Section 1
Executive Summary

The Coastal Protection and Restoration Authority is approaching Fiscal Year (FY) 2015 with a focus on bigger and bolder projects and a dedication to developing tools that will inform planning, design and implementation of our work. We continue to seek additional sources of funding for the coastal program, meanwhile using innovative solutions to maximize available funding and ensure that every dollar invested is used as efficiently and effectively as possible.

Accomplishments and Notable Projects

Some accomplishments and notable projects completed or in construction in FY 2014 included:

- **Madisonville Bulkhead Project (PO-87):** This project improved 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 reestablished critical areas of fragile marsh and minimized the continuous fragmentation of the State's coastal wetlands.
- **Central Wetlands Demonstration (PO-73):** This water assimilation demonstration project will be completed in conjunction with the Sewerage and Water Board of New Orleans.
- **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.
- **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 constructing 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.
- **Lake Pontchartrain & Vicinity, Seabrook LPV-IHNC-01 (PO-55),** Orleans 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 2015 include:

- Bayou Bonfouca Marsh Creation, St. Tammany Parish (PO-104)
- Bayou Dupont Marsh and Ridge Creation Project, Jefferson Parish (BA-48)
- Central Wetlands - EBSTP to A2, Orleans and St. Bernard Parishes (PO-73-2)
- Central Wetlands – Riverbend, St. Bernard Parish (PO-73-1)
- Freshwater Bayou Bank Stabilization (CIAP), Vermilion Parish (TV-11B [EB])
- 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)

- South Lake Lery Shoreline and Marsh Restoration, Plaquemines Parish (BS-16)
- Caminada Headland Beach and Dune Restoration Increment 2, Lafourche Parish (BA-143)

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

2017 Coastal Master Plan Update: Tools and Modeling

CPRA is committed to continuing to improve the models and tools used to support the decision-making process. CPRA, with assistance from The Water Institute of the Gulf and over 50 experts, has developed and begun to implement the Model Improvement Plan for the 2017 Coastal Master Plan. The improvements include higher resolution, advanced communications and interactions between models, and incorporation of new processes, such as marsh edge erosion. Ecosystem outcomes models will be improved to provide a more accurate prediction of the effect of restoration and protection actions on fish and wildlife species, or other ecosystem services. Future scenarios (environmental and risk/damage) will be updated, and it is envisioned that a full set of sensitivity analyses, as well as calibration/validation, performance assessments and uncertainty analyses will be conducted through this effort. Information from these model improvements will be used to develop the 2017 Coastal Master Plan.

Specifically to inform the planning and implementation of sediment diversions, CPRA, in partnership with the U.S. Army Corps of Engineers (USACE), continues to develop numerous tools to evaluate the effects of sediment diversion projects on the Mississippi River through the Mississippi River Hydrodynamic Study and Delta Management project. CPRA is also developing basin-wide models for Pontchartrain and Barataria Basins to inform the continued development of the

sediment diversion projects and answer key concerns that we have heard from stakeholders about the basin-wide effects of diversions. Specifically, the basin-wide models will be able to provide information about capacity and efficiency to build/maintain land, salinity patterns, changes in vegetation/habitats, water level fluctuations, effect of nutrients and sediment on vegetation and soils, fisheries abundance and distribution, and the effect of uncertainties, such as sea level rise and subsidence. Information from these models will be available in spring-summer 2015.

The Year Ahead: Projecting FY 2015

The FY 2015 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 2015 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 2015 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 2015 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.

Stay Informed

We encourage you to join us as we move forward in our efforts to protect and restore coastal Louisiana. The CPRA Board conducts monthly meetings to provide a forum for updates and public discussion of our current work. In addition, new tools, such as our Quarterly Progress Reports, have been developed to allow for greater visibility on our progress and to provide additional information about CPRA projects, programs and initiatives. These resources and information about upcoming meetings can be found online at www.coastal.la.gov.

