal.	2
CIAP	PO-90	West Lac Des Allemands Shoreline Protection	SP	BOEMRE/FWS	18	58	StJo.	N/A	Pending	N/A	\$507,369	\$3,313,183	The proposed project will consist of 7,535 feet of shoreline protection, extending from "Pleasure Bend" westward to Pointe Aux Herbes, along the western shore of Lac des Allemands, St. John the Baptist Parish, Louisiana. The proposed feature consists of foreshore rock dike with gaps for fish and public access to the lake shoreline.	2
CIAP	CS-36	Shoreline Protection at Intracoastal Park	SP	BOEMRE/FWS	27	36	Cal.	3	Pending	N/A	N/A	\$1,000,000	This is a two phase project that is located on the south side of the Gulf Intracoastal Waterway at LA Highway 27 south. The goal of the project is to restore the existing rock shoreline protection and stabilization for approximately 1,000 feet by placing cellular concrete block revetment along the existing shoreline.	4
CIAP	CS-37	South GIWW Restoration	HR SP	BOEMRE/FWS	30	36	Cal.	2,500	Pending	N/A	\$83,074	\$525,459	This project features include the relocation of two existing water control structures (48 inch culverts) that are currently not functioning as designed; the installation of a new water control structure (two 36 inch culverts); and the refurbishment of three miles of adjacent levees.	4

PARISH CIAP PROJECTS

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CIAP	CS-41	Horseshoe Lake Marsh Restoration	HR SP	BOEMRE/FWS	30	33	Cal.	1,200	Pending	N/A	\$350,000	\$1,650,000	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	CS-42	South Johnson Bayou Restoration	HR MM	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	CS-43	Dreary Island Restoration	HR MM	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	CS-44	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	CS-48	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 bank 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 MM	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 48 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

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CIAP	ME-30	North Mermentau Restoration	HR MM	BOEMRE/FWS	25	47	Cam.	10,000	2011	N/A	\$211,141	\$3,006,631	This project will replace 12 existing water control structures that are not currently functioning as designed and also refurbish 1.5 miles of adjacent levees. Cameron Parish will purchase the structures that will be installed by the local gravity drainage district. The objective is to restore the pre-Hurricane Rita salinity and water levels to approximately 10,000 acres of marsh.	4
CIAP	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
CIAP	TE-59	Attakapas Canal Hydrologic Restoration	DM HR	BOEMRE/FWS	21	60	Asu.	12	Pending	N/A	\$48,000	\$977,000	This project will remove excessive accumulated sediment from Attakapas Canal at its intersection with Lake Verret 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 Verret. As part of the project, cypress trees will be planted at the rate of 302 trees per restored acre.	3a
CIAP	TE-60	Lake Verret Swamp and Lake Rim Restoration	DM MC	BOEMRE/FWS	21	60	Asu.	40	Pending	N/A	\$115,000	\$4,634,146	Located in west-central Assumption Parish, Lake Verret 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 Verret and improve the condition of 40 acres of deteriorating lake rim and adjacent swamp habitat.	3a
CIAP	AT-06	Point Chevreuil Shoreline Protection	MC SP	BOEMRE/FWS	21	50	StM.	25	Pending	N/A	\$204,461	\$1,655,704	The project is located in Region 3, Atchafalaya River Basin, St. Mary Parish, along the southeastern shoreline of East Cote Blanche Bay, around Point Chevreuil and the northwestern shoreline of Atchafalaya Bay. The eroding shoreline was caused by the 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
CIAP	AT-07	Deer Island Pass Realignment	DM HR MC	BOEMRE/FWS	21	51	StM.	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 5,280 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
CIAP	AT-08	Bayou Amy Boat Launch and Educational Pavilion	PA	BOEMRE/FWS	22	46	StMt.	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
CIAP	AT-09	Stephensville Wastewater Assimilation and Facility Restoration	MM	BOEMRE/FWS	21	50	StMt.	5	Pending	N/A	N/A	\$2,200,002	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 wetland assimilation. Stephensville's wastewater facility is located in Stephensville along Bayou Milhomme in Lower St. Martin Parish.	3b
CIAP	AT-10	Beau Bayou Water Quality and Sediment Reduction	HR SNT	BOEMRE/FWS	22	46	StMt.	23,000	Pending	N/A	\$340,960	\$3,360,461	This project consists of a combination of multiple actions including dredging, gapping and creating inline-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
CIAP	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
CIAP	TV-25	Port of Iberia Bridge Replacement - Port Road over Rodere Lateral	INF	BOEMRE/FWS	22	49	Ibe.	N/A	2012	N/A	\$66,465	\$391,807	The project is located in Iberia Parish, and will aid the Port of Iberia in its day-to-day operations. This project will replace the bridge on Port Road over Rodere Lateral. The existing bridge is approximately 28 feet wide and 60 feet long. 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

PARISH CIAP PROJECTS

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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 Iberia 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	\$645,554	The project is located in Iberia 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. 8,300 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 Cote 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	Thorguson 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 Thorguson Road from Hwy 90 to the River Road, as a result it, 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 3 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 Vermilion 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. I. Liquid Road (850 linear feet), Barge Road (1,450 linear feet), Teal Road (1,200 linear feet).	3b

PARISH CIAP PROJECTS

Program	State Project Number (Federal)	Project Name	Project Type	Agency/Sponsor	Senate District	House District	Parish	Acres Benefitted	Construction Completion Date	Feasibility Cost	Engineering, Design, & Landrights Cost	Construction Cost	Project Summary	Planning Unit
CIAP	TV-50	Henry Hub Access Improvements - Charlie Field Road Improvements	INF	BOEMRE/FWS	26	49	Ver.	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 a 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
CIAP	TV-51	Oyster Reef Parallel to Cheniere au Tigre	SP	BOEMRE/FWS	26	47	Ver.	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 the 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
CIAP	TV-53	North Prong Schooner Bayou	FD SP	BOEMRE/FWS	26	49	Ver.	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 Mermentau Basin.	3b

Program: CIAP= Coastal Impact Assistance Program

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; SD=Sediment Diversion; 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 CIAP was transferred from BOEMRE to FWS on Oct. 1, 2011.

Parish: Asc.=Ascension, Asu.=Assumption, Cal.=Calcasieu, Cam.=Cameron, Ibe.=Iberia, Jef.=Jefferson, Laf.=Lafourche, Liv.=Livingston, Orl.=Orleans, StC.=St. Charles, StJa.=St. James, StJo.=St. John the Baptist, StM.=St. Mary, StMt.=St. Martin, StT.=St. Tammany, Tan.=Tangipahoa, Ter.=Terrebonne, Plaq.=Plaquemines, Ver.=Vermilion

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**Appendix E**  
Inventory of Non-State  
Projects

**B. Federal Protection  
Projects**

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# 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



