Integration of Coastal Protection and Coastal Restoration in Louisiana

Presented at
2009 Louisiana Transportation Conference
January 10, 2009

Office of Coastal Protection and Restoration
Presentation Overview

- Overview of state organizational changes re: coastal restoration and hurricane protection
- Review of coastal restoration and hurricane protection implementation efforts and associated funding sources
In 2005, Hurricanes Katrina and Rita made landfall on the Louisiana coast.
Louisiana Legislative Direction

- Following the devastation of Hurricanes Katrina and Rita, the La. Legislature passed Act 8. Act 8 called for:
  - A long-term comprehensive coastal protection plan combining hurricane protection and the protection, conservation, restoration, and enhancement of coastal wetlands and barrier shorelines or reefs
  - Plan will address hurricane protection and coastal restoration efforts from both short-term and long-range perspectives and shall incorporate structural, management, and institutional components of both efforts

- Act 8 also created the Coastal Protection and Restoration Authority (CPRA)
Coastal Protection and Restoration Authority

CPRA Mandate:

“Hurricane protection and coastal restoration must be integrated to achieve a long-term solution for coastal protection.”

“Develop, coordinate, make reports on, and provide oversight for a comprehensive coastal protection master plan and annual coastal protection plans…”
Integrated Ecosystem Restoration and Hurricane Protection: Louisiana’s Comprehensive Master Plan for a Sustainable Coast
State of Louisiana Master Plan

- Integrates Hurricane Protection and Coastal Restoration

- Objectives:
  - Reduce Risk to Communities
  - Restore Ecosystem Sustainability
  - Maintain Array of Fish & Wildlife Habitats
  - Sustain LA’s Unique Heritage and Culture
Coastal Restoration and Hurricane Protection: A Single Approach is Not the Solution

Figure 5: Multiple lines of defense concept (adapted from graphic produced by the Lake Pontchartrain Basin Foundation).
State of Louisiana Master Plan

- Strategic framework of actions necessary to secure future of coastal Louisiana
- Integrated approach to planning and implementation needed to meet objectives
- Strives to balance objectives, although further work needed to refine strategies
- Starting point for long-term integration of objectives and implementation of program
- Provides framework to focus advances in science, engineering, and technology to achieve integrated objectives
Bold Initiative

It is estimated that Louisiana’s MASTER PLAN will take $50 billion plus for planning, design, and construction over the next 30 years.
Annual Plan

- Will be submitted to Legislature during regular legislative session each year.

- Outlines specific list of projects that will be priority for CPRA to develop or begin implementing and constructing during upcoming fiscal year including approximate costs for each project.

Fiscal Year 2009 Annual Plan:
Ecosystem Restoration and Hurricane Protection in Coastal Louisiana

March 2009
What Does the Annual Plan Do?
Identifies Funding Needs for Fiscal Year

- Annual Plan describes how the State and our federal partners intend to protect and restore Louisiana’s coast in the FY.
- Annual Plan outlines ongoing and future projects and their funding requirements for the FY.
- Annual Plan makes recommendations on how dollars from the Coastal Protection & Restoration Fund, Capital Outlay funds, CIAP and other sources should be applied to achieve these goals.
- Annual Plan identifies needs that are not currently funded.
The Annual Plan

Act 8 of the 2005 Legislature also directs the CPRA to prepare an Annual Coastal Protection and Restoration Plan for submission to the legislature.

Act 545 of the 2008 Legislature mandated additional requirements including a 3 year funding projection.
Primary Funding Authorities

- Coastal Wetlands Planning, Protection Restoration Act (CWPPRA)
- Coastal Impact Assistance Program (CIAP)
- Water Resource Development Act (WRDA)
- LA Coastal Area (LCA) Program (WRDA)
- State Coastal Protection and Restoration Trust Fund
- State Capitol Outlay Funds
- Gulf of Mexico Energy Security Act (GOMESA)
Coastal Wetland Protection, Planning, and Restoration Act (CWPPRA/Breaux Act)

$60-$70 Million annually appropriated to federal agencies; requires a state match.

