



Coastal Protection and Restoration Authority of Louisiana

Office of Coastal Protection and Restoration

2011 Annual Inspection Report

Barataria Barrier Island Complex Project: Pelican Island and Pass La Mer to Chaland Pass Restoration

State Project Number BA-38
Priority Project List 11

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Plaquemines Parish

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I. Introduction

The Barataria Barrier Island Complex Project: Pelican Island and Pass La Mer to Chaland Pass Restoration (BA-38) has one project area located between Pass La Mer and Chaland Pass (Chaland Headland, BA-38-2) at the approximate coordinates 30° 08' 00" N latitude and 92° 45' 00" W longitude. The other project area is located between Empire Waterway and Scofield Pass along the Plaquemines barrier shoreline (Pelican Island, BA-38-1) at the approximate coordinates 30° 08' 00" N latitude and 92° 45' 00" W longitude. Both project areas are located in Plaquemines Parish.

II. Project Description and History

The Barataria Barrier Island Complex Project: Pelican Island and Pass La Mer to Chaland Pass Restoration (BA-38) consists of nourishing and rebuilding the shoreline with sediment to create a beach berm, dune, and a back barrier marsh platform at two sites. 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. The short-term land loss rate for the Pass La Mer to Chaland Pass area is -46.6 acres per year or -3.36% per year. The short-term land loss rate for the Empire Waterway to Scofield Pass reach is -20.79 acres per year or -4.36% per year.

Construction of the Pass La Mer to Chaland Pass Restoration segment of the project (BA-38-2) was completed in January 2007. At this time construction has not begun on the Pelican Island Restoration segment (BA-38-1).

The Barrier Island Maintenance Program (BIMP) performed a maintenance installation of sand fence in January 2010. Approximately 10,000 linear feet of fencing was placed in areas determined to be the most in need of it. Additional sand fencing and vegetative plantings were installed in 2011 at Chaland Headland. This work included planting approximately 16,200 Bitter Panicum (*Panicum amarum*) at a cost of \$56,700; and installing approximately 6,300 linear feet of sand fence at a cost of \$59,850. This was an anticipated event using available project funds.

III. Inspection Purpose and Procedures

The purpose of the annual inspection of the Pass La Mer to Chaland Pass Restoration Project (BA-38-2) 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 La Mer to Chaland Pass Restoration Project (BA-38-2) was not performed in person this year. It was agreed by CPRA and NOAA that a visual inspection of aerial photographs and final inspection photographs of the sand fencing and vegetative planting job will be sufficient to complete the annual inspection. Photographs are included in Appendix B of this report.

IV. Inspection Results

Sand Fence

The sand fencing replaced by the BIMP was in good condition and is performing very well (Photo #1, #2). There are many locations where the sand is near the top of the fencing. The new (2011) sand fence was placed in the gaps left by the BIMP fencing (Photo #3, #4).

Containment Dike

During the past year CPRA Staff has driven by two of the dike gaps for various reasons. Each time there was water flowing through them. There are no photos of this for this inspection.

Settlement Plates

One settlement plate was turned on its side. The other six are undamaged.

Vegetative Plantings

Vegetative plantings were replaced in May on the beach and dune. They were planted around the natural vegetation so as not to destroy what is already there. The only species planted was Bitter Panicum as this seemed to work best for the construction plantings on the beach and dune. (Photo #3, #4)

V. Conclusions

The Pass La Mer to Chaland Pass Restoration Project is performing very well considering the condition the 2008 Hurricane season left it in. The natural vegetation has taken hold, and, with this year's addition of vegetative plantings, there should be no issues with

vegetation in the near future. The sand fencing has now been completely replaced with a single row of fence and the BIMP sections are accumulating windblown sand as expected. It is expected that the only issues to be faced in the short term is the addition of more sand fence once this row is covered up with sand.

VI. Recommendations

There are no recommendations based on this inspection.

Immediate Repairs

- None at this time.

Programmed Maintenance

- None at this time.

