Southeast Louisiana Project Update

CPRA Board Meeting
Belle Chasse, LA
October 18, 2017

John Troutman
CPRA Operations Division
New Orleans Regional Office
Overview

- Construction
  - CWPPRA
  - NRDA Early Restoration Projects
- Engineering and Design
  - CWPPRA
  - Oil Spill (NFWF, NRDA, &RESTORE)
- Hurricane Protection Projects
- ‘17 Hurricane Response

Louisiana Coastal Protection and Restoration Authority
Southeast Louisiana Projects

[Map of Southeast Louisiana Projects]

Primary Program
- CWPPRA
- NFWF
- NRDA
- RESTORE

Louisiana Coastal Protection and Restoration Authority
PROJECTS RECENTLY CONSTRUCTED
AND IN CONSTRUCTION

(BA-0034-2) Hydrologic Restoration and Veg Planting in the Des Allemands Swamp
(BA-0164) Bayou Dupont Sediment Delivery Marsh Creation #3
(BS-0016) Lake Lery Shoreline and Marsh Restoration
(PO-0104) Bayou Bonfouca Marsh Creation

(BA-0076) Cheneir Ronquille Barrier Island Restoration
(BA-0111) Shell Island – West Barrier Island Restoration
Southeast Louisiana Projects - Construction
Bayou Bonfouca Marsh Creation (PO-104)

- **Project Features:**
  - 424 acres of Marsh Creation
  - Approx. 500 acres of Marsh Nourishment

- **Funding:**
  - CWPPRA

- **Construction:**
  - Contractor – Weeks Marine, Inc.
  - Construction Completion by February 2018

- **Project Total Cost:**
  - $29.2 Million
Bayou Bonfouca Marsh Creation (PO-104)
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Bayou Bonfouca Marsh Creation (PO-104)

 Marsh Creation Area 1

 Marsh Creation Area 2

 Ponds
Hydrologic Restoration and Vegetative Planting Des Allemands Swamp (BA-34-2)

• **Project Features:**
  - Excavation of 8 Spoil Bank Gaps (-1.0’ deep, 50’ bottom, 100’ top)
  - Spoil Disposal Area (+2.0’ NAVD88 Max.)
  - Disposal Areas to be planted with Bald Cypress and Water Tupelo

• **Construction:**
  - Contractor – Magnolia Dredge & Dock, LLC of Mandeville
  - NTP Issued – September 26, 2017 and contractor mobilized
  - Estimate Construction End – February 12 2018

• **Total Project Cost:**
  - $6.2 Million - CWPPRA
Hydrologic Restoration and Vegetative Planting
Des Allemands Swamp (BA-34-2)
Hydrologic Restoration and Vegetative Planting
Des Allemands Swamp (BA-34-2)

BA-0034-2 Gap and Spoil Placement Design
South Lake Lery Shoreline and Marsh Creation (BS-16)

• USFWS Project Lead

• Project Features:
  - 520 acres of marsh creation
  - 35,843 Linear Feet of Shoreline Restoration (6.8 miles)

• Lake Rim:
  - 50 ft. crown width
  - 3’ NAVD elevation
  - Vegetation Planting

• Project Cost:
  - $33.72 Million - CWPPRA
South Lake Lery Shoreline and Marsh Creation (BS-16)
South Lake Lery Shoreline and Marsh Creation (BS-16)
South Lake Lery Shoreline and Marsh Creation (BS-16)
Bayou Dupont Sediment Delivery Marsh Creation #3 and Terracing (BA-164)

• Project Features:
  ➢ 137 acres of Marsh Creation
    ▪ Borrow: Mississippi River Sediment (Alliance Anchorage)
  ➢ 9,679 linear feet of Terraces (14 terraces)
    ▪ Borrow: in-situ sediment

• Project Status:
  ➢ Project construction is complete
    ▪ Marsh creation: completed August 2016
    ▪ Terraces: completed June 2017
    ▪ Planting of terraces: Spring 2018

• Project Costs:
  ➢ Total Cost: $18.7 Million - CWPPRA
Bayou Dupont Sediment Delivery Marsh Creation #3 and Terracing (BA-164)

Alliance Anchorage Borrow Area

BA-164 Project Area Location
Bayou Dupont Sediment Delivery Marsh Creation #3 and Terracing (BA-164)
Bayou Dupont Sediment Delivery Marsh Creation #3 and Terracing (BA-164)

*Marsh Creation*
Bayou Dupont Sediment Delivery Marsh Creation #3 and Terracing (BA-164)

Terraces
Shell Island-West Barrier Island Restoration (BA-111)

