Coastal Protection and Restoration Authority of Louisiana

Office of Coastal Protection and Restoration

2015 Annual Inspection Report

Pass Chaland to Grand Bayou Pass Barrier Shoreline Restoration

State Project Number BA-35
Priority Project List 11

March 2, 2016
Plaquemines Parish

Prepared by:

Barry Richard, P.E.
CPRA
New Orleans Field Office
CERM, Suite 309
2045 Lakeshore Dr.
New Orleans, La 70122
# Table of Contents

I. Introduction.............................................................................................................................1

II. Project Description and History..........................................................................................1

III. Inspection Purpose and Procedures......................................................................................1

IV. Inspection Results ..................................................................................................................2

V. Conclusions.............................................................................................................................2

VI. Recommendations..................................................................................................................3

    Immediate Repairs ..................................................................................................................3

    Programmed Maintenance .......................................................................................................3

## Appendices

Appendix A  Project Features Map

Appendix B  Photographs

Appendix C  Three Year Budget Projections

Appendix D  Field Inspection Form
I. Introduction

The Pass Chaland to Grand Bayou Pass Barrier Shoreline Restoration (BA-35) project area is located between Pass Chaland and Grand Bayou Pass and separates Bay Joe Wise from the Gulf of Mexico. Both project areas are located in Plaquemines Parish.

II. Project Description and History

The Pass Chaland to Grand Bayou Pass Barrier Shoreline Restoration (BA-35) consists of nourishing and rebuilding the shoreline with sediment to create a beach berm, dune, and a back barrier marsh platform. The wetlands, dune, and swale habitats within the project area have undergone substantial loss due to oil and gas activities, subsidence, sea-level rise, and marine and wind induced shoreline erosion. Marine processes acting on the abandoned deltaic headlands and barrier islands rework and redistribute the previously deposited sediment. In these areas along the shoreline, there are several locations where the shoreline has receded and decreased to a critical width that is susceptible to breaching during storms.

Construction of the Pass Chaland to Grand Bayou Pass Barrier Shoreline Restoration (BA-35) was completed in July, 2009.

III. Inspection Purpose and Procedures

The purpose of the annual inspection of the Pass Chaland to Grand Bayou Pass Barrier Shoreline Restoration (BA-35) is to evaluate the constructed project features to identify any deficiencies and prepare a report detailing the condition of project features and recommended corrective actions needed. Should it be determined that corrective actions are needed, the OCPR shall provide, in the report, a detailed cost estimate for engineering, design, supervision, inspection, and construction contingencies, and an assessment of the urgency of such repairs (O&M Plan). The annual inspection report also contains a summary of maintenance projects and an estimated projected budget for the upcoming three (3) years for operation, maintenance and rehabilitation. The three (3) year projected operation and maintenance budget is shown in Appendix C. A summary of past operation and maintenance projects completed since completion of the project can be found in Section II.

An inspection of the Pass Chaland to Grand Bayou Pass Barrier Shoreline Restoration (BA-35) was held on May 28, 2015, by members of NOAA and CPRA. Photographs of this inspection are included in Appendix B of this report.
IV. Inspection Results

Sand Fence

Approximately 14,360 linear feet of sand fencing was installed during project construction. This structure is performing as designed based on visual inspection.

Containment Dike

Due to poor access this feature was not inspected at this time. However, based on recent aerial photography it appears this structure has almost completely degraded.

Settlement Plates

The settlement plates were not inspected on this site visit.

Vegetative Plantings

The vegetative plantings are performing well. The natural vegetation has also filled in the gaps nicely.

V. Conclusions

The project is performing as designed. Based on visual inspections and aerial imagery the shoreline is retreating. The majority of this was caused by the landfall of Hurricane Isaac in 2012. The sand fencing and vegetation is still evident on the island and still performing the job of sediment retainage. This shoreline retreat will continue to be observed visually and through regular surveys. If necessary more sand fencing or vegetative plantings will be used to maximize sediment retainage through the 20 year life of the project.

VI. Recommendations

It is recommended not to perform any maintenance work at this time.

Immediate Repairs

- None at this time.

Programmed Maintenance

- No Programmed Maintenance is recommended at this time.
Appendix A

Project Features Map
Appendix B

Photographs
Annual Inspection Report
Pass Chaland to Grand Bayou Pass Barrier Shoreline Restoration
State Project No. BA-35

**Photo #1 – West End Beach Looking East.**

**Photo #2 – West End Shoreline Looking East.**
Photo #3 – Tidal Creek on Beach, Looking North.
Appendix C

Three Year Budget Projection
**Annual Inspection Report**  
**Pass Chaland to Grand Bayou Pass Barrier Shoreline Restoration**  
**State Project No. BA-35**

Federal Sponsor: NMFS  
Construction Completed: June 11, 2009  
PPI: #11

### Current Approved O&M Budget

| Year 0 | Year -1 | Year -2 | Year -3 | Year -4 | Year -5 | Year -6 | Year -7 | Year -8 | Year -9 | Year -10 | Year -11 | Year -12 | Year -13 | Year -14 | Year -15 | Year -16 | Year -17 | Year -18 | Year -19 | Project Life Budget | Currently Funded |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------------|-----------------|
| FY10   | FY11    | FY12    | FY13    | FY14    | FY15    | FY16    | FY17    | FY18    | FY19    | FY20    | FY21    | FY22    | FY23    | FY24    | FY25    | FY26    | FY27    | FY28    | FY29    | $3,074,332    | $2,469,484    |

