Update on activities in the region includes:

1. Two studies/plans
   - one recently completed
   - one ongoing

2. Restoration Projects
   - Recent past and near future
   - Federal, State, and Local
   - Various stages (Planning – Construction)

3. Master Plan projects – further out
June 15, 2012

Final Report

NORTHSORE HURRICANE/FLOOD PROTECTION/RESTORATION PLAN

Prepared by:

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8282 Goodwood Boulevard
Baton Rouge, Louisiana 70806

Prepared for:

St. Tammany Parish
and
Tangipahoa Parish

Sponsor:

Louisiana Coastal Protection and Restoration Authority
Office of the Governor - Coastal Activities
P.O. Box 44027
Baton Rouge, Louisiana 70804-4027
North Shore Hurricane/Flood Protection Plan (PO-74) Overview

Scope of the Plan:

• Assess Northshore area flood risk

• Evaluate existing drainage, flood protection, coastal restoration projects and other data

• Recommend actions
Identified Flood Prone Areas and Flooding Sources
Reviewed Repetitive Flood Losses
Evaluated Hurricane/Flood Control Projects with Repetitive Loss Data
Evaluated Restoration Projects for Potential Flood Reduction Benefits
Table 14. Summary of Results for Mitigation Focus Areas

<table>
<thead>
<tr>
<th>Area</th>
<th>Causes</th>
<th>Type of Flood Event</th>
<th>Social Vulnerability</th>
<th>Economic Vulnerability</th>
<th>Treatments</th>
<th>Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alafia River</td>
<td>Large rain events</td>
<td>Headwater</td>
<td>Low to Medium</td>
<td>Low</td>
<td>Elevate, Relocate</td>
<td>SELA Structure Raising, Stormwater detention ponds</td>
</tr>
<tr>
<td>Bayou Beauregard and Tributaries Storm Surge</td>
<td>Hurricane</td>
<td>Storm surge</td>
<td>High</td>
<td>Low</td>
<td>Elevate, Relocate</td>
<td>N/A</td>
</tr>
<tr>
<td>Bayou Beauregard and Tributaries</td>
<td>Large rain events</td>
<td>Headwater</td>
<td>High</td>
<td>Low</td>
<td>Elevate, Relocate, Flood proofing</td>
<td>Bayou Vincent Flood Storage and Improvements, Bayou Vincent Detention Pond</td>
</tr>
</tbody>
</table>
STATUS OF PROJECTS IDENTIFIED IN THE NORTHSHORE PLAN

Projects in Engineering and Design:
• Levee Segment 2B and Schneider Canal Fronting Protection
• Channel Relocation North of Cloverland

Constructed Projects:
• Levee Segments 2A, 3B and 3C
• Graci Drive Culvert Improvements
• Whisperwood Pond
• Cypress Bayou Pond
• Tammany Hills Detention Pond
• Labarre Street Detention Pond and Channel Improvements (under construction)
St. Tammany Watershed Management Study (PO-151)

**Recently initiated**
Projected Completion Date: March 2014
Total Project Budget: $1.3 million
Funding Program: CDBG
St. Tammany Watershed Management Study (PO-151)

• Prioritize projects for combined water resource management
  • Wetland Restoration
  • Storm Surge Protection
  • Urban Growth
  • Storm Water Runoff and Water Quality
  • Drainage

• Study Features:
  • Data Collection and Model Application
  • Alternatives Evaluation
  • Prioritization of projects
Coastal Restoration Projects
2009 - Present
Project Features

- 115 acres of intermediate marsh creation with vegetation planting
- Repair of breach in the lake rim
- Maintain lake rim and protect adjacent hardwood sites
- Corps of Engineers Mitigation Project (GNO HSDRRS – LPV)

• Status: Planning
Madisonville Bulkhead (PO-87)

Project Features:

• Replace 800 linear feet of bulkhead and timber dock

• Multiple Funding Sources: CDBG, State Surplus, LDOTD

• Total Budget: $2.3 million

• Status: In Construction

• Projected completion: December 2013
Mandeville Aquatic Ecosystem Restoration (PO-51)

- Construction Date: July 2010
- Total Project Budget: $3.73 million
- Funding Program: CIAP
Mandeville Aquatic Ecosystem Restoration (PO-51)