Table ES-1: Projected Three-Year Revenues (FY 2015 - FY 2017)

Revenue Sources	FY 2015	FY 2016	FY 2017	Program Total (FY 2015 - FY 2017)
CPR Trust Fund Annual Revenue[1]	$33,131,175	$33,100,000	$33,100,000	$99,331,175
CPR Trust Fund Carried Forward	$15,320,000	$0	$0	$15,320,000
GOMESA[1]	$80,775	$80,775	TBD	$161,550
DOTD Interagency Transfer[1]	$4,000,000	$4,000,000	$4,000,000	$12,000,000
CIAP	$78,616,250	$30,755,349	$16,691,884	$126,063,483
Surplus '07, '08, '09	$291,732,872	$53,178,060	$120,000	$345,030,933
Community Development Block Grants	$13,520,558	$3,565,520	$0	$17,086,078
LOSCO	$1,111,403	$202,074	$0	$1,313,477
NRDA Early Restoration[2]	$78,555,920	$115,368,331	$34,497,051	$228,421,302
NFWF	$113,161,715	$81,953,872	$115,094,000	$310,209,587
Other Oil Spill Related Revenues	$43,115,935	$38,221,005	$118,030,070	$199,367,009
LDNR Mitigation Funds[3]	$2,154,000	$0	$0	$2,154,000
LDNR Beneficial Use Funds[4]	$1,200,000	$0	$0	$1,200,000
Iberia Parish IGA[5]	$300,000	$0	$0	$300,000
MOEX Settlement[6]	$6,259,059	$0	$0	$6,259,059
OCD-DRU Grant[7]	$575,000	$0	$0	$575,000
Berm to Barrier[8]	$161,462	$134,028	$81,719	$377,209
FEMA Reimbursement for OM&M	$5,264,655	$0	$0	$5,264,655
Project Generated - Adaptive Management	$18,719,241	$17,754,220	$20,071,584	$56,545,045
Project Billing	$18,500,000	$18,500,000	$18,500,000	$55,500,000
Capital Outlay Request Submitted for HSDRRS 30-Year Payback	$0	$73,277,135	$73,277,135	$146,554,270
Total Projected Revenue	**$725,480,021**	**$470,090,369**	**$433,463,442**	**$1,629,033,832**

Notes

1. Annually recurring revenue source.
2. NRDA funds have not been procured; projections represent possible FY 2015 - FY 2017 expenditures if funding is procured by June 30, 2014. 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 BA-43 (EB) and ME-25 SF.
4. Used to partially fund ME-25 SF and additional marsh creation in Plaquemines Parish.
5. Used to partially fund TV-57.
6. Represents anticipated balance as of FY 2015 of an initial deposit of $6.75 million of funds from the MOEX settlement.
7. Used to fund Coastal Community Resiliency Program.
8. Used to fund monitoring of constructed Berm to Barrier projects.

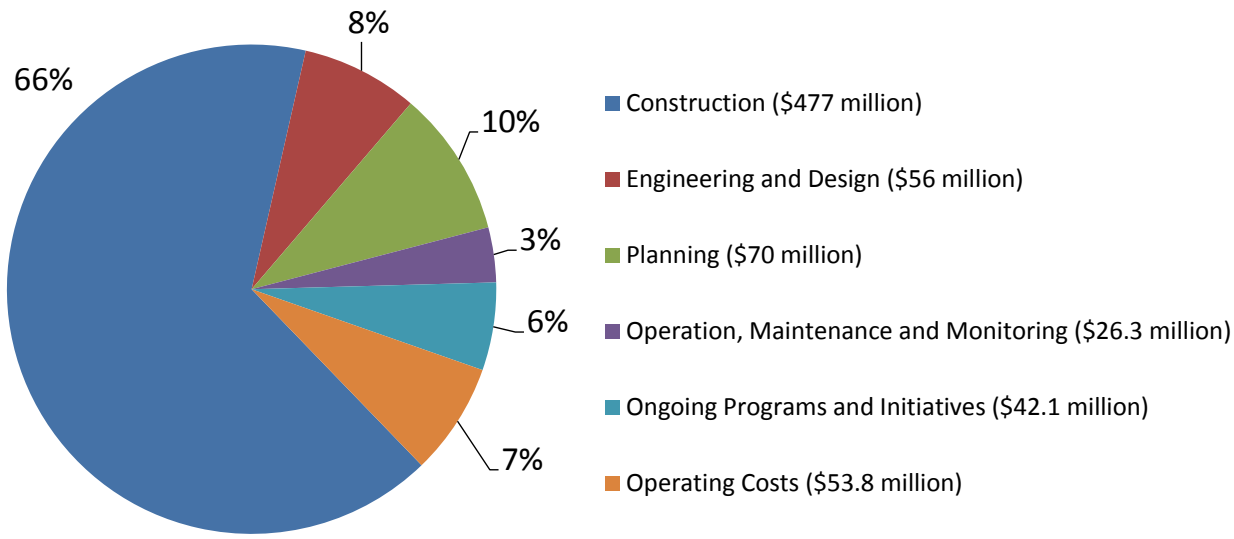
Table ES-2: Projected Three-Year Expenditures[1] (FY 2015 - FY 2017)