### State O&M

| FY10   | $814,975 | $533,594 | $1,010,438 | $4,561 | $4,656 | $4,754 | $4,854 | $224,790 | $5,060 | $5,166 | $5,275 | $5,386 | $5,499 | $5,614 | $259,991 | $5,852 | $5,975 | $6,101 | $6,229 | $6,360 | $2,967,130    | $2,410,224    |

### Corps Admin

| FY10   | $2,356 | $819 | $836 | $853 | $871 | $890 | $908 | $927 | $947 | $967 | $987 | $1,008 | $1,029 | $1,050 | $1,072 | $1,095 | $1,118 | $1,141 | $0 | $0 | $18,874    | $5,735    |

### Federal S&A

| FY10   | $17,365 | $11,548 | $19,166 | $1,219 | $1,245 | $4,178 | $1,297 | $4,487 | $1,352 | $1,381 | $1,410 | $1,440 | $4,832 | $1,501 | $1,532 | $1,564 | $1,597 | $5,768 | $88,328    | $53,525    |

### Total

| FY10   | $20,947 | $13,514 | $20,587 | $4,277 | $4,336 | $4,724 | $4,937 | $5,012 | $5,133 | $5,236 | $5,340 | $5,447 | $5,556 | $5,667 | $5,780 | $6,257 | $90,516    | $23,946    |

### Projected O&M Expenditures

| Maintenance Inspection | $4,208 | $4,296 | $4,380 | $4,468 | $4,556 | $4,648 | $4,742 | $4,837 | $4,934 | $5,032 | $5,133 | $5,236 | $5,340 | $5,447 | $5,556 | $5,697 | $5,780 | $6,257 | $90,516    | $23,946    |

### General Maintenance

| Corps Admin | $836 | $853 | $871 | $890 | $908 | $927 | $947 | $967 | $987 | $1,008 | $1,029 | $1,050 | $1,072 | $1,095 | $1,118 | $1,141 | $0 | $0 | $15,699    | $2,782    |

### Structure Operations

| Federal S&A | $19,166 | $1,219 | $1,245 | $4,178 | $1,297 | $4,487 | $1,352 | $1,381 | $1,410 | $1,440 | $4,832 | $1,501 | $1,532 | $1,564 | $1,597 | $5,768 | $59,415    | $6,720    |

### State S&A

| Construction: | $481,790 | $161,230 |
| E&D | $4,218 |
| Surveying | $0 |
| Construction Administration | $0 |

### Total

| FY10   | $706,177 | $6,318 | $9,528 | $6,577 | $6,709 | $246,829 | $6,986 | $10,291 | $7,273 | $7,021 | $7,572 | $7,726 | $259,612 | $8,043 | $8,206 | $8,372 | $7,377 | $12,025 | $1,333,041    | $260,524    |

### O&M Expenditures from COE Report

| FY10   | $470,305 |

### Current O&M Budget less COE Admin

| FY10   | $2,463,749 |

### Current Project Life Budget less COE Admin

| FY10   | $2,463,749 |

### State O&M Expenditures not submitted for in-kind credit

| FY10   | $0 |

### Remaining Available O&M Budget

| FY10   | $1,993,444 |

### Total Projected Project Life Budget

| FY10   | $1,803,346 |

### Total Estimated O&M Expenditures (as of August 2010)

| FY10   | $470,305 |

### Incremental Funding Request Amount FY16-FY18

| FY10   | $1,732,920 |

### Project Life Budget Request Amount

| FY10   | $1,232,112 |
Appendix D

Field Inspection Form
### Maintenance Inspection Report Check Sheet

**Project No./Name:** (BA-35) Pass Chaland to Grand Bayou Pass Restoration  
**Date of Inspection:** 5/28/2015  
**Time:** N/A  
**Inspector(s):** CPRA and NOAA  
**Structure No.:** n/a  
**Structure Description:** n/a  
**Water Level:** N/A  
**Type of Inspection:** Annual  
**Weather Conditions:** Clear and Breezy

<table>
<thead>
<tr>
<th>Item</th>
<th>Condition</th>
<th>Physical Damage</th>
<th>Corrosion</th>
<th>Photo #</th>
<th>Observations and Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sand Fencing</td>
<td>Poor</td>
<td></td>
<td></td>
<td></td>
<td>No sign of any fencing remaining.</td>
</tr>
<tr>
<td>Containment Dike</td>
<td>Poor</td>
<td></td>
<td></td>
<td></td>
<td>No access, did not inspect.</td>
</tr>
<tr>
<td>Settlement Plates</td>
<td>Fair</td>
<td></td>
<td></td>
<td></td>
<td>Did not inspect on this visit.</td>
</tr>
<tr>
<td>Plantings</td>
<td>Good</td>
<td></td>
<td></td>
<td>1, 2, 3</td>
<td>Appear to be doing well.</td>
</tr>
</tbody>
</table>