



## **Coastal Protection and Restoration Authority of Louisiana**

### **Office of Coastal Protection and Restoration**

## **2010 Annual Inspection Report**

### **Pass Chaland to Grand Bayou Pass Barrier Shoreline Restoration**

State Project Number BA-35  
Priority Project List 11

August 31, 2011  
Plaquemines Parrish

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## **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 April 28, 2010, by Barry Richard (OCPR), Joy Merino (NOAA), and Rachel Sweany (NOAA). A second trip was made by Barry Richard, Shane Faust, and Clayton Breland (OCPR) on September 29, 2010, to observe the plantings and sand fencing. Photographs of both inspections 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. Sand accumulation is evident along the entire length of the installed fencing. There is no damage to report at this time. (Photo #1)

### **Containment Dike**

The containment dike was not degraded upon demobilization from the construction site. During the period between demobilization and this inspection the dike has been slowly degrading due to natural processes. One gap was observed to have been naturally created just east of the western shoreline of Bay Joe Wise. (Photo #2)

### **Settlement Plates**

The settlement plates are still in place and were surveyed earlier this summer as part of O&M.

### **Vegetative Plantings**

The vegetation has established very well on the dune and beach platform. The plantings in the marsh have not fared as well. There was about 15% loss on the beach and dune platform and about 30% loss in the marsh. (Photos 3 and 4)

## **V. Conclusions**

Based on the two inspections this year, this project has performed well after construction. The sand fencing is holding up well and doing a good job of capturing wind blown sediments. The containment dike is degrading as anticipated and the vegetative plantings are doing great compared to what was expected. One thing to observe for the next inspection is the need to gap the containment dike as there is minimal hydrologic exchange between Bay Joe Wise and the marsh creation area.

## **VI. Recommendations**

It is recommended o no perform any maintenance work at this time.

### **Immediate Repairs**

- None at this time.

### **Programmed Maintenance**

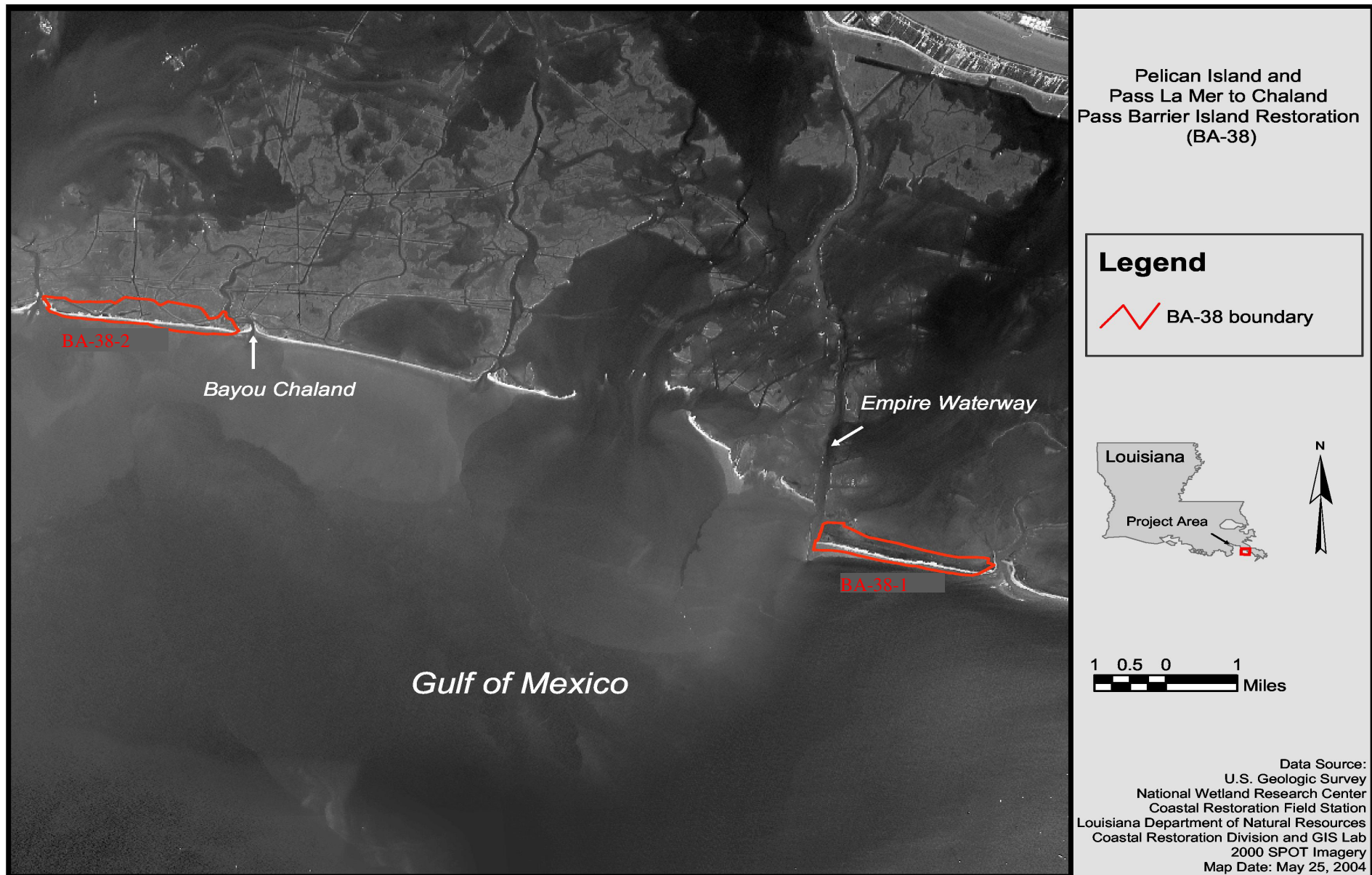
- No Programmed Maintenance is recommended at this time.