Program/Funding Source	FY 2015	FY 2016	FY 2017	Program Total (FY 2015 - FY 2017)
CWPPRA Projects (not including Surplus expenditures)[2]	$18,373,834	$24,178,492	$25,000,000	$67,552,326
WRDA Projects (not including Surplus or CIAP expenditures)	$0	$0	$0	$0
CIAP Projects and Programs (not including Surplus Expenditures)	$78,616,250	$30,755,349	$16,691,884	$126,063,483
Surplus Projects and Programs	$291,732,872	$53,178,060	$120,000	$345,030,933
Community Development Block Grants	$13,520,558	$3,565,520	$0	$17,086,078
HSDRRS 30 Year Payback[3]	$0	$73,277,135	$73,277,135	$146,554,270
State-Only Projects (Non-Surplus)	$8,944,410	$2,096,000	$33,586,000	$44,626,410
NRDA Early Restoration Expenditures[4]	$78,555,920	$115,368,331	$34,497,051	$228,421,302
NFWF Expenditures (not including Surplus Expenditures)	$113,161,715	$81,953,872	$115,094,000	$310,209,587
Other Oil Spill Related Expenditures (not including Surplus Expenditures)	$43,115,935	$38,221,005	$118,030,070	$199,367,009
LOSCO	$1,111,403	$202,074	$0	$1,313,477
LDNR Mitigation Expenditures[5]	$2,154,000	$0	$0	$2,154,000
LDNR Beneficial Use Expenditures[6]	$1,200,000	$0	$0	$1,200,000
Iberia Parish IGA Expenditures[7]	$300,000	$0	$0	$300,000
OM&M- Projects (not including Surplus or CIAP expenditures)	$10,744,312	$13,817,299	$4,719,415	$29,281,026
OM&M- Marine Debris Removal (FEMA)	$6,160,662	$0	$0	$6,160,662
Project Support	$4,000,000	$4,000,000	$4,000,000	$12,000,000
Operating Costs (see Tables 4-3 and 4-4)	$53,795,400	$64,669,121	$60,994,711	$179,459,232
Total Planned Expenditures	**$725,487,271**	**$505,282,257**	**$486,010,265**	**$1,716,779,794**

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 2016 - FY 2017 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 2015-2017 expenditures if funding is procured by June 30, 2014. 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 BA-43 (EB) and ME-25 SF.
6. Used to partially fund ME-25 SF and additional marsh creation in Plaquemines Parish.
7. Used to partially fund TV-57.

Figure ES-1: Projected FY 2015 Expenditures by Project Phase



Notes

- Construction includes Beneficial Use ($4 million)
- OM&M includes BIMP ($3.3 million). Repair/Rehabilitation of Projects ($1.1 million) and Marine Debris Removal ($6.2 million)
- Ongoing Programs Includes Project Support ($4 million)

TOTAL Expenditures
$725 million