- Provides dedicated stream of revenue for coastal restoration; reauthorized through 2019.
- Louisiana’s cost share 15%
CWPPPRA Projects

- 142 active projects since 1991
- 81 projects completed – $417.8M; 76,804 acres benefited
- Total cost of all PPL 1-17 projects = $840.3M
- 12 projects completed since August 2005 - $148M; 8,300 acres benefited
- 1991-2019 LA CWPPPRA Funding = $2.4B
Coastal Impact Assistance Program (CIAP)

- Will provide $127.5 million annually of Outer Continental Shelf (OCS) mineral revenues to Louisiana for 4 years, beginning October 1, 2006 (Federal Fiscal Year 2007); funds will also be provided to other mineral-producing coastal states.
- Total (4-year) CIAP funding to Louisiana estimated at $510 million, of which 35% ($178.5 million) is dedicated to coastal parishes.
Coastal Impact Assistance Program (CIAP)

- 19 restoration/conservation projects and programs – 89.3% ($296M) of State’s CIAP funds, plus $43.5M from 8 parishes (CIAP funds)

- 4 infrastructure projects – 10.7% ($35.5M) of State’s CIAP funds, plus $5.4M in parish CIAP cost share*

*Includes amounts in approved CIAP plan plus minor CIAP plan changes proposed to MMS in Dec. 2007

Only 23% or a total of $150M of the CIAP funds over the 4 year program life can be used on infrastructure (hurricane protection/transportation), planning assistance or administrative costs.
CIAP

114 Projects Included in Final Plan

- 10 State-only CIAP projects ($93.8 M)
- 13 State/Parish CIAP projects ($289.8 M)
- 91 Parish-only CIAP projects ($126.5 M)
Water Resources Development Act (WRDA) 2007

Sec 7006: Construction

- Authorizes S&T substantially in accordance with plan (Working Groups, Contracts, Demo Projects)
- Authorizes: MRGO Ecosystem Restoration, Hope Canal Diversion, Barataria Basin Barrier Shoreline Restoration, Bayou Lafourche Reintroduction, Myrtle Grove Diversion
- Beneficial Use of Dredged Material Program
- Feasibility Reports required for additional 10 projects


- **Dec 31, 2009** (Sec. approval): Caillou Lake Land Bridge, Pt. au Fer Shoreline, Caernarvon Diversion Modification, Davis Pond Diversion Modification Components of state master plan
LCA Items in WRDA 2007

- Other feasibility reports required from Sec. of Army to Congress (NLT December 31, 2008):
  - Small MS R. Div. at Convent/Blind River ($88M)
  - Amite R. Div. Canal Modification ($5.6M)
  - Multipurpose Oper. of Houma Nav. Canal Lock ($18.1M)
  - Terrebonne Basin Barrier Shoreline Restoration ($124.6M)
  - Medium Div. at White’s Ditch ($86.1M)
  - Convey Atchafalaya River Water to N. Terrebonne Wetl. ($221.2M)

- Sec. of Army may carry out above projects if favorable Chief’s report is completed by Dec. 3, 2010. Construction appropriations not allowed unless Chief’s report approved by the authorizing Congressional committees.
LCA Items in WRDA 2007
(cont’d)

- Authorizes additional LCA projects if Sec. of Army deems feasible (feasibility reports are due to authorizing Congressional Committees NLT Dec. 31, 2009):
  - Gulf/Caillou Lake Land Bridge ($56.3M)
  - Gulf Shoreline at Point au Fer Island ($43.4M)
  - Modification of Caernarvon Diversion ($20.7M)
  - Modification of Davis Pond Diversion ($64.2M)

- Construction appropriations not provided unless Chief’s report is approved by authorizing Congressional Committees
Southwest Coastal Louisiana Feasibility Study

Background

- Authorized under several authorities, including WRDA 2007
- Includes Calcasieu, Cameron, and Vermilion Parishes
- Integrates flood control alternatives with coastal restoration measures to provide for sustainable human and natural communities
- Corps of Engineers and CPRA are cost-sharing partners
Southwest Coastal Louisiana Feasibility Study Status

- Completed Project Management Plan (PMP) includes two-phase feasibility study with Phase 1 to be completed in 6 months
- Phase 1 cost is about $1.9 million
- Feasibility Study Cost Share Agreement signed January 2009
2007

$200 Million Surplus Funds

Act 203 of the 2007 Regular Legislative Session provides for:

- $147.3 million in supplemental appropriations for the 2006-2007 fiscal year to the Louisiana Department of Natural Resources for the purpose of coastal restoration.