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

## **Appendix A**

### **Project Features Map**



## **Appendix B**

### **Photographs**





**Photo #1 – Sand Fencing.**



**Photo #2 – Natural Dike Gap.**





**Photo #3 – Beach and Dune Vegetative Plantings.**



**Photo #4 –Vegetative Plantings Looking North from Sand Fence.**

## **Appendix C**

### **Three Year Budget Projection**

Pass Chaland to Grand Bayou Pass Barrier Shoreline Restoration Project / BA-35 / PPL 11  
**Three-Year Operations & Maintenance Budgets 07/01/2010 - 06/30/2013**

Project Manager

*Barry Richard*

O & M Manager

*Barry Richard*

Federal Sponsor

NMFS

Prepared By

*Barry Richard*

	2010/2011	2011/2012	2012/2013
<b>Maintenance Inspection</b>	\$4,424.00	\$4,561.00	\$4,656.00
<b>General Maintenance</b>	\$0.00	\$0.00	\$0.00
<b>Structure Operation</b>	\$0.00	\$0.00	\$0.00
<b>State Administration</b>	\$0.00	\$0.00	\$0.00
<b>Federal Administration</b>	\$0.00	\$0.00	\$0.00
<b>Maintenance/Rehabilitation</b>			

10/11 Description:

E&D	\$0.00
Construction	\$0.00
Construction Oversight	\$0.00
Sub Total - Maint. And Rehab.	\$ -

11/12 Description:

E&D	\$0.00
Construction	\$0.00
Construction Oversight	\$0.00
Sub Total - Maint. And Rehab.	\$ -

12/13 Description:

E&D	\$0.00
Construction	\$0.00
Construction Oversight	\$0.00
Sub Total - Maint. And Rehab.	\$ -

	2010/2011	2011/2012	2012/2013
<b>Total O&amp;M Budgets</b>	\$ 4,424.00	\$ 4,561.00	\$ 4,656.00

<b>O &amp; M Budget (3 yr Total)</b>	\$ 13,641.00
<b>Unexpended O &amp; M Budget</b>	\$ 2,437,984.05
<b>Remaining O &amp; M Budget (Projected)</b>	\$ 2,424,343.05

## OPERATION AND MAINTENANCE BUDGET WORKSHEET 2010/2011

Pass Chaland to Grand Bayou Pass Barrier Shoreline Restoration Project / BA-35 / PPL 11

DESCRIPTION	UNIT	EST. QTY.	UNIT PRICE	ESTIMATED TOTAL
O&M Inspection and Report	EACH	1	\$4,424.00	\$4,424.00
General Structure Maintenance	LUMP	1	\$0.00	\$0.00
Engineering and Design	LUMP	1	\$0.00	\$0.00
Operations	LUMP	1	\$0.00	\$0.00
Construction Oversight	LUMP	1	\$0.00	\$0.00

### ADMINISTRATION

LDNR / CRD Admin.	LUMP	0	\$0.00	\$0.00
FEDERAL SPONSER Admin.	LUMP	0	\$0.00	\$0.00
SURVEY Admin.	LUMP	0	\$0.00	\$0.00
OTHER				\$0.00
TOTAL ADMINISTRATION COSTS:				\$0.00

### MAINTENANCE / CONSTRUCTION

#### SURVEY

SURVEY DESCRIPTION:					
	Secondary Monument	EACH	0	\$0.00	\$0.00
	Staff Gauge / Recorders	EACH	0	\$0.00	\$0.00
	Marsh Elevation / Topography	LUMP	0	\$0.00	\$0.00
	TBM Installation	EACH	0	\$0.00	\$0.00
	OTHER				\$0.00
	TOTAL SURVEY COSTS:				\$0.00

