



Coastal Protection and Restoration Authority of Louisiana

Office of Coastal Protection and Restoration

2008 Annual Inspection Report

Bayou Chevee Shoreline Protection

State Project Number PO-22
Priority Project List 5

July 13, 2009
Orleans Parish

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I. Introduction

The Bayou Chevee Shoreline Protection Project (PO-22) is located within the northern section of the Bayou Sauvage National Wildlife Refuge, approximately 2 miles west of Chef Pass. Project features are located entirely in Orleans Parish and the project area encompasses 212 acres. The site was inspected on January 15, 2009, by representatives of OCPR.

II. Project Description and History

On December 7, 2001, construction of the Bayou Chevee project, located on the southern shoreline of Lake Pontchartrain, was completed. The project is divided into two areas, the North Cove area and the South Cove area (Appendix A). The rock dike protects both areas from shoreline erosion.

High wave energies associated with Lake Pontchartrain and Chef Pass have caused extensive erosion along the southern Lake Pontchartrain shoreline that has been estimated to average 15 feet per year. Thus, without the project, the shoreline erosion would have amounted to 300 feet in 20 years. The project was intended to alleviate this problem through the construction of 8,875 feet (extended from the originally planned 5,690 feet by contract modification) of new rock dike that extends across both the North and South Coves. A pre-existing U.S. Fish and Wildlife Service rock dike located between the North Cove and the South Cove serves to link the dike sections into one continuous rock structure.

The principal project features include:

1. Rock dike – North Cove. Dike length = 4,825 feet.
2. Rock dike – South Cove. Dike length = 4,050 feet.
3. Both dikes were constructed with following dimensions:
 - a. Height – 3.6 feet.
 - b. Crown width – 4.9 feet.
 - c. Two fish dips on each of North Cove and South Cove dikes.
 - d. Settling plate on east-southeast side of each fish dip
4. Flotation channels were constructed along the length of the dikes. The Channels were constructed a minimum of 82 feet from the center of the dike and silted in shortly after construction.

III. Inspection Purpose and Procedures

The purpose of the annual inspection of the Bayou Chevee Shoreline Protection Project (PO-22) 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, 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 September 3, 2003). 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 are outlined in Section II.

An inspection of the Bayou Chevee Shoreline Protection Project (PO-22) was held on January 15, 2009, by representatives of OCPR Brady Carter and Barry Richard. This inspection was prompted by the coastal Louisiana landfall of Hurricanes Gustav and Ike. Photographs from an inspection performed earlier by plane are included in Appendix B of this report.

IV. Inspection Results

Rock Rip Rap

There was no visible damage to the dikes. Structures appear to be settling, however, it was not noticeable enough to warrant any action at this time.

V. Conclusions

The structures on the North and South Coves appear to be performing as designed. The storm surge from Hurricane Katrina caused some damage to the marsh inside of the project area. Most of this damage occurred in the South Cove section of the project, near Chef Pass, where the structure ends and leaves a portion of the cove exposed. This project would be greatly benefited by extending the structure on the South Cove to meet Chef Pass.

VI. Recommendations

There is no need for any maintenance activity at this time. The marsh situation will continue to be monitored.