Project Features:

• Upgraded existing wastewater treatment plant

• Biological wastewater treatment feature – 2.5 miles of force main was built to distribute treated effluent into 1.7 square miles of wetlands west of the city

• The project DOUBLED the city’s wastewater intake capacity and provides benefits to adjacent wetlands
Green Property Preservation (PO-48)

Project Features

• St. Tammany purchased property (27 acres) to prevent development

• Protect cypress swamp and BHW habitats and benefit wildlife

• Funding Program: CIAP

• Cost: $1.35 Million

• Completed August 2011
French Property Preservation (PO-48)

Project Features

• St. Tammany purchased property (39.5 acres) to prevent development

• Protect mixed hardwood and pine savanna and benefit wildlife

• Provide easements for increased public access

• Funding Program: CIAP
• Cost: $1.72 Million
• Completed August 2011
Goose Point-Point Platte Marsh Creation (PO-33)

Construction Completion Date: February 2009

Acres Benefited: 566

Total Project Budget: $20.8 million

Funding Program: CWPPRA
Goose Point – Point Platte Marsh Creation (PO-33)

May 2008: Fill Area E
Goose Point – Point Platte Marsh Creation (PO-33)
Northshore Beach Marsh Restoration
(PO-70)

Project Features

• Create 40 acres of marsh to restore lake rim and protect interior marshes

• Funding Program: CIAP (Parish)

• Cost: $1.86 Million

• Status: E&D; to be merged with PO-104
Bayou Bonfouca Marsh Creation (PO-104)

Project Features
- 600 acres of marsh creation along the lake rim and further interior
- Funding Program: CWPPRA
- Cost: $28.02 Million
- Status: E&D; to be merged with PO-70
Bayou Sauvage Intermediate Marsh and Bottomland Hardwood (PO-121-BSPS)

**Project Features**
- Create (348 acres) BHW and marsh habitat
- Areas planted with native hardwoods and marsh vegetation
- Corps of Engineers Mitigation Project (GNO HSDRRS – LPV)
- **Status:** Planning
Bayou Sauvage Flood Side Marsh Restoration (PO-121-BSFS)

Project Features
• 302 acres of brackish marsh creation
• Areas planted with marsh vegetation
• Construction and repair of rock dikes along Lake Pontchartrain
• Corps of Engineers Mitigation Project (GNO HSDRRS – LPV)
• Status: Planning
Alligator Bend Shoreline Protection (PO-34)

- **Project Feature**: 9 miles of shoreline protection from Alligator pass to Unknown Pass
- **Funding Program**: CWPPRA
- **Budget**: $57.66 million
- **Status**: 95 % Design; Competing for Phase 2 funding
Orleans Landbridge Shoreline Protection (PO-36)

Project Status: Constructed 2012
Distance: 8.2 miles
Project Budget: $42 Million
Funding Program: CIAP
I-10 Bridge Demolition
Questions?

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john.troutman@la.gov
2012 MASTER PLAN PROJECTS

Protection Projects

• **Slidell Ring Levee** - $81 million - Construction of a ring levee to an elevation of 16.0 feet around Slidell for hurricane storm surge risk reduction.

• **Lake Pontchartrain Barrier** - $76 million - Planning, engineering and design to construct a levee to an elevation of 24.5 feet across the mouth of Lake Pontchartrain from the New Orleans Landbridge to Interstate 59 north of Slidell for hurricane storm surge risk reduction. PLANNING AND DESIGN ONLY.
2012 MASTER PLAN PROJECTS

Restoration Projects - may provide some degree of additional protection for St. Tammany

- **New Orleans East Landbridge Restoration** - ($2.363 billion) *8,510 acres* of marsh creation

- **Biloxi Marsh Creation** - $3.046 billion - *33,280 acres*

- **Biloxi Marsh Oyster Reef** - $83 million - *113,000 feet* of oyster barrier reef along the eastern shore of Biloxi Marsh

- **Eastern Lake Borgne Shoreline Protection** - $85 million - *57,000 feet* of rock breakwaters

- **Golden Triangle Marsh Creation** - $293 million - *2,440 acres* of marsh creation in the Golden Triangle area