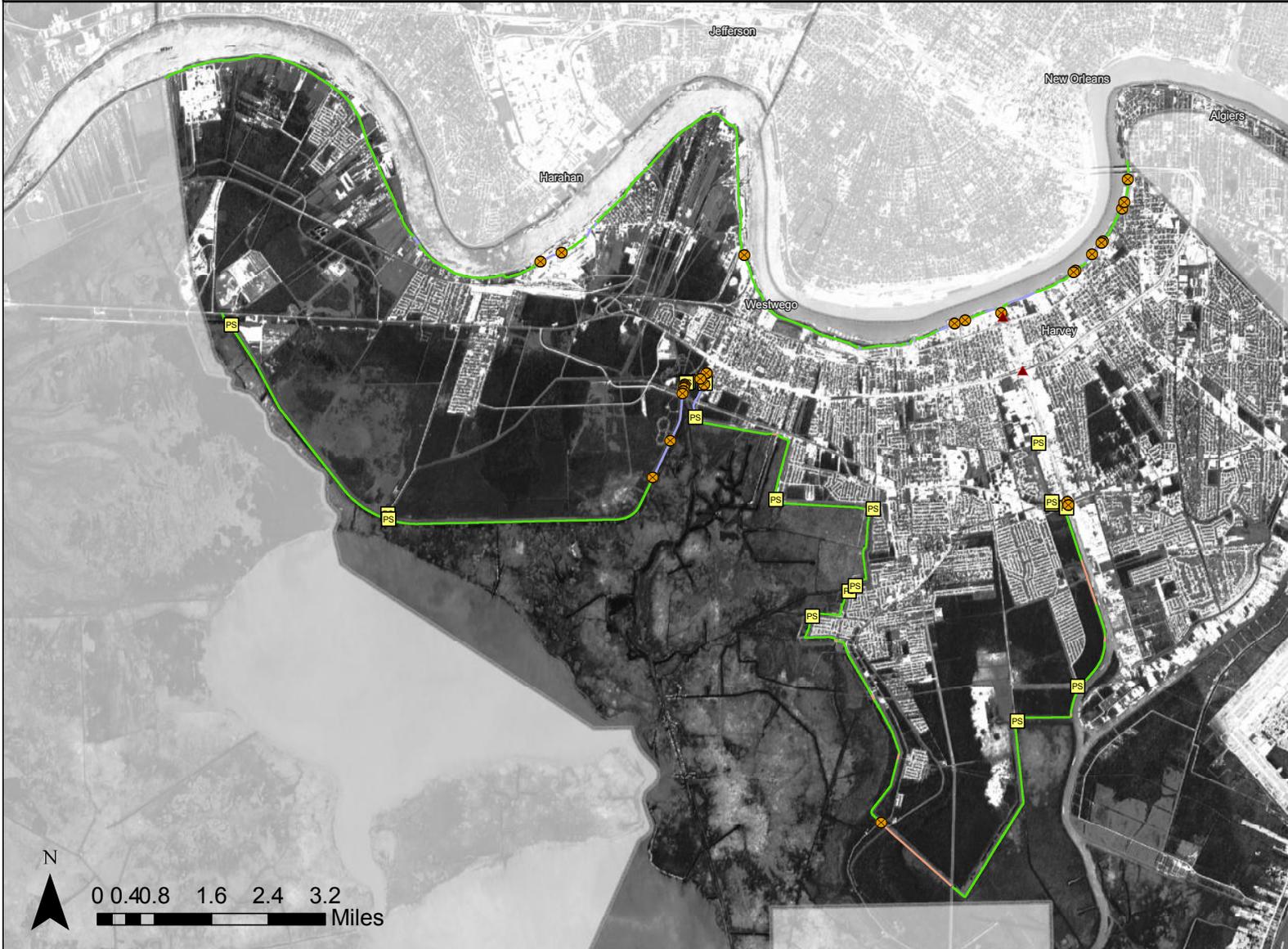
Map by: Louisiana Office of Coastal Protection & Restoration

Date: April 28, 2009

Imagery: 2000 SPOT

Data Sources:  
USACE  
LA OCPR

# WEST JEFFERSON LEVEE DISTRICT LEVEL ALIGNMENTS & STRUCTURES



## Legend

### Levee construction types

- Earthen Levee
- I-Wall
- Sheet Pile
- ▲ Control Structure
- ⊗ Flood Gate
- PS Pump Station
- ☾ Water Bodies