#### GEOTECHNICAL

GEOTECH DESCRIPTION:					
	Borings	EACH	0	\$0.00	\$0.00
	OTHER				\$0.00
	TOTAL GEOTECHNICAL COSTS:				\$0.00

#### CONSTRUCTION

CONSTRUCTION DESCRIPTION:	Repair of storm damage to valves, fencing, and embankment. Replacement of storm damaged gate actuator.				
Rip Rap	LIN FT	TON / FT	TONS	UNIT PRICE	
	0	0.0	0	\$0.00	\$0.00
	0	0.0	0	\$0.00	\$0.00
	0	0.0	0	\$0.00	\$0.00
Filter Cloth / Geogrid Fabric	SQ YD	0		\$0.00	\$0.00
Navigation Aid	EACH	0		\$0.00	\$0.00
Signage	EACH	0		\$0.00	\$0.00
General Excavation / Fill	CU YD	0		\$0.00	\$0.00
Dredging	CU YD	0		\$0.00	\$0.00
Sheet Piles (Lin Ft or Sq Yds)		0		\$0.00	\$0.00
Timber Piles (each or lump sum)		0		\$0.00	\$0.00
Timber Members (each or lump sum)		0		\$0.00	\$0.00
Hardware- Gate Actuator, gate sleeves	LUMP	1		\$0.00	\$0.00
Materials	LUMP	1		\$0.00	\$0.00
Mob / Demob	LUMP	1		\$0.00	\$0.00
Contingency	LUMP	1		\$0.00	\$0.00
General Structure Maintenance	LUMP	1		\$0.00	\$0.00
OTHER -- Veg Plantings	LUMP	1		\$0.00	\$0.00
OTHER -- Sand Fencing	LF	14,400		\$0.00	\$0.00
OTHER				\$0.00	\$0.00
TOTAL CONSTRUCTION COSTS:					\$0.00

**TOTAL OPERATIONS AND MAINTENANCE BUDGET:** **\$4,424.00**



## OPERATION AND MAINTENANCE BUDGET WORKSHEET 2011/2012

Pass Chaland to Grand Bayou Pass Barrier Shoreline Restoration Project / BA-35 / PPL 11

DESCRIPTION	UNIT	EST. QTY.	UNIT PRICE	ESTIMATED TOTAL
O&M Inspection and Report	EACH	1	\$4,561.00	\$4,561.00
General Structure Maintenance (Radio Equip.)	LUMP	1	\$0.00	\$0.00
Engineering and Design	LUMP	1	\$0.00	\$0.00
Operations	LUMP	1	\$0.00	\$0.00
Construction Oversight	LUMP	1	\$0.00	\$0.00

### ADMINISTRATION

LDNR / CRD Admin.	LUMP	1	\$0.00	\$0.00
FEDERAL SPONSER Admin.	LUMP	1	\$0.00	\$0.00
SURVEY Admin.	LUMP	1	\$0.00	\$0.00
OTHER				\$0.00
TOTAL ADMINISTRATION COSTS:				\$0.00

### MAINTENANCE / CONSTRUCTION

#### SURVEY

SURVEY DESCRIPTION:					
	Secondary Monument	EACH	0	\$0.00	\$0.00
	Staff Gauge / Recorders	EACH	0	\$0.00	\$0.00
	Marsh Elevation / Topography	LUMP	0	\$0.00	\$0.00
	TBM Installation	EACH	0	\$0.00	\$0.00
	OTHER				\$0.00
	TOTAL SURVEY COSTS:				\$0.00