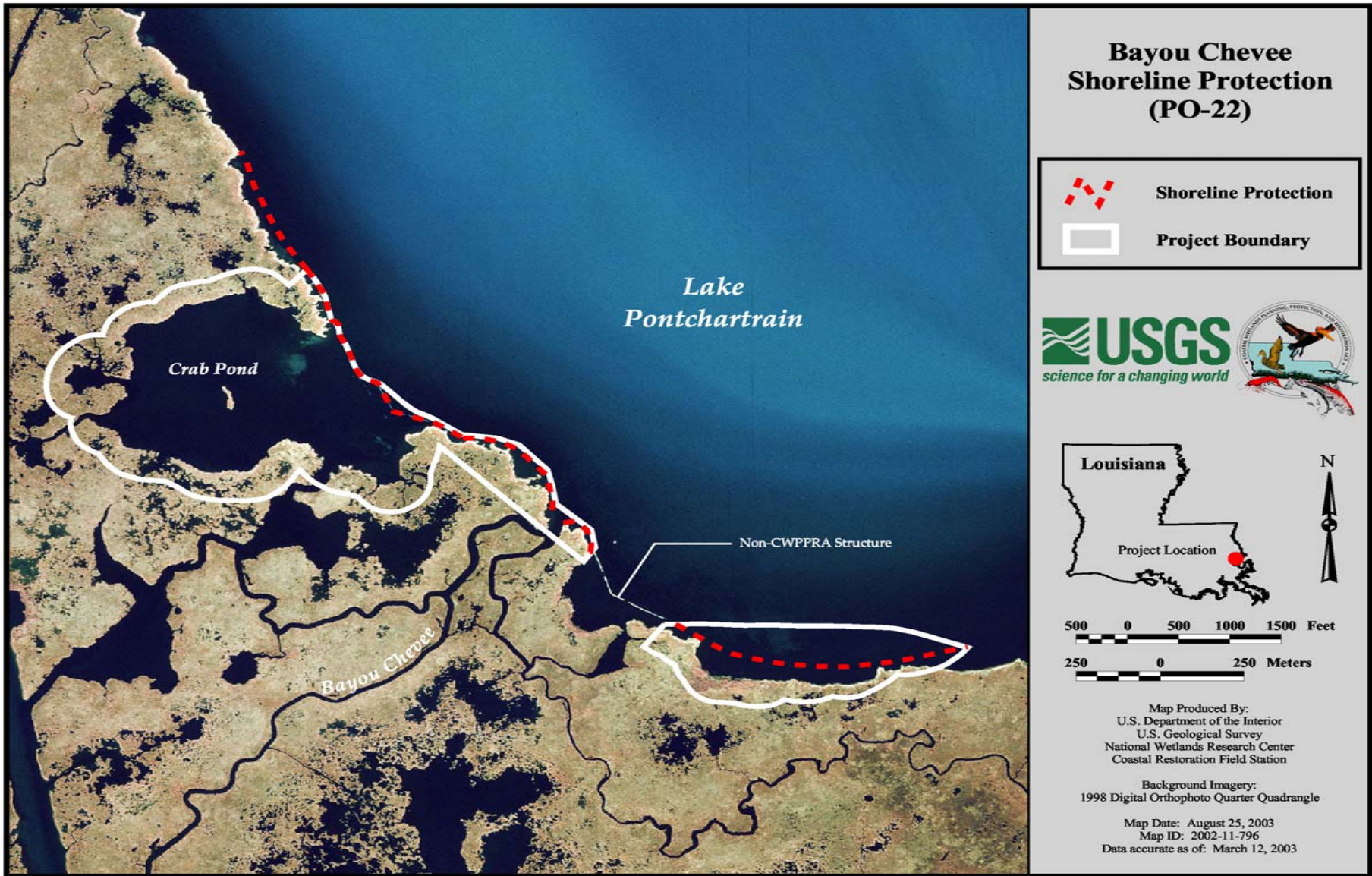
Immediate Repairs

- None at this time.

Programmed Maintenance

- None at this time.

Appendix A
Project Features Map



Appendix B
Photographs



Photo #1 – North Cove Rock Dike.



Photo #2 – Bayou Chevee Rock Dike.

Appendix C

Three Year Budget Projection

**BAYOU CHEVEE SHORELINE PROTECTION PROJECT / PO-22 / PPL 5
 Three-Year Operations & Maintenance Budgets 07/01/2009 - 06/30/2012**

Project Manager
 Barrt Richard

O & M Manager
 Barry Richard

Federal Sponsor
 USACE

Prepared By
 Barry Richard

	2009/2010	2010/2011	2011/2012
<i>Maintenance Inspection</i>	\$0.00	\$3,517.00	\$0.00
<i>General Maintenance</i>	\$0.00	\$0.00	\$0.00
<i>Structure Operation</i>	\$0.00	\$0.00	\$0.00
<i>Administration</i>	\$0.00	\$0.00	\$0.00
<i>Maintenance/Rehabilitation</i>			