Map by: Louisiana Office of Coastal Protection & Restoration

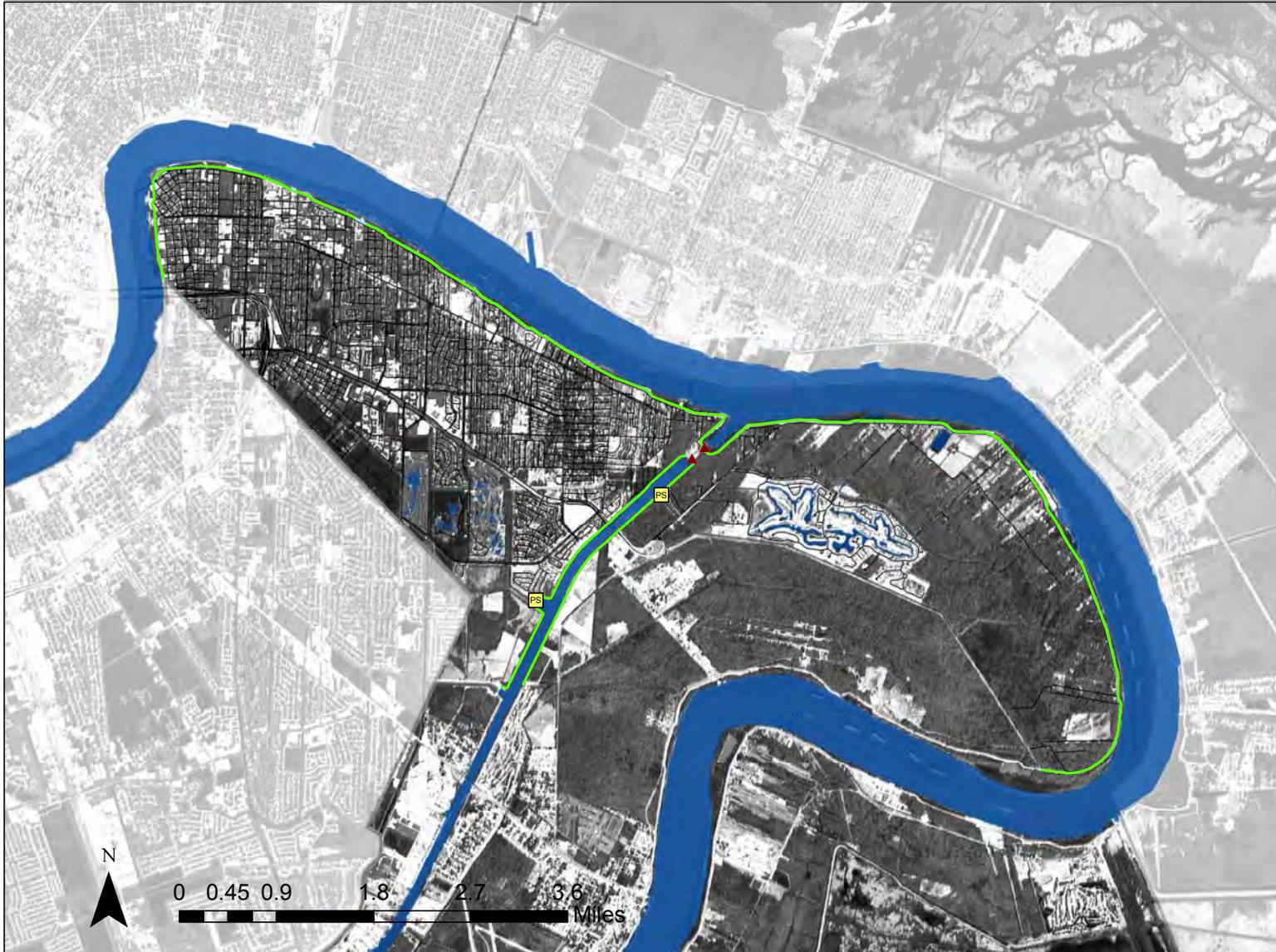
Date: April 28, 2009

Imagery: 2000 SPOT

Data Sources:  
USACE  
LA OCPR



# ALGIERS LEVEE DISTRICT LEVEE ALIGNMENTS & STRUCTURES



## Legend

### Levee Construction Type

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



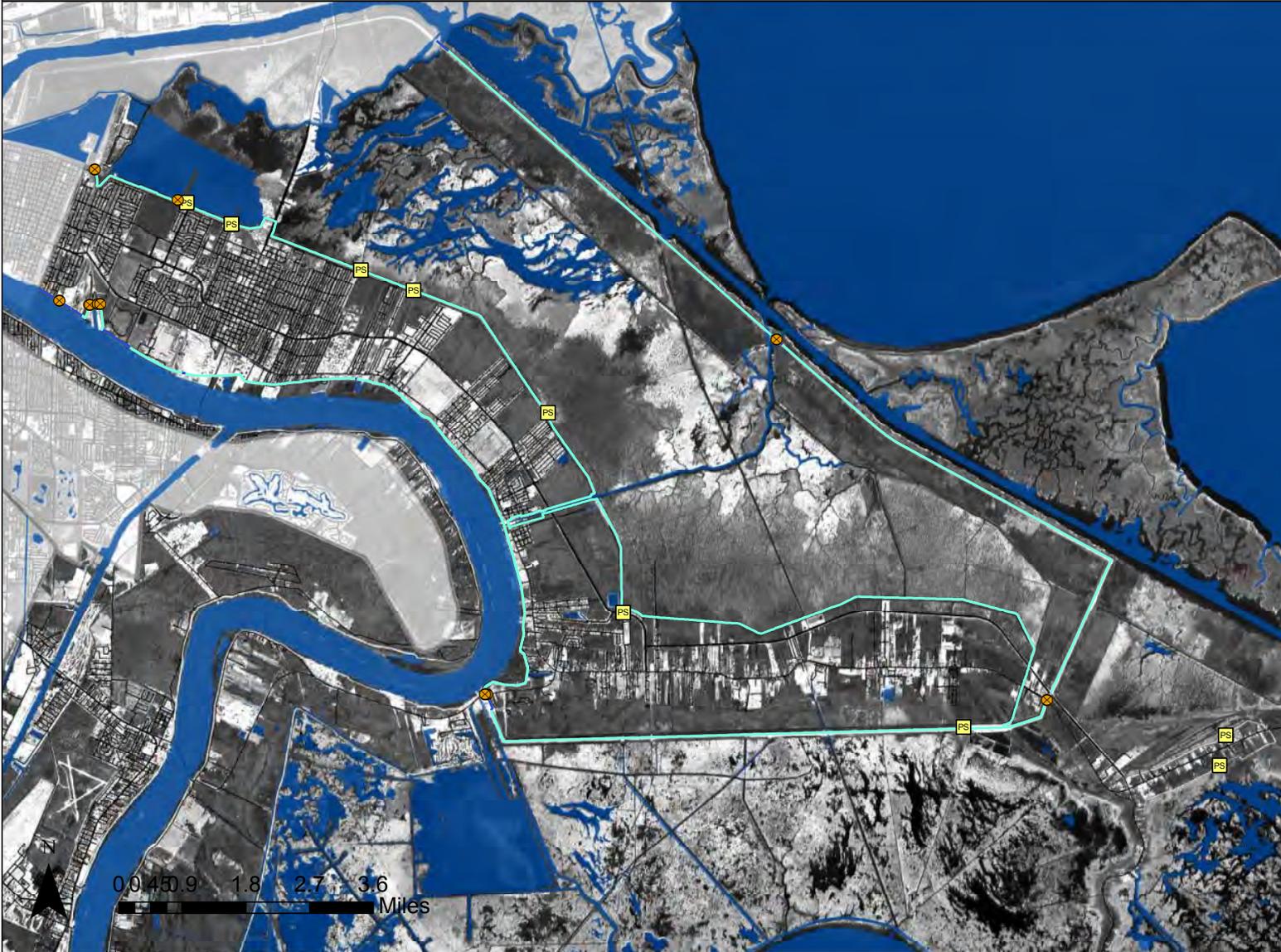
Map by: Louisiana Office of Coastal Protection & Restoration

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
- PS 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 LEVEL ALIGNMENTS & STRUCTURES