- $52.7 million in supplemental appropriations for the 2006-2007 fiscal year to the Louisiana Department of Transportation and Development for the purposes of coastal protection.
2007 Surplus-Funded Coastal Restoration

Total Funds ($147.3M)
- Cameron Parish Shoreline ($30.8 M)
- Biloxi Marsh ($22M)
- Pipeline Conveyance in Plaquemines Parish ($22M)
- Marsh Creation near Freshwater Bayou ($4M)
- Beneficial Use-Calcasieu Ship Channel ($5M)
- HNC Lock Complex ($40M)
- Grand Isle Breakwater/Jetty ($1M)
- Science, Technology, and Education ($22M)
- Emergency Reserve ($0.5M)
2007 Surplus-Funded Hurricane Protection and Evacuation

Total Funds ($52.7M)

- Raising of LA 1 at Golden Meadow Floodgate and Completion of Golden Meadow Lock Structure ($18M)
- Lafitte Levee Protection ($10M)
- Forty Arpent Levee, St. Bernard Parish ($5M)
- Raising of LA 23 at LaReussite ($1.2M)
- Morganza to the Gulf Project ($10M)
- East of Harvey Canal Interim Hurricane Protection-Phase I ($4M)
- St. Charles Parish West Bank Hurricane Prot. Levee Phase I - Magnolia Ridge ($4.5M)
The **Largest Contribution** to Hurricane Protection and Coastal Restoration in State History Symbolizes A New Day in Louisiana:

- “I want to be clear: coastal restoration can no longer wait. Hurricane protection efforts can no longer be delayed. The time for studies is long past gone. We need to get started. We need to get to work on our coast.”
- “We have also committed $300 million for hurricane protection and coastal restoration projects, the largest such commitment in our state’s history. Hurricanes Katrina and Rita showed that we no longer have the luxury to wait and study, and that action must be taken immediately. We cannot afford a repeat of 2005.”
2008

$300 Million Surplus Funds

Act 3 of the 2008 2nd Extraordinary Legislative Session provides for:

- $160.5 million for hurricane protection
- $110 million for coastal restoration
- $16 million for innovative coast-wide initiatives
- $13.5 million for emergency reserve/accelerated advancement of high priority items
The stark reality is that Louisiana will have billions of dollars of projects constructed over the next few years by the state and the Corps and this will require staff and dollars for operations and maintenance, repair, replacement and rehabilitation.
Summary of Restoration Project Implementation Since August 2005 (All Programs)

- 24 Projects constructed ($165 M; 11,400 acres benefited)
- 20 Projects in construction ($371 M; 6,200 acres benefited)
- 58 Projects in engineering and design ($1.83 B; >100,000 acres benefited)
Merging and Re-Organization of Elements of Two State Agencies

- Elements of Public Works Section (Flood Protection) of La. Dept. of Transportation and Development were merged with elements the Office of Coastal Restoration and Management (Coastal Restoration Division and Coastal Engineering Division) of La. Department of Natural Resources
- The new entity is called the Office of Coastal Protection and Restoration (OCPR)
- OCPR reports to the Governor’s Executive Assistant of Coastal Activities, who also chairs the Coastal Protection and Restoration Authority (CPRA)
- OCPR’s mission is to integrate the State’s hurricane protection and coastal restoration efforts
Coastal Protection and Restoration Authority
Implementation Structure

Director of Implementation, David Miller

Planning and Project Management
David Fruge

Engineering and Operations
Christopher Knotts

Louisiana Coastal Engineer and Science (LACES)
Richard Raynie
Ratio of T.O. to Budget for Louisiana

- Graph compares T.O. (blue) and Budget (red) over the years.
Operation and Maintenance Responsibilities

Lifecycle cost increases for increased levee inspections, I-walls, T-walls, floodgates, operations, maintenance, repair, replacement and rehabilitation as more is built.
Questions?