



**Coastal Protection and Restoration
Authority of Louisiana**

**Office of Coastal Protection and
Restoration**

2009 Annual Inspection Report

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

State Project Number BA-38
Priority Project List 11

July 1, 2009
Plaquemines Parrish

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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) and is located at the approximate coordinates 30° 08' 00" N latitude and 92° 45' 00" W longitude. The other project area is located at Pelican Island between Fontanille Pass (Empire Waterway) and Scofield Pass along the Plaquemines barrier shoreline and is located 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. 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 Fontanelle Pass 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 Project (BA-38-2) was completed in January, 2007. At this time construction has not begun on the Pelican Island Restoration Project (BA-38-1).

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 Chaland Headland Project (BA-38-2) was held on September 25, 2008, by representatives of the OCPR Barry Richard and Brady Carter, and Rachel Sweany representing National Marine Fisheries Service (NMFS). This inspection was prompted by the coastal Louisiana landfall of Hurricanes Gustav and Ike. Photographs of that inspection are included in Appendix B of this report.

A subsequent site visit occurred on May 13, 2009. The purpose of this trip was to show FEMA representatives the extent of the 2008 hurricane damage associated with claims made by the state. Conclusions from this visit can be found in Section V.

IV. Inspection Results

Sand Fence

All of the sand fencing was relocated outside of the project area by the storms. (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. In May, 2008, members of the OCPR and NMFS hydraulically cut 4 gaps into the containment dike using a high pressure pump. At the time of the inspection these gaps were larger and allowing water to exchange between the project area and outer marshes and canals. Photos #2 and 3)

Settlement Plates

One settlement plate was turned on its side (Photo #4). The other six are undamaged.

Vegetative Plantings

Most of the vegetative plantings were damaged due to the storms.

V. Conclusions

The Chaland Headland Project area took a big hit during the 2008 hurricane season. The sand fencing will require replacement as well as the vegetative plantings since most of those were displaced. The remaining settlement plates will continue to be surveyed as scheduled while the damaged plate should be removed. A good majority of the beach material is now located within the marsh template and some can be found farther north of the project area. The project will continue to be monitored for any changes and the required maintenance work should be performed in a timely manner.

During the May, 2009 site visit there were no major changes noted. Natural vegetation is beginning to grow throughout the now higher marsh platform and some transported sediments are beginning to build up on the beach. However, the sand fencing and vegetative plantings are still very much needed to assist in the recovery of this system.

VI. Recommendations

It is the recommendation of the OCPR/NOFO that the sand fencing and vegetative plantings be replaced as necessary.

Immediate Repairs

- Sand Fencing and Vegetative Plantings.