## Legend

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



Map by: Louisiana Office of Coastal Protection & Restoration

Date: April 28, 2009

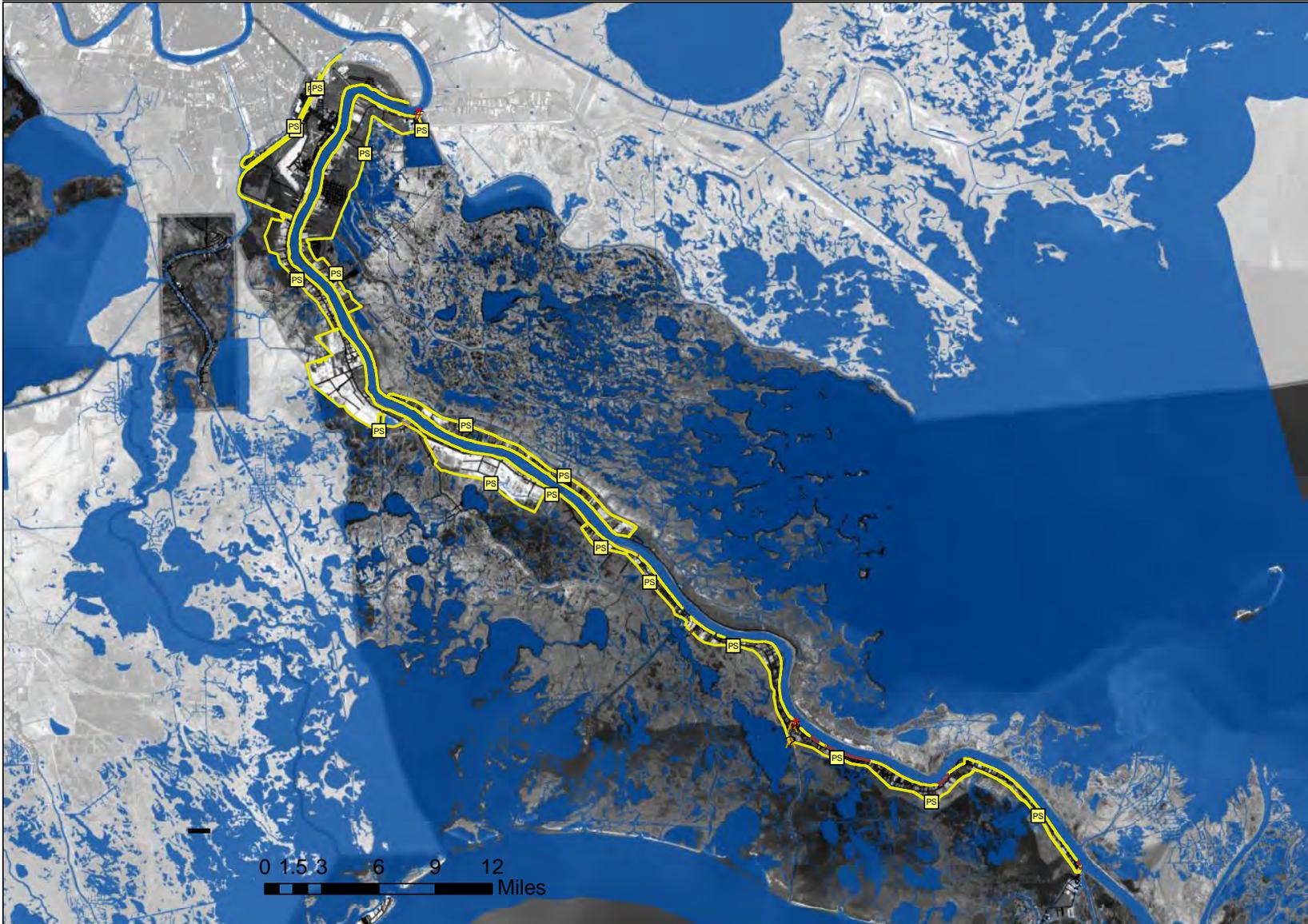
Imagery: 2000 SPOT

Data Sources:  
USACE  
LA OCPR



0 0.4 0.8 1.6 2.4 3.2  
Miles

# PLAQUEMINES PARISH GOVERNMENT LEVEE ALIGNMENTS & STRUCTURES



## Legend

### Levee Construction Type

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



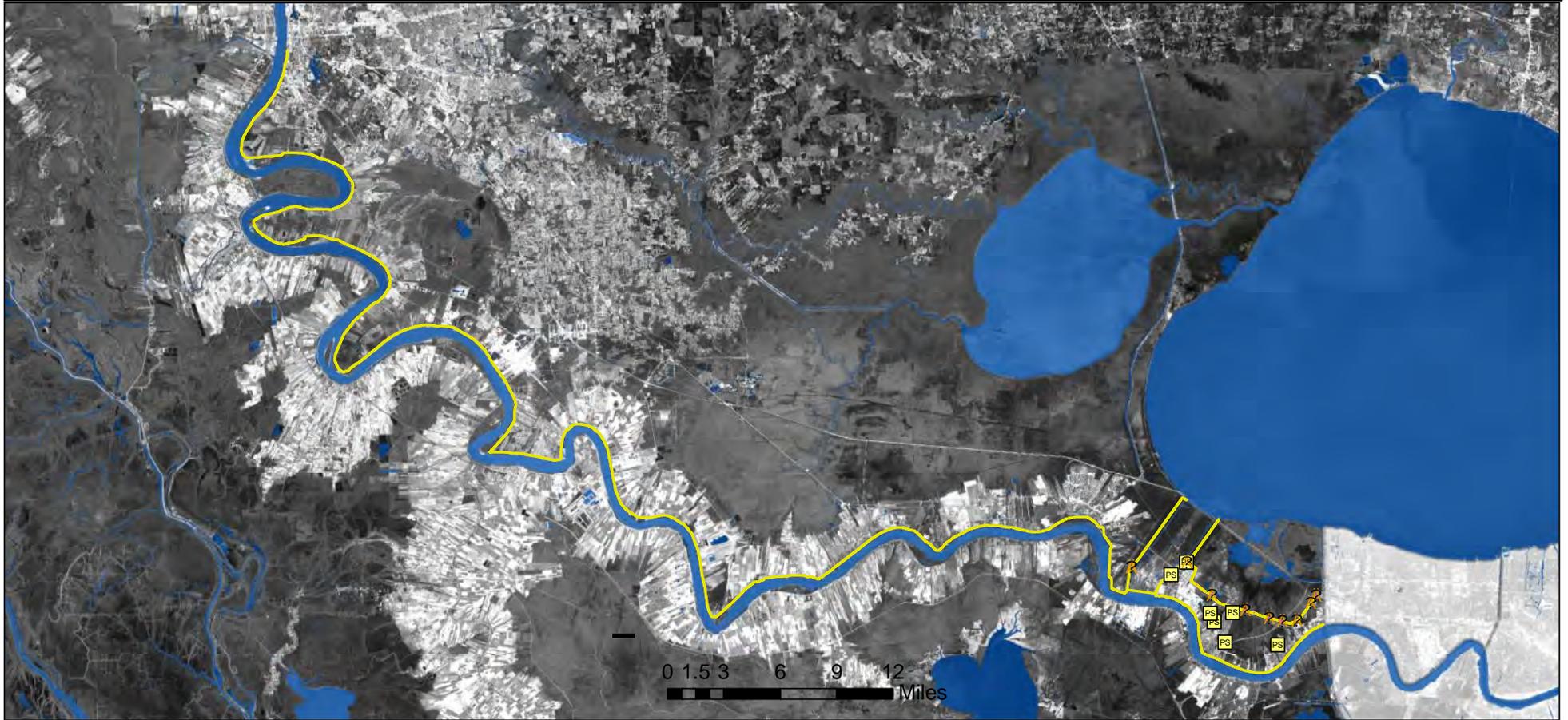
Map by: Louisiana Office of Coastal Protection & Restoration