#### GEOTECHNICAL

GEOTECH DESCRIPTION:					
	Borings	EACH	0	\$0.00	\$0.00
	OTHER				\$0.00
	TOTAL GEOTECHNICAL COSTS:				\$0.00

#### CONSTRUCTION

CONSTRUCTION DESCRIPTION:						
	Rip Rap	LIN FT	TON / FT	TONS	UNIT PRICE	
		0	0.0	0	\$0.00	\$0.00
		0	0.0	0	\$0.00	\$0.00
		0	0.0	0	\$0.00	\$0.00
	Filter Cloth / Geogrid Fabric		SQ YD	0	\$0.00	\$0.00
	Navigation Aid		EACH	0	\$0.00	\$0.00
	Signage		EACH	0	\$0.00	\$0.00
	General Excavation / Fill		CU YD	0	\$0.00	\$0.00
	Dredging		CU YD	0	\$0.00	\$0.00
	Sheet Piles (Lin Ft or Sq Yds)			0	\$0.00	\$0.00
	Timber Piles (each or lump sum)			0	\$0.00	\$0.00
	Timber Members (each or lump sum)			0	\$0.00	\$0.00
	Hardware		LUMP	1	\$0.00	\$0.00
	Materials		LUMP	1	\$0.00	\$0.00
	Mob / Demob		LUMP	1	\$0.00	\$0.00
	Contingency		LUMP	1	\$0.00	\$0.00
	General Structure Maintenance		LUMP	1	\$0.00	\$0.00
	OTHER -- Veg Plantings		LUMP	1	\$0.00	\$0.00
	OTHER -- Sand Fencing		LF	14,400	\$0.00	\$0.00
	OTHER				\$0.00	\$0.00
	TOTAL CONSTRUCTION COSTS:					\$0.00

**TOTAL OPERATIONS AND MAINTENANCE BUDGET:** \$4,561.00

## OPERATION AND MAINTENANCE BUDGET WORKSHEET 2012/2013

Pass Chaland to Grand Bayou Pass Barrier Shoreline Restoration Project / BA-35 / PPL 11

DESCRIPTION	UNIT	EST. QTY.	UNIT PRICE	ESTIMATED TOTAL
O&M Inspection and Report	EACH	1	\$4,656.00	\$4,656.00
General Structure Maintenance (Radio Equip.)	LUMP	1	\$0.00	\$0.00
Engineering and Design	LUMP	1	\$0.00	\$0.00
Operations	LUMP	1	\$0.00	\$0.00
Construction Oversight	LUMP	1	\$0.00	\$0.00

### ADMINISTRATION

LDNR / CRD Admin.	LUMP	1	\$0.00	\$0.00
FEDERAL SPONSER Admin.	LUMP	1	\$0.00	\$0.00
SURVEY Admin.	LUMP	1	\$0.00	\$0.00
OTHER				\$0.00

**TOTAL ADMINISTRATION COSTS: \$0.00**

### MAINTENANCE / CONSTRUCTION

#### SURVEY

SURVEY DESCRIPTION:					
	Secondary Monument	EACH	0	\$0.00	\$0.00
	Staff Gauge / Recorders	EACH	0	\$0.00	\$0.00
	Marsh Elevation / Topography	LUMP	1	\$0.00	\$0.00
	TBM Installation	EACH	0	\$0.00	\$0.00
	OTHER				\$0.00
	TOTAL SURVEY COSTS:				\$0.00

#### GEOTECHNICAL

GEOTECH DESCRIPTION:					
	Borings	EACH	0	\$0.00	\$0.00
	OTHER				\$0.00
	TOTAL GEOTECHNICAL COSTS:				\$0.00

#### CONSTRUCTION

CONSTRUCTION DESCRIPTION:					
	Rip Rap	LIN FT	TON / FT	TONS	UNIT PRICE
		0	0.0	0	\$0.00
		0	0.0	0	\$0.00
		0	0.0	0	\$0.00
	Filter Cloth / Geogrid Fabric	SQ YD	0	\$0.00	
	Navigation Aid	EACH	0	\$0.00	
	Signage	EACH	0	\$0.00	
	General Excavation / Fill	CU YD	0	\$0.00	
	Dredging	CU YD	0	\$0.00	
	Sheet Piles (Lin Ft or Sq Yds)		0	\$0.00	
	Timber Piles (each or lump sum)		0	\$0.00	
	Timber Members (each or lump sum)		0	\$0.00	
	Hardware	LUMP	1	\$0.00	
	Materials	LUMP	1	\$0.00	
	Mob / Demob	LUMP	1	\$0.00	
	Contingency	LUMP	1	\$0.00	
	General Structure Maintenance	LUMP	1	\$0.00	
	OTHER -- Veg Plantings	LUMP	1	\$0.00	
	OTHER -- Sand Fencing	LF	14,400	\$0.00	
OTHER -- Tidal Features	LUMP	1	\$0.00		
TOTAL CONSTRUCTION COSTS:					

**TOTAL OPERATIONS AND MAINTENANCE BUDGET: \$4,656.00**

## **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: 4/28/2010 Time: 10:00am

Structure No. n/a

Inspector(s): Richard, Merino, Sweeney

Structure Description: n/a

Water Level N/A

Type of Inspection: Annual

Weather Conditions: Windy, Partly Cloudy

Item	Condition	Physical Damage	Corrosion	Photo #	Observations and Remarks
Sand Fencing	Good			1	Still intact and performing well.
Containment Dike	Good			2	Gaps occurring naturally.
Settlement Plates	Good				Still in place.
Plantings	Good			3,4	About 85% still alive and growing well.