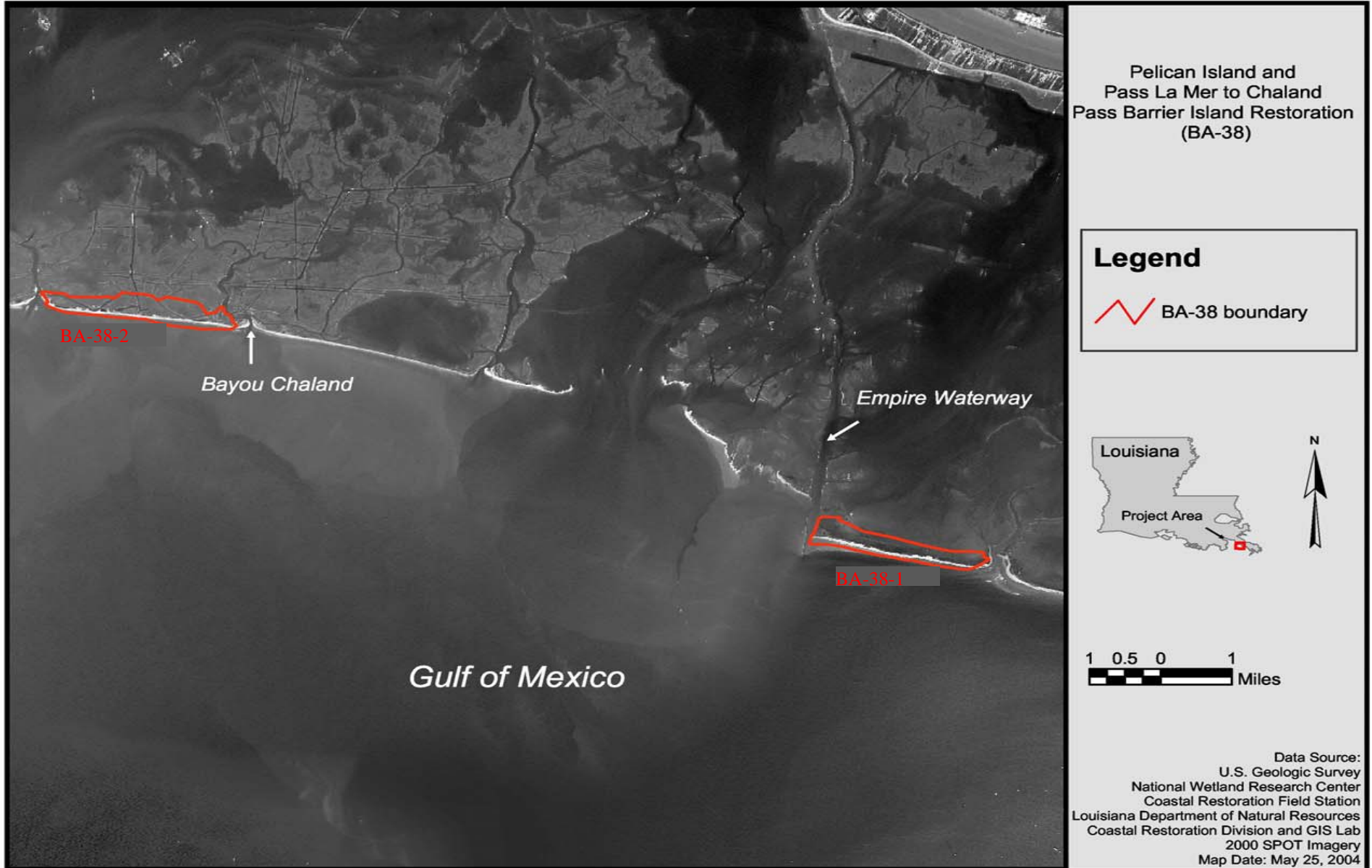
Programmed Maintenance

- No Programmed Maintenance is scheduled at this time.

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Appendix A

Project Features Map



Appendix B

Photographs



Photo #1 –Damage to Sand Fence (now in surf line).



Photo #2 – Hydraulic Dike Gapping.

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Photo #3 – Dike Gap (at 6 months).



Photo #4 – Settlement Plate (overturned).

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Appendix C

Three Year Budget Projection

Pelican Island and Pass La Mer to Chaland Pass Restoration Project (BA-38) / PO-24 / PPL 8
Three-Year Operations & Maintenance Budgets 07/01/2009 - 06/30/2012

Project Manager
 Barry Richard

O & M Manager
 Barry Richard

Federal Sponsor
 NMFS

Prepared By
 Barry Richard

	2009/2010	2010/2011	2011/2012
Maintenance Inspection	\$6,244.00	\$6,369.00	\$6,406.00
General Maintenance	\$0.00	\$0.00	\$0.00
Structure Operation	\$0.00	\$0.00	\$0.00
Administration	\$0.00	\$0.00	\$0.00
Maintenance/Rehabilitation			

09/10 Description:

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

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.	\$ -

	2009/2010	2010/2011	2011/2012
Total O&M Budgets	\$ 6,244.00	\$ 6,369.00	\$ 6,406.00

O & M Budget (3 yr Total)	\$ 19,019.00
Unexpended O & M Budget	\$ 1,297,500.00
Remaining O & M Budget (Projected)	\$ 1,278,481.00