Date: April 28, 2009

Imagery: 2000 SPOT

Data Sources:  
USACE  
LA OCPR

# PONTCHARTRAIN LEVEE DISTRICT LEVEE ALIGNMENTS & STRUCTURES



Map by: Louisiana Office of Coastal Protection & Restoration

Date: April 28, 2009

Imagery: 2000 SPOT

Data Sources:  
USACE  
LA OCP&R

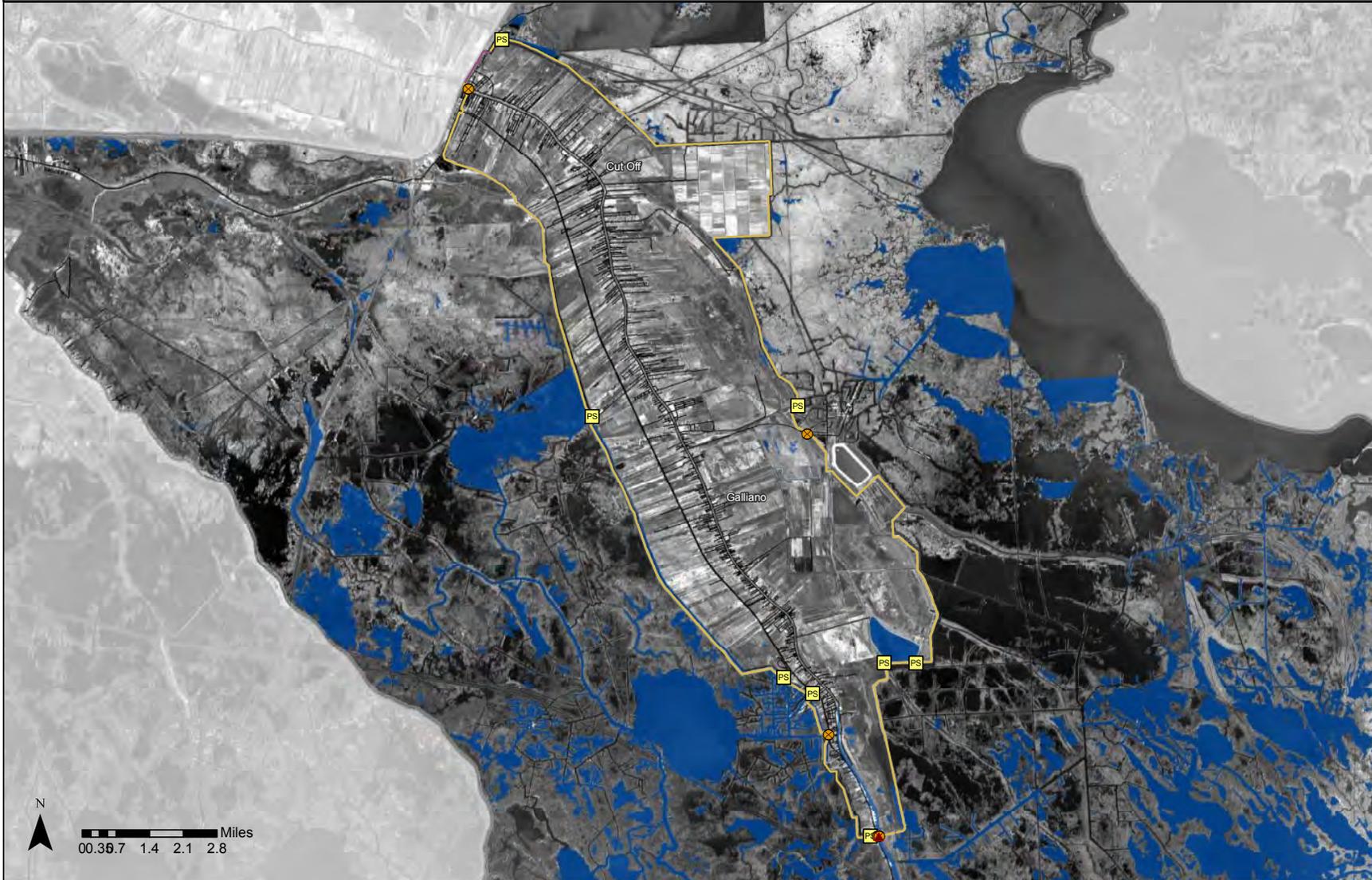


## Legend

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



# SOUTH LAFOURCHE LEVEE DISTRICT LEVEE ALIGNMENTS & STRUCTURES



## Legend

- Levee construction types**
- Earthen Levee
  - I-Wall
  - Sheet Pile
  - ▲ Control Structure
  - Flood Gate
  - PS Pump Station
  - █ Water Bodies