- **Project Features:**
  - **East Lobe:**
    - 8,100 linear feet of Beach/Dune
    - 154 acres of Marsh Creation
  - **West Lobe:**
    - 6,300 linear feet of Beach/Dune
    - 133 acres of Marsh Creation
  - **Total fill:** 5,772,027 cubic yards

- **Project Status:**
  - Notice to Proceed: Sept. 22, 2015
  - Construction Completion: July 10, 2017

- **Project Cost:**
  - $72 M
Shell Island-West Barrier Island Restoration (BA-111)
Shell Island-West Barrier Island Restoration (BA-111)

2013
Shell Island-West Barrier Island Restoration (BA-111)

Shell Island West (BA-111)

2017

Louisiana Coastal Protection and Restoration Authority
Chenier Ronquille Barrier Island Restoration (BA-76)

• Project Lead for Construction- NMFS

• Project Features:
  - 212 ac. beach/dune habitat (1.9M yd³ fill)
  - 306 ac. back barrier marsh habitat (1.1M yd³ fill)

• Project Status:
  - Construction Start – May 2016
  - Construction Complete – Mar. 2017
  - Vegetative Plantings – Mar. 2018 (O&M)

• Cost:
  - Total Cost – $35 M
Chenier Ronquille Barrier Island Restoration (BA-76)
Chenier Ronquille Barrier Island Restoration (BA-76)
Chenier Ronquille Barrier Island Restoration (BA-76)

Chenier Ronquille Project Area (facing West)
Southeast Louisiana Project Update

ENGINEERING & DESIGN: CWPPRA
NRDA, NFWF, & RESTORE
CWPPRA PROJECTS IN ENGINEERING & DESIGN

BA-0125 Northwest Turtle Bay Marsh Creation
BA-0193 Caminada Headlands Bac Barrier Marsh Creation Increment 2
BA-0194 East Leeville Marsh Creation And Nourishment
BA-0195 Barataria Bay Rim Marsh Creation And Nourishment
PO-0075 Labranche East Marsh Creation
PO-0133 Labranche Central Marsh Creation
PO-0169 New Orleans Landbridge Shoreline Stabilization And Marsh Creation
PO-0173 Fritchie Marsh Creation And Terracing
PO-0178 Bayou La Loutre Ridge Restoration And Marsh Creation
PO-0179 St. Catherine Island Marsh Creation And Shoreline Protection
Southeast Louisiana Project Update

NATIONAL FISH AND WILDLIFE FOUNDATION (NFWF)

(BA-0153) Mid-Barataria Sediment Diversion
(BS-0030) Mid-Breton Sediment Diversion
Southeast Louisiana Projects - NFWF
MID-BASIN SEDIMENT DIVERSION PROGRAM
Mid-Barataria Sediment Diversion (BA-153)

• Structure Type
  – Gated Open Channel Structure

• Peak Flow
  – 75,000 cfs

• Base Flow
  – 5,000 cfs
Mid-Breton Sediment Diversion (BS-30)

- Structure Type
  - Gated Open Channel Structure
- Peak Flow
  - 35,000 cfs
- Base Flow
  - TBD
Southeast Louisiana Project Update

NATURAL RESOURCES DAMAGE ASSESSMENT (NRDA)

(BA-0202) Queen Bess Island Restoration
(BA-0203) Barataria Basin Ridge and Marsh Creation - Spanish Pass Increment
(PO-0180) Lake Borgne Marsh Creation – Increment One
Southeast Louisiana Projects – NRDA
Lake Borgne Marsh Creation - Increment One (PO-180)

- **Project Features:**
  - Create 1,548 acres of marsh

- **Project Status & Anticipated Schedule:**
  - Duplantis Design Group - E&D Contractor
  - 95% Design – Mid 2020
  - Final Design and Bid Documents – Late 2021

- **Project Costs:**
  - E&D Phase Cost: $7 Million
  - Total Project Cost: $127 Million
Lake Borgne MC - Increment One (PO-180)
Queen Bess Island Restoration (BA-202)

• **Project Goals/Features:**
  - Create a sustainable rookery and a sanctuary for water birds
    - 26.8 acres of habitat for colonial nesting water birds and pelicans
    - 9.2 acres of habitat nesting terns and skimmers
  - Post-construction vegetative planting

• **Anticipated Schedule:**
  - Engineering & Design Complete – November 2018
  - Construction Start – September 2019

• **Project Cost:**
  - $2.5 Million E&D
  - 17.5 Million Constructed (estimated)
Queen Bess Island Restoration (BA-202)
Queen Bess Island Restoration (BA-202)