09/10 Description:

<i>E&D</i>	\$0.00
<i>Construction</i>	\$0.00
<i>Construction Oversight</i>	\$0.00
<i>Sub Total - Maint. And Rehab.</i>	\$ -

10/11 Description:

<i>E&D</i>	\$0.00
<i>Construction</i>	\$0.00
<i>Construction Oversight</i>	\$0.00
<i>Sub Total - Maint. And Rehab.</i>	\$ -

11/12 Description:

<i>E&D</i>	\$0.00
<i>Construction</i>	\$0.00
<i>Construction Oversight</i>	\$0.00
<i>Sub Total - Maint. And Rehab.</i>	\$ -

	2009/2010	2010/2011	2011/2012
<u>Total O&M Budgets</u>	\$ -	\$ 3,517.00	\$ -

<u>O & M Budget (3 yr Total)</u>	\$ 3,517.00
<u>Unexpended O & M Budget</u>	\$ 223,282.50
<u>Remaining O & M Budget (Projected)</u>	\$ 219,765.50

OPERATION AND MAINTENANCE BUDGET WORKSHEET 2009/2010
BAYOU CHEVEE SHORELINE PROTECTION PROJECT / PO-22 / PPL 5

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

TOTAL OPERATIONS AND MAINTENANCE BUDGET: \$0.00

OPERATION AND MAINTENANCE BUDGET WORKSHEET 2010/2011
BAYOU CHEVEE SHORELINE PROTECTION PROJECT / PO-22 / PPL 5

DESCRIPTION	UNIT	EST. QTY.	UNIT PRICE	ESTIMATED TOTAL
O&M Inspection and Report	EACH	1	\$3,517.00	\$3,517.00
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	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:	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
	Structure survey	LUMP	1	\$0.00	\$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	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(cap 20%)	LUMP	1	\$0.00	\$0.00
	Variable Crest Weir Structure Repair	LUMP	1	\$0.00	\$0.00
	OTHER			\$0.00	\$0.00
	OTHER			\$0.00	\$0.00
TOTAL CONSTRUCTION COSTS:					\$0.00

TOTAL OPERATIONS AND MAINTENANCE BUDGET: \$3,517.00

OPERATION AND MAINTENANCE BUDGET WORKSHEET 2011/2012
 BAYOU CHEVEE SHORELINE PROTECTION PROJECT / PO-22 / PPL 5

DESCRIPTION	UNIT	EST. QTY.	UNIT PRICE	ESTIMATED TOTAL
O&M Inspection and Report	EACH	1	\$0.00	\$0.00
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	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:	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
Structure survey	LUMP	1	\$0.00	\$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
Navagation 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(cap 20%)	LUMP	1	\$0.00	\$0.00
Variable Crest Weir Structure Repair	LUMP	1	\$0.00	\$0.00
OTHER			\$0.00	\$0.00
OTHER			\$0.00	\$0.00
TOTAL CONSTRUCTION COSTS:				\$0.00

TOTAL OPERATIONS AND MAINTENANCE BUDGET: **\$0.00**

Appendix D
Field Inspection Form

MAINTENANCE INSPECTION REPORT CHECK SHEET

Project No. / Name: **PO-22 Bayou Chevee Shoreline Protection**

Date of Inspection: 1/15/2009

Time: 9:30 am

Structure No. no number assigned

Inspector(s): Richard Carter

Structure Description: Foreshore Rock Dike

Water Level

Inside: N/A

Outside: N/A

Type of Inspection: Post Storm

Weater Conditions: Cold, Sunny

Item	Condition	Pysical Damage	Corrosion	Photo #	Observations and Remarks
Foreshore Rock Dike North Cove	Good	May Be Sinking	None		Observation: The structure appeared in good condition. It may be sinking but not significantly.
Foreshore Rock Dike South Cove	Good	May Be Sinking	None		The marsh behind the structure has been greatly damaged by the storm surge.
USFWS Dike Segment	Good	May Be Sinking	None		Remarks:
Exposed Shore South of Dike	Poor	Inundated/ Washed Away	N/A		