Map by: Louisiana Office of Coastal Protection & Restoration

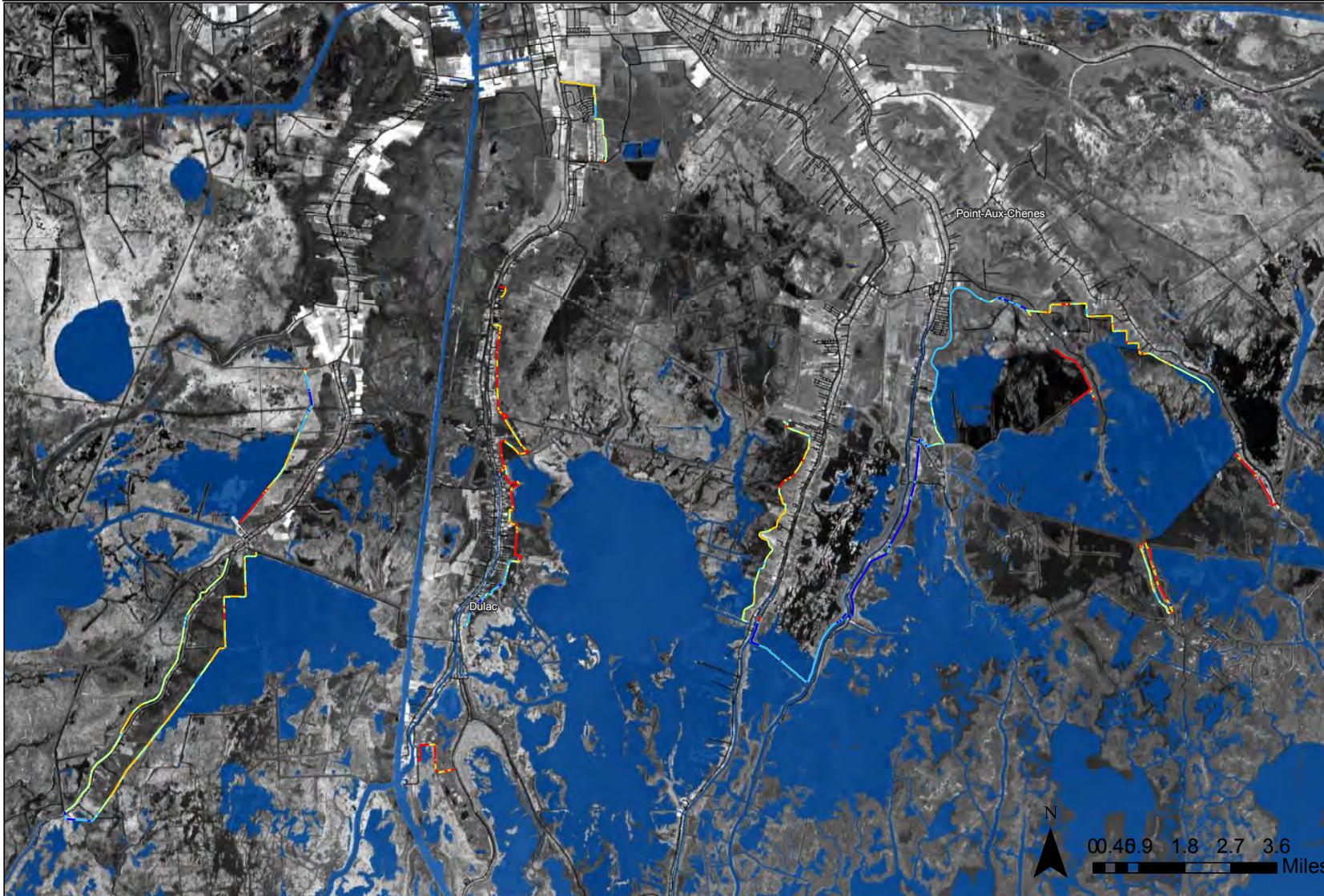
Date: April 28, 2009

Imagery: 2000 SPOT

Data Sources:  
USACE  
LA OCP&R



# TERREBONNE LEVEE & CONSERVATION DISTRICT LEVEE ELEVATIONS



## Legend

### Levee Elevation (Ft)

- 2.4 - 5.5
- 5.6 - 6.8
- 6.9 - 8.2
- 8.3 - 10.0
- 10.1 - 12.7
-  Water Bodies



Map by: Louisiana Office of Coastal Protection & Restoration

Date: April 28, 2009

Imagery: 2000 SPOT

Data Sources:  
USACE  
LA OCPR



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## **Appendix E**

# Inventory of Non-State Projects

## **C. Projects and Project Concepts in Coastal Parish Master Plans**

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**PROJECT CONCEPTS FROM COASTAL PARISH MASTER PLANS**

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

**PROJECT CONCEPTS FROM COASTAL PARISH MASTER PLANS**

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

**PROJECT CONCEPTS FROM COASTAL PARISH MASTER PLANS**

Program	Local Project Number	Project Name	Project Type	Senate District	House District	Parish	Project Costs	Project Summary	Planning Unit
CIAP	BI-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
CIAP	BI-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
CIAP	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
CARA	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
CARA	NA-8	Goose Bayou to Lafitte Levee	HP	8	105	Jef.	N/A	This project would construct flood protection from the Town of Jean Lafitte southward to Goose Bayou. The flood protection system would be constructed east of LA Highway 45 at the wetland/non-wetland interface.	2
CARA	BI-3	Elmer's Island Acquisition and Preservation	LA	8	105	Jef.	\$6,000,000	This project recommends the public purchase and preservation of 1,700 acres of Elmer's Island as a publicly accessible primitive area.	2
CARA	CS-4	Wetland Harbor Activities Recreational Facility (WHARF)	LA	8	105	Jef.	\$28,000,000	The project involves the development of multi-use facilities to provide individuals of all physical capabilities with onsite recreational opportunities. The development will also afford them access to the adjacent wetlands, nearby State and Federal parks, and the abundant natural and cultural experiences offered by Louisiana's wetlands.	2
CARA	BB-1	North Barataria Bay Shoreline Wave Breaks	SP	8	105	Jef.	\$42,600,000	This project would provide basin-wide protection to insure the integrity of the affected wetland shorelines south of Bay Jimmy and Wilkerson Bayou in the eastern portion of the project, north of Barataria Bay in the middle portion of the project, and adjacent to Bayou Cholas, Bayou Defond, and Creole Bay in the western portion of the project. The project would restrict channel dimensions at various locations in order to limit saltwater intrusion, tidal prism, and enhance freshwater retention.	2
State and Local	NA-1	Naomi Siphon Sediment Enrichment	FD	8	105	Jef.	\$330,000	This project involves using a dedicated dredge, during high water levels in the river, to pump river-bottom sediment into the discharge stream of the siphon. The enriched effluent would continue its course over land, depositing the sediments along its route.	2
State and Local	NA-6	Rosethorne Wetlands Sewage Effluent Diversion	WA	8	105	Jef.	\$90,000	The proposed project envisions re-routing the Rosethorne wastewater treatment plant effluent from the Intracoastal Canal to an area of adjacent wetlands. The project would consist of upgrading the capacity of the existing sewerage effluent pumping station and installing approximately 1,300 feet of force main. Water control structures and a flow distribution system would also be constructed to channel the flow through the wetlands. The outlet of the discharge line would be placed at the most hydrologically upstream point of the target wetland feasible to ensure that the maximum area of wetlands is benefited and the highest contaminant removal possible is achieved.	2
State and Local	CS-3	Bayou Segnette Wetlands Sewage Effluent Diversion	WA	8	105	Jef.	\$350,000	The proposed project envisions re-routing the Westwego wastewater treatment plant effluent from the local drainage canal network to an area of adjacent wetlands. The project would consist of constructing an effluent pumping station and installing approximately 4200 feet of force main. Water control structures and a flow distribution system would also be constructed to channel the flow through the wetlands. The outlet of the discharge line would be placed at the most hydrological upstream point of the target wetland feasible to ensure that the maximum area of wetlands is benefited and the highest contaminant removal possible is achieved.	2
State and Local	BI-6	Grand Isle Plan, Part I - NW Grand Isle Breakwater Enhancement	SP	8	105	Jef.	\$650,000	This project will modify existing ineffective breakwater segments on the northwest side of Grand Isle to close gaps which prevent sediment accretion.	2
N/A	N/A	Bay Coquette Barrier Island	BI	1	105	Pla.	Not provided	Barrier island fronting Bay Coquette east of Scofield Island.	2
N/A	N/A	Chaland Headland	BI	1	105	Pla.	Not provided	Chaland Headland.	2
N/A	N/A	Chenier Ronquille	BI	1	105	Pla.	Not provided	Cheniere Ronquille.	2
N/A	N/A	E. Grand Terre	BI	1	105	Pla.	Not provided	East Grande Terre.	2
N/A	N/A	Pass Chaland to Grand Bayou	BI	1	105	Pla.	Not provided	Pass Chaland to Grande Bayou Pass.	2
N/A	N/A	Pelican Island	BI	1	105	Pla.	Not provided	Restoration enhancement including elevating dunes and widening islands and planting a mangrove fringe on the backside of the islands across 2.4 miles, approximately 10 feet high and 2000 feet wide.	2
N/A	N/A	Sandy Point Barrier Island	BI	1	105	Pla.	Not provided	Barrier Island E of Bay Coquette to Sandy Point.	2

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Program	Local Project Number	Project Name	Project Type	Senate District	House District	Parish	Project Costs	Project Summary	Planning Unit
N/A	N/A	Sandy Point	BI	1	105	Plaq.	Not provided	Sandy Point/Bay Coquette.	2
N/A	N/A	Scofield Island	BI	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
N/A	N/A	Shell/Lanaux Island	BI	1	105	Plaq.	Not provided	Shell/Lanaux Island.	2
N/A	N/A	Baptiste Collete	DE	1	105	Plaq.	Not provided	Baptiste Collete sub-delta.	2
N/A	N/A	Venice	FD	1	105	Plaq.	Not provided	Venice: Tiger Pass to West Bay.	2
N/A	N/A	Bastian Bay/Buras	FD	1	105	Plaq.	Not provided	Buras/Bastian Bay Diversion.	2
N/A	N/A	Myrtle Grove	FD	1	105	Plaq.	Not provided	Myrtle Grove Diversion.	2
N/A	N/A	Naomi	FD	1	105	Plaq.	Not provided	Naomi Siphon.	2
N/A	N/A	Spanish Pass/Venice Diversion	FD	1	105	Plaq.	Not provided	Spanish Pass Freshwater Diversion.	2
N/A	N/A	West Point a la Hache	FD	1	105	Plaq.	Not provided	West Pointe a la Hache Siphon.	2
N/A	N/A	Empire-Triumph Fringe Marsh	MC	1	105	Plaq.	Not provided	Fringe Marsh Construction.	2
N/A	N/A	Myrtle Grove-Naomi	MC	1	105	Plaq.	Not provided	Myrtle Grove to Naomi Fringe Marsh.	2
N/A	N/A	Port Sulphur-West Pointe a la Hache	MC	1	105	Plaq.	Not provided	Port Sulphur to West Pointe a la Hache Fringe Marsh.	2
N/A	N/A	Venice-Triumph Fringe Marsh	MC	1	105	Plaq.	Not provided	Fringe Marsh Construction.	2
N/A	N/A	West Point a la Hache-Myrtle Grove	MC	1	105	Plaq.	Not provided	West Pointe a la Hache to Myrtle Grove Fringe Marsh.	2
N/A	N/A	Bayou Long/ Bayou Fontanelle	RR	1	105	Plaq.	Not provided	Empire Channel Islands, Bayou Long/Bayou Fontanelle.	2
N/A	N/A	Lake Hermitage	RR	1	105	Plaq.	Not provided	Bayou Grand Cheniere/Lake Hermitage.	2
N/A	N/A	Nairn	RR	1	105	Plaq.	Not provided	Ridge North of Bay de la Cheniere (West of Nairn).	2
N/A	N/A	Bastian Bay	SP	1	105	Plaq.	Not provided	Bastian Bay.	2
N/A	N/A	Bay Coquette	SP	1	105	Plaq.	Not provided	Bay Coquette.	2
N/A	N/A	Bay Joe Wise	SP	1	105	Plaq.	Not provided	Bay Joe Wise.	2
N/A	N/A	Bay Long	SP	1	105	Plaq.	Not provided	Bay Long.	2
N/A	N/A	Bayou Grand Liard/Buras	SP	1	105	Plaq.	Not provided	Bayou Grande Liard/Buras Fringe Marsh.	2
N/A	N/A	Bayou Long	SP	1	105	Plaq.	Not provided	Empire Waterway/ Bayou Long.	2
N/A	N/A	Grand Terre (West)	SP	1	105	Plaq.	Not provided	North of West Grande Terre Island.	2
N/A	N/A	Venice	RR	1	105	Plaq.	Not provided	Ridge West of Venice along banks of Spanish Pass.	2
N/A	N/A	Highway 82/ Schooner Bayou Control Structure	SP	26	47	Ver.	Not provided	Install a barrier along the south bank of Schooner Bayou from LA Hwy 82 to the Schooner Bayou structure. These measures would halt saltwater intrusion into the basin, preserving the integrity of the Mermentau Basin and create surge protection for the communities, agricultural economy and act as another line of defense against storm surges caused by tropical storms and hurricanes.	4
N/A	FD 8	South-West Shore Lake Decade	MC	20	51	Ter.	Not provided	Description not provided.	3a
N/A	FD 42	East Island Dune and Marsh Restoration	BI	20	53	Ter.	Not provided	Description not provided.	3a
N/A	FD 6	Marsh Creation to the North of Lost Lake	MC	20	51	Ter.	Not provided	Description not provided.	3a
N/A	FD 7	West Shore Lake Decade	MC	20	51	Ter.	Not provided	Description not provided.	3a
N/A	FD 9	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
N/A	FD 10	North Shore Lake Mechant	MC	20	51	Ter.	Not provided	Description not provided.	3a
N/A	FD 28	Marsh Creation East of Lake Boudreaux	MC	20	53	Ter.	Not provided	Description not provided.	3a