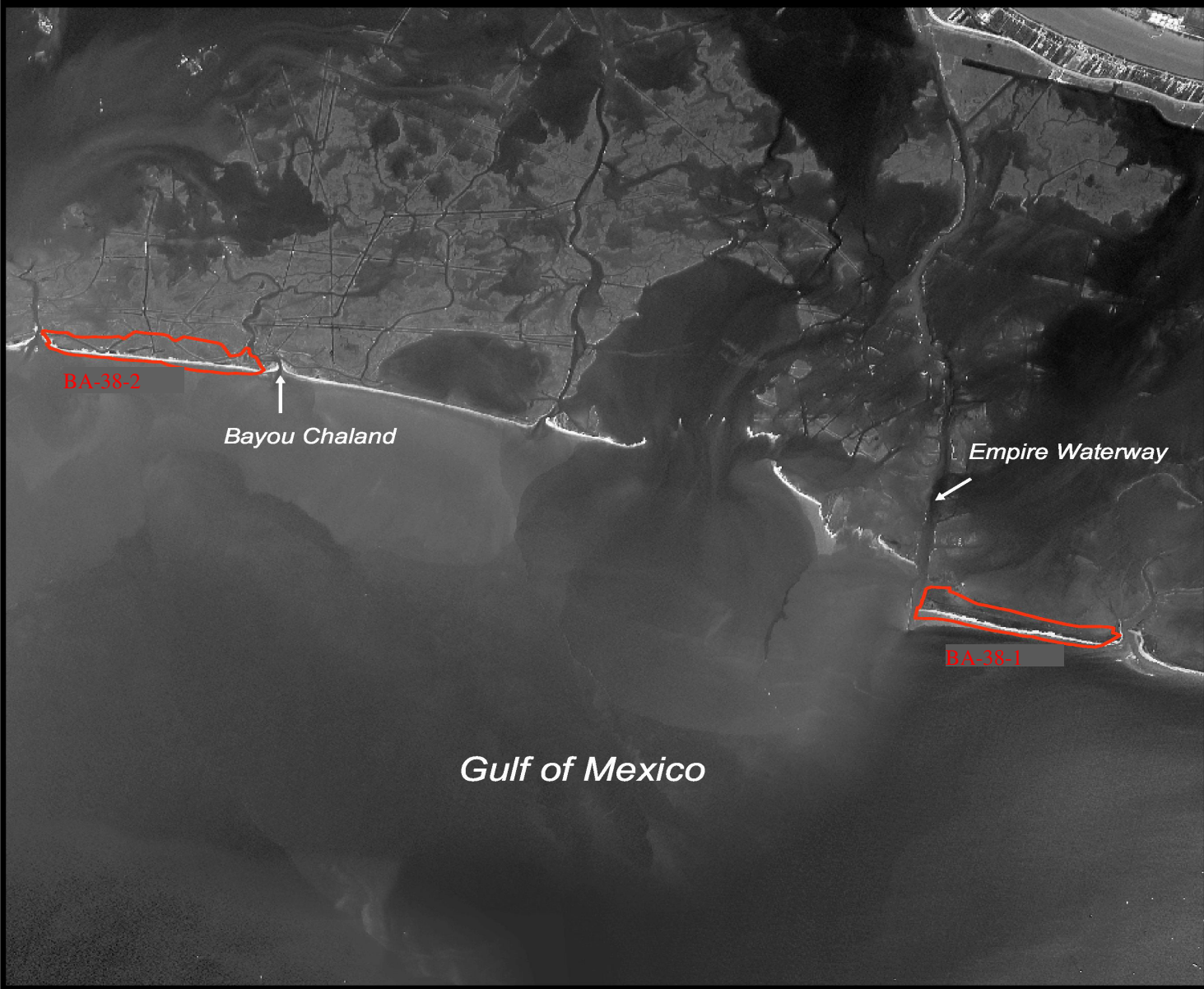
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Appendix A

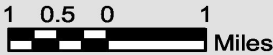
Project Features Map



Pelican Island and
Pass La Mer to Chaland
Pass Barrier Island Restoration
(BA-38)

Legend

 BA-38 boundary



Data Source:
U.S. Geologic Survey
National Wetland Research Center
Coastal Restoration Field Station
Louisiana Department of Natural Resources
Coastal Restoration Division and GIS Lab
2000 SPOT Imagery
Map Date: May 25, 2004

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Appendix B

Photographs

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Photo #1 – Old Fencing (BIMP January 2010), note sand deposition.



Photo #2 – Old Fencing (BIMP January 2010), note sand deposition.

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Photo #3 – New (May 2011) Fencing and Plantings.



Photo #4 – New (May 2011) Fencing and Plantings.

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Appendix C

Three Year Budget Projection

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Appendix D

Field Inspection Form

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MAINTENANCE INSPECTION REPORT CHECK SHEET

Project No./Name: **(BA-38-2) Pass La Mer to Chaland Pass Restoration**

Date of Inspection: 5/11/2011 Time: N/A

Structure No. n/a

Inspector(s): Faust

Structure Description: n/a

Water Level N/A

Type of Inspection: Annual

Weather Conditions: N/A

Item	Condition	Physical Damage	Corrosion	Photo #	Observations and Remarks
Sand Fencing	Good			1, 2, 3, 4	The current fencing is in good condition and performing as designed. New sand fencing installed to fill gaps.
Containment Dike	N/A				Not inspected this cycle.
Settlement Plates	N/A				Not inspected this cycle.
Plantings	Good			3, 4	New Plantings along beach; natural vegetation coming in nicely throughout the project area.
					Note: This annual inspection was based on photographs taken during the final construction inspection for the sand fence installation and vegetative planting job done in May, 2011.