Project Map and Features

Louisiana Coastal Protection and Restoration Authority
Barataria Basin Ridge & Marsh Creation Spanish Pass (BA-203)

• Project Features:
  - Ridge and marsh creation project near Venice LA
  - To create 1,250 acres of marsh and ridge habitat

• Project Status and Anticipated Schedule:
  - Currently establishing E&D contract with Baird and Associates
  - Project is expected to go to construction end of 2019

• Project Cost:
  - $4.5 Million E&D
  - $124.5 Million Construction (estimated)
Barataria Basin Ridge & Marsh Creation
Spanish Pass (BA-203)
RESOURCES AND ECOSYSTEM SUSTAINABILITY, TOURISTS OPPORTUNITIES, AND REVIVED ECONOMIES OF THE GULF STATES (RESTORE)

BA-0197  West Grand Terre Beach Nourishment and Stabilization
PO-0029  River Reintroduction into Maurepas Swamp
PO-0163  Golden Triangle Marsh Creation
PO-0174  Biloxi Marsh Living Shoreline Project
River Reintroduction Into Maurepas Swamp (PO-29)

• **Project Features (major):**
  - Gated Diversion structure (2,000 cfs)
  - Conveyance channel with guide levees

• **Project Status and Anticipated Schedule:**
  - September 2017 - RESTORE Funding for E&D

• **Project Cost:**
  - $24 Million E&D
  - $175 M Construction (estimated)
River Reintroduction Into Maurepas Swamp (PO-29)

45,000 Benefit Area

Louisiana Coastal Protection and Restoration Authority
River Reintroduction Into Maurepas Swamp (PO-29)

- Mississippi River Intake
- Headworks
- River Road Crossing
- Sedimentation Basin
- CNN RR Crossing
- Conveyance Channel
- KCS Railroad
- Airline Highway Crossing
- I-10 Crossing
- Ancillary Features
  - Lateral Release Valves
  - Check Valves Under I-10
  - Weirs At Bayou Secret & Bourgeois Canal
  - Embankment Cuts
Golden Triangle Project (PO-163)

• **Project Features:**
  - Restore and protect wetland, fish, and wildlife habitat and help maintain landscape integrity and enhance community resilience.
  - E&D for 600 acres of marsh creation
  - Borrow Source: Lake Borgne

• **Project Status & Anticipated Schedule:**
  - Data Collection underway
  - Completion of Final Design: Late 2019
  - Begin Construction: Fall 2020

• **Project Costs:**
  - E&D Phase Cost: $4.7 million
  - Construction Cost: $50 million (estimated)
Golden Triangle Project (PO-163)
Biloxi Marsh Living Shoreline (PO-0174)

- **Project Features:**
  - 9-11 miles of living shoreline structures

- **Project Costs:**
  - $3.2 M awarded for E&D
  - $57.7M total (estimated)

- **Project Status & Anticipated Schedule:**
  - NTP to design engineer Mott McDonald issued April, 2017
  - Anticipate Construction in late 2019
Biloxi Marsh Living Shoreline (PO-0174)
West Grand Terre Restoration (BA-197)

• **Project Features:**
  - Restore 235 acres (12,000 linear feet) of beach and dune habitat and 66 acres of back barrier marsh.
  - Protection of Fort Livingston

• **Project Status & Anticipated Schedule:**
  - E&D Began in Fall 2016
  - Completion of Final Design: Summer 2020

• **Project Costs:**
  - $ E&D 7.26 Million
  - Construction $53 Million (estimated)
West Grand Terre Restoration (BA-197)
Southeast Louisiana Project Update

2017 HURRICANE RESPONSE
HARVEY, IRMA AND NATE
CPRA Response to Hurricanes Harvey, Irma, & Nate

• During these events, local levee districts (SLFPMAE, SLFPMAW, Plaquemines, St. Charles, Terrebonne, USACE, etc...) operated the Flood Gates in accordance with the operating manuals.

• CPRA monitored the activities and reported significant events to the Governor's Unified Command Group
SE Regional Hurricane Protection Projects in Construction

• WBV (BA-66)
• NOV (BA-67)
• Jean Lafitte Tidal Protection (BA-75-1)
• St. Charles West Bank Hurricane Protection Levees (BA-85)
• SELA (PO-57)
• PCCP (PO-60)
• HSDRRS Mitigation
  – WBV & LPV (BA-109, BA-154, and PO-121)
New Orleans to Venice Levees (BA-67)
New Orleans to Venice Levees (BA-67)

STATUS

• 11 Projects in Engineering and Design

• 14 Projects in Construction
  ➢ Numerous reaches are in the process of being turned over

• 4 Projects Completed
QUESTIONS?

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