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

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

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

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N/A	N/A	Hanson Canal and Yellow Bayou - Flood Control Structures	HP	21	50	StM.	\$6,200,000	Hanson Canal and Yellow Bayou, both similar to the Franklin Canal, were designated to serve as conduits for removal of stormwater following normal rainfall events. However, during hurricanes and related events, both serve as a means for reverse flow generated by storm surge. Hurricanes Rita and Ike are recorded example events. Closures and levee improvements are needed to prevent surge flows from moving inland during surge events.	3b
N/A	N/A	Yokely Levee Improvements	HP	21	50	StM.	\$5,000,000	During Hurricane Ike, the Charenton Navigational Canal overflowed its banks and inundated the Yokely drainage area with storm surge. Levee improvements and construction of a berm parallel to Industrial Road and the Charenton Navigational Canal south of US 90 are needed to prevent damages from storm surge inundation.	3b
N/A	N/A	Charenton Canal - Flood Control Structure and Levee Improvements - Alternative 1	HP	21	50	StM.	\$114,000,000	This alternative is presented as a flood control structure with embankment improvements along both sides of the Charenton Canal. Embankment improvements are needed to prevent overtopping of the canal along its length near urban areas. These improvements will connect to existing levees that are planned for upgrading and proposed federal and/or State funded levees. The timeframe for the construction of these federal/State levees was indefinite at this writing. Nonetheless, the general consensus at the local, regional, State, and federal levels is that the major new levee improvements are decades away, dependent upon state and federal funding appropriations. The functional success of this alternative is directly dependent upon completion of proposed federal and state alignments west of the Charenton Canal to and beyond the Cypremort Ridge tying in to highlands of the Teche Ridge near the parish line.	3b
N/A	N/A	Charenton Canal - Flood Control Structure and Levee Improvements - Alternative 2	HP	21	50	StM.	\$14,000,000	Alternative 2 proposes the construction of a flood control structure in Bayou Teche east of its intersection with Charenton Canal. This alternative is less costly than the previous option as it is not dependent on future new federal or state levee construction west of the Charenton Canal or along or west of the Cypremort Ridge. A short levee extension extending northward from the westernmost end of the Bayou Yokely Levee reach will be required.	3b
N/A	N/A	Berwick Levee Improvements - Reach W-124 South	HP	21	50	StM.	\$200,000	Reach W-124 near Turtle's Corner south of the city limits of Berwick has a height deficient section approximately 75 feet wide and 1.5 feet deep. The proposed project, which is a federal responsibility, is to fill and compact the area to ensure levee height and design consistency with the surrounding system.	3B
N/A	N/A	West of Wax Lake Outlet to Charenton Canal - Continued Levee Improvements	HP	21	50	StM.	\$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/A	N/A	Amelia Area - Continuation of Miller Plan Alternative 2E	HP	21	50	StM.	\$50,000,000	Alternative 2E follows the existing levee alignments in the northwestern section of Amelia and then create an internal levee ring to protect most of the residential areas of Amelia. This alternative excludes much of the industrial area along Bayou Boeuf.	3b
N/A	N/A	Berwick Lock Elevation	HP	21	50	StM.	\$1,000,000 - \$100,000,000	The Berwick Lock is currently below the elevation of the surrounding Atchafalaya River levee and seawall protection system. This situation creates vulnerability for all urban and agriculture land situated between Berwick and Calumet as a direct function of Atchafalaya River flows, both riverine and surge. The USACE is aware of the lock elevation deficiency and has the responsibility to elevate the height as needed.	3b
N/A	N/A	WHLO East, Wax Lake East, and W-124 Levee Reach Improvements	HP	21	50	StM.	\$22,000,000	The reaches currently protect the municipalities of Berwick and Patterson and the community of Bayou Vista from storm surge. Currently, the levee reaches range from 9-19 feet MSL. The proposed project would elevate the levees to a consistent 18 feet MSL.	3b
N/A	N/A	SMLD Backwater Plan Reconnaissance and Feasibility Analysis	HP	21	50	StM.	\$100,000	Reconnaissance Study and possible feasibility analysis	3b
N/A	N/A	Amelia Area - Miller Plan Alternative 3E	HP	21	50	StM.	\$171,650,000	This alternative is presented in the Miller Plan, begins in Assumption Parish on the east side of Bayou Boeuf near its intersection with Lake Palourde, continues southward east and inclusive of existing urban areas, crosses the Intracoastal Waterway with a control structure, continues westward in St. Mary Parish south of the Intracoastal Waterway along the higher ground of Avoca Island in a generally northwest direction, and ties into the Avoca Levee near the Bayou Boeuf Locks south of Morgan City.	3b
N/A	N/A	Amelia Area - Louisiana State Master Plan Alignment 1E	HP	21	50	StM.	\$400,000,000	The Louisiana State Master Plan Alignment begins east of St. Mary Parish coming westward from Terrebonne Parish to the east bank of Bayou Boeuf, crosses Bayou Boeuf south of the railroad track via a control structure, follows Bayou Boeuf on the Amelia side southward then turns northwest along the bank, proposes a lock in Bayou Boeuf connection to Avoca Island levee near the Bayou Boeuf Locks at Morgan City.	3b
N/A	N/A	Amelia Area - SMLD Backwater Prevention Plan 4E	HP	21	50	StM.		An additional alternative was presented during the planning process (4E) involving the construction of a backwater protection flood control structure in Bayou Chene south of the GIWW with associated new levee alignments. This alternative is in the conceptual stage of planning and requires additional analysis, comparison, and contrast to the other eastern St. Mary and regional backwater protection alternatives. Once reasonable feasibility is established, a detailed evaluation of this alternative may be warranted as a suitable alternative in the state master plan. An initial investigation generally following the guidelines of a USACE reconnaissance study would be in order in an effort to determine the basic feasibility of the alternative. A more detailed feasibility will follow should the project prove feasible with benefits and cost comparable to Alternatives 1E and 3E.	3b

**PROJECT CONCEPTS FROM COASTAL PARISH MASTER PLANS**

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

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

**Parish:** Asc.=Ascension, Asu.=Assumption, Cal.=Calcasieu, Cam.=Cameron, Ibe.=Iberia, Jef.=Jefferson, Laf.=Lafourche, Liv.=Livingston, Ori.=Orleans, Pla.=Plaquemines, StB.=St. Bernard, StC.=St. Charles, StJa.=St. James, StJo.=St. John the Baptist, StM.=St. Mary, StMt.=St. Martin, StT.=St. Tammany, Tan.=Tangipahoa, Ter.=Terrebonne, Ver.=Vermilion.