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OPERATION AND MAINTENANCE BUDGET WORKSHEET 2009/2010

Pelican Island and Pass La Mer to Chalard Pass Restoration Project (BA-38) / PO-24 / PPL 8

DESCRIPTION	UNIT	EST. QTY.	UNIT PRICE	ESTIMATED TOTAL
O&M Inspection and Report	EACH	1	\$6,244.00	\$6,244.00
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	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:	DESCRIPTION	UNIT	EST. QTY.	UNIT PRICE	ESTIMATED TOTAL
	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:	DESCRIPTION	UNIT	EST. QTY.	UNIT PRICE	ESTIMATED TOTAL
	Borings	EACH	0	\$0.00	\$0.00
	OTHER				\$0.00
TOTAL GEOTECHNICAL COSTS:					\$0.00

CONSTRUCTION

CONSTRUCTION DESCRIPTION:	DESCRIPTION	UNIT	EST. QTY.	UNIT PRICE	ESTIMATED TOTAL
	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	\$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			\$0.00	\$0.00
	OTHER			\$0.00	\$0.00
	OTHER			\$0.00	\$0.00
TOTAL CONSTRUCTION COSTS:					\$0.00

TOTAL OPERATIONS AND MAINTENANCE BUDGET: \$6,244.00

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OPERATION AND MAINTENANCE BUDGET WORKSHEET 2010/2011

Pelican Island and Pass La Mer to Chaland Pass Restoration Project (BA-38) / PO-24 / PPL 8

DESCRIPTION	UNIT	EST. QTY.	UNIT PRICE	ESTIMATED TOTAL
O&M Inspection and Report	EACH	1	\$6,369.00	\$6,369.00
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	1	\$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	0.0	0	\$0.00
	0	0.0	0	\$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			\$0.00	\$0.00
OTHER			\$0.00	\$0.00
OTHER			\$0.00	\$0.00
TOTAL CONSTRUCTION COSTS:				\$0.00

TOTAL OPERATIONS AND MAINTENANCE BUDGET: \$6,369.00

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OPERATION AND MAINTENANCE BUDGET WORKSHEET 2011/2012

Pelican Island and Pass La Mer to Chalant Pass Restoration Project (BA-38) / PO-24 / PPL 8

DESCRIPTION	UNIT	EST. QTY.	UNIT PRICE	ESTIMATED TOTAL
O&M Inspection and Report	EACH	1	\$6,406.00	\$6,406.00
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	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:	UNIT	EST. QTY.	UNIT PRICE	ESTIMATED TOTAL
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:	UNIT	EST. QTY.	UNIT PRICE	ESTIMATED TOTAL
Borings	EACH	0	\$0.00	\$0.00
OTHER				\$0.00
TOTAL GEOTECHNICAL COSTS:				\$0.00

CONSTRUCTION

CONSTRUCTION DESCRIPTION:	UNIT	EST. QTY.	UNIT PRICE	ESTIMATED TOTAL
Rip Rap	LIN FT	0	\$0.00	\$0.00
	TON / FT	0.0	\$0.00	\$0.00
	TONS	0	\$0.00	\$0.00
		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			\$0.00	\$0.00
OTHER			\$0.00	\$0.00
OTHER			\$0.00	\$0.00
TOTAL CONSTRUCTION COSTS:				\$0.00

TOTAL OPERATIONS AND MAINTENANCE BUDGET: \$6,406.00

Appendix D

Field Inspection Form

MAINTENANCE INSPECTION REPORT CHECK SHEET

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

Date of Inspection: 9/25/2008 Time: 10:00am

Structure No. n/a

Inspector(s): Richard, Carter, Sweeney

Structure Description: n/a

Water Level N/A

Type of Inspection: Post Storm

Weather Conditions: Mild, sunny

Item	Condition	Physical Damage	Corrosion	Photo #	Observations and Remarks
Sand Fencing	Bad			1	This feature is no longer present in the project area.
Containment Dike	Good			2, 3	Gaps created.
Settlement Plates	Fair			4	One is turned on its side, the other 6 are ok.
Plantings	Bad				Most plantings damaged.