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**Appendix E**  
Inventory of Non-State  
Projects

**D. Restoration  
Partnership Projects**

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## RESTORATION PARTNERSHIP PROJECTS

Program	Project Number	Project Name	Project Type	Project Sponsor	Parish	Project Costs	Project Summary	Planning Unit
Rest. Partnerships	N/A	Westwego WHARF	LA	City of Westwego	Jef.	\$1,000,000 (State) \$1,250,000 (TPL Match)	In 2008, the Trust for Public Land (TPL) helped the City of Westwego acquire a 92-acre tract of cypress/bottomland hardwood forest that will provide the residents of Westwego water access to the Jean Lafitte Historical Park, Bayou Segnette State Park, and Lake Salvador Game Management Preserve. This property will be developed into a wetlands park known as the WHARF – Wetlands Harbor Activities Recreational Facility. This facility will provide opportunities for the physically challenged to experience Louisiana's natural environment. The Partnership Fund will provide \$1 million to the City of Westwego for repayment to TPL to help them recoup some of the costs of the acquisition.	2
Rest. Partnerships	N/A	Terrebonne Vegetative Plantings	VP	Terrebonne Parish Consolidated Government	Ter.	\$40,000 (State) \$30,000 (TPCG Match)	Terrebonne Parish, in partnership with the Barataria Terrebonne National Estuary Program (BTNEP) will conduct a series of four vegetative plantings on the newly created marsh cells at site of the recently completed CWPPRA Project TE-44, North Lake Mechant Landbridge. Earthen plugs will also be planted. Terrebonne Parish will provide additional financial support, and the BTNEP will provide project implementation services, including logistical support and volunteer coordination. Terrebonne Parish and BTNEP also propose to conduct vegetative plantings at three additional sites: the marsh area adjacent to the Upper Petite Caillou (Bayou Neuf) pump Station near Chauvin, the toe of the non-federal levee near Dulac (Suzy Canal), and in the Caillou Marshes EMU on and adjacent to the Harry Bourg Corporation property.	3a
Rest. Partnerships	N/A	North Lake Mechant Landbridge Completion	MC	ConocoPhillips	Ter.	\$30,000 (State) \$5,000 (ConocoPhillips Match)	The project consists of dredging approximately 875 cubic yards of sediment to construct an earthen plug. The proposed earthen plug is needed to complete the CWPPRA Project TE-44, North Mechant Landbridge Restoration. The plug is will be planted with natural vegetation for this area.	3a
Rest. Partnerships	N/A	Christian Marsh Terraces Project	SNT, VP	Coalition to Restore Coastal Louisiana	Ver.	\$454,720 (State) \$298,000 (CRCL Match)	The project proposes to build terraces and plant vegetation within an area of shallow open water that was formerly vegetated marsh. The project will create 20,850 linear feet of terraces which will enhance and protect an additional 300 acres of adjacent marsh. To protect the shoreline of the new terraces and to help bind the newly placed soils, appropriate vegetation will be planted by volunteers recruited from the local communities and across South Louisiana.	3b
Rest. Partnerships	N/A	Calcasieu-Sabine Watershed Restoration	HR, SNT	Ducks Unlimited	Cal.	\$1,780,805 (State) \$966,214 (DU Match)	The objectives of this project are to 1) restore the historic flow of First Bayou, thereby providing fresh water to the surrounding marshes and preventing flooding to communities in the area; 2) create marsh terraces in the Gum Gove region to reduce wave fetch, prevent erosion, and promote the growth of emergent/submerged vegetation; and 3) restore the cross-sectional elevations of Oyster Bayou to help promote healthy marsh in the area. The proposed restoration would reroute drainage through First Bayou and associated roadside conveyances, under the First Bayou-Highway 27 Bridge and into Mud Lake. A total of 105,000 linear feet of marsh terraces are proposed to benefit approximately 1,200 acres of marsh and help restore habitats for commercial and recreational activities throughout the Calcasieu-Sabine region. Restoration of Oyster Bayou's cross-sectional elevations will return salinity patterns and variations to a semblance of their historical patterns, and thereby return more than 7,000 acres within the Oyster Bayou watershed to higher levels of primary productivity that should ultimately result in marsh recovery and the creation of land.	4
Rest. Partnerships	N/A	10,000 Trees for Louisiana	VP	Coalition to Restore Coastal Louisiana	Jef., Pla., St., Tan., Ver.	\$84,475 (State) \$335,790 (CRCL Match)	The Restoration Tree Trust has donated a total of 10,000 native trees for vegetative planting in the Coalition to Restore Coastal Louisiana's (CRCL) Community-Based Restoration Program. Over 25 species of trees are available and will be planted in densities ranging from 125 to 150 trees per acre. Tree protectors will be purchased to reduce predation. Multiple project sites have been identified across the coast from Southwest Louisiana to the Mississippi Delta.	Coastwide

**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; SD=Sediment Diversion; SNT=Sediment and Nutrient Trapping; SP=Shoreline Protection; VP=Vegetation Planting.

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**Appendix F**  
CPRA FY 2014 Capital  
Outlay Requests

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**COASTAL PROTECTION & RESTORATION AUTHORITY (AGENCY: 01-109)**  
**Estimated Coastal Protection Needs for FY 2014 through FY 2018**

Priority Ranking	Project	State Funding Needs (General Obligation Bonds)					TOTAL
		(Year 1) FY 2014	(Year 2) FY 2015	(Year 3) FY 2016	(Year 4) FY 2017	(Year 5) Outlying Years	
1	West Bank and Vicinity , New Orleans, LA Hurricane Protection (BA-66)		\$31,660,895	\$31,660,895	\$31,660,895	\$813,261,115	\$908,243,800
2	Lake Pontchartrain, LA & Vicinity Hurricane Protection Project (PO-63)	\$42,188,962	\$42,188,962	\$42,188,962	\$42,188,962	\$1,043,892,437	\$1,212,648,285
3	Morganza, LA to the Gulf of Mexico Hurricane Protection Project (TE-64)	\$35,000,000	\$25,000,000	\$35,000,000	\$35,000,000	\$80,345,000	\$210,345,000
4	West Shore, Lake Pontchartrain, Louisiana Hurricane Protection Project (PO-62)	\$5,000,000	\$10,000,000	\$25,000,000	\$25,000,000	\$290,000,000	\$355,000,000
5	Lafitte Area Tidal Protection (BA-75)	\$6,000,000	\$8,000,000*	\$10,000,000*	\$20,000,000*	\$20,000,000*	\$64,000,000
6	St. Charles West Bank Hurricane Protection Levee (BA-85)	\$12,000,000	\$20,000,000	\$20,000,000	\$20,000,000	\$20,000,000	\$92,000,000
7	North Shore, Lake Pontchartrain Flood Protection (PO-74)	\$5,000,000					\$5,000,000
8	Lockport to Larose Hurricane Protection Levee	\$5,000,000	\$10,000,000	\$20,000,000	\$20,000,000	\$20,000,000	\$75,000,000
9	Larose to Golden Meadow, LA Hurricane Protection Project (TE-65)	\$5,000,000	\$6,600,000	\$500,000			\$12,100,000
10	Delcambre-Avery Canal Storm Surge Protection (TV-57)	\$9,000,000					\$9,000,000
11	St. Mary Backwater Flooding Protection	\$5,000,000					\$5,000,000
12	Southwest Coastal Louisiana Project (LA-20)		\$3,000,000	\$3,000,000	\$3,000,000	\$691,000,000	\$700,000,000
13	South Central Coastal Plan (TV-54)	\$2,000,000	\$2,000,000				\$4,000,000
		\$131,188,962	\$150,449,857	\$177,349,857	\$176,849,857	\$2,958,498,552	
New Proposed Funding							
		FY14-Priorities 1 & 2	FY14-Priority 5				

As per DOA's request/guidance, Year 5 represents the remaining authorized project costs over the life of the project. (Donaldsonville to the Gulf, West Shore Lake Pontchartrain, and Southwest Coastal construction cost is a rough estimate considering these projects are still in the feasibility stage) (West Bank & Vicinity and Lake Pontchartrain & Vicinity Year 5 represents the current remaining principal and interest based upon 30 Year payback)

10/18/2012

Note: \*To be included in next year's capital outlay request.







**Coastal Protection and Restoration Authority**

**P.O. Box 44027**

**Baton Rouge, LA 70804**

**<http://www.coastal.la.gov>**