



Coastal Protection and  
Restoration Authority of Louisiana

**State of Louisiana**

**Coastal Protection and Restoration  
Authority of Louisiana (CPRA)**

**2011/2012 Annual Inspection  
Report**

for

**BOSTON CANAL/VERMILION  
BAY SHORE RESTORATION  
PROJECT  
(TV-09)**

State Project Number TV-09  
Priority Project List 2

May 16, 2012  
Vermilion Parish

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## **I. Introduction**

The Boston Canal/Vermilion Bay Shore Restoration Project consists of approximately 466 acres of brackish marsh and open water. It is located in Vermilion Parish, approximately 12 miles south of Delcambre, LA on the northern bank of Vermilion Bay and at the mouth of Boston Canal. It is bounded on the south by Vermilion Bay, on the west by Mud Point, and on the east by Oaks Canal. (See Appendix A).

The Boston Canal/Vermilion Bay Shore Restoration Project was authorized by Section 303(a) of Title III Public Law 101-646, the Coastal Wetlands Planning Protection and Restoration Act (CWPPRA) enacted on November 29, 1990 as amended and approved on the second Priority Project List. The Boston Canal/Vermilion Bay Shore Restoration Project has a twenty year (20 year) economic life, which began in October 1995.

## **II. Inspection Purpose and Procedures**

The purpose of the annual inspection of the Boston Canal/Vermilion Bay Shore Restoration Project (TV-09) 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, CPRA 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, 2002). The annual inspection report also contains a summary of maintenance projects, if any, which were completed since completion of constructed project features 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.

An inspection of the Boston Canal/Vermilion Bay Shore Restoration Project (TV-09) was held on May 16, 2012 under sunny skies and mild temperatures. In attendance were Mel Guidry, Stan Aucoin, Garrett Broussard, and Jody White of CPRA. NRCS was represented by Dale Garber. Parties met at the Maxie Pierce Landing off Hwy 333 in Intracoastal City. The annual inspection began at approximately 12:50 p.m.

The field inspection included a complete visual inspection of all features. Staff gauge readings were used, when available, to determine approximate elevations of water, rock dikes, and other project features. Photographs were taken at each project feature (see Appendix B) and Field Inspection notes were completed in the field to record measurements and deficiencies (see Appendix D).

## **III. Project Description and History**

The Boston Canal Project involves the installation and maintenance of approximately 1,405 linear feet of foreshore rock dike along the northern bank of Vermilion Bay and both east and west banks of Boston Canal at its convergence with Vermilion Bay. Also included is the

installation of approximately 34,000 plantings of smooth cordgrass (~14 miles) along the northern bank of Vermilion Bay between Mud Point and Oaks Canal. The purpose of the project is to maintain the integrity of approximately 466 acres of wetlands in the vicinity of Boston Canal by stabilizing the northern bank of the Vermilion Bay shoreline and to prevent further regression of the banks at the mouth of Boston Canal.

The principal project features include:

- 1 - Approximately 1,405 linear feet of rock breakwater on the northern bank Vermilion Bay at the mouth of the Boston Canal in Vermilion Parish
- 2 - Approximately 1100 linear feet of sediment fencing which consists of all lumber, hardware and woven geotextile fabric and placed within the confines of the rock breakwaters.
- 3 - Approximately 34,000 smooth cord grass plants planted between Mud Point and Oaks Canal along the northern shoreline of Vermilion Bay.

#### **IV. Summary of Past Operation and Maintenance Projects**

**General Maintenance:** Below is a summary of completed maintenance projects and operation tasks performed since October 1995, the construction completion date of the Boston Canal/Vermilion Bay Shore Protection Project.

**Maintenance Project – Loland Broussard:** This maintenance project included the modification of the sediment trapping fences constructed behind the rock dikes by Loland Broussard of NRCS in concurrence with LDNR and at no cost to CWPPRA on March 7, 2002. Modification of the fences involved cutting the geotextile panels from the top of the fence down to approx. 6" below the mud line (~ 30") and removing the panel. The 4x4 wooden posts were not disturbed and left intact. The reinforcement wire behind each panel was severely deteriorated and virtually non-existent. The southern most fences were preventing sediment from filling the entire area behind the dikes. Since the fences have been removed, sediment has been more evenly distributed. Vegetation continues to increase.

**Structure Operations:** There are no operations associated with this project.

#### **V. Inspection Results**

##### **Rock Dikes**

The rock dikes are in excellent condition. The Vermilion Bay shoreline erosion to the west and east of the rock dike tie-ins have not worsened. It was noted during previous inspections that a small gap left on the western tie-in during the original construction caused shoreline erosion. Recommendations made during the 2003 O & M inspection were reconsidered due

to costs and logistics associated with the repairs. These areas will continue to be monitored. If it is seen that the situation worsens, steps will be taken to stabilize the area at that time. The west day marker installed as part of the TV-09 project is missing; however, the piling remains. The east day marker is still present. Additional day/night markers have been installed by others. (Photos: Appendix B, Photos 1 - 5)

#### **Sediment Fencing**

The sediment fencing was removed in 2002 as stated in Section IV above. Vegetation has established against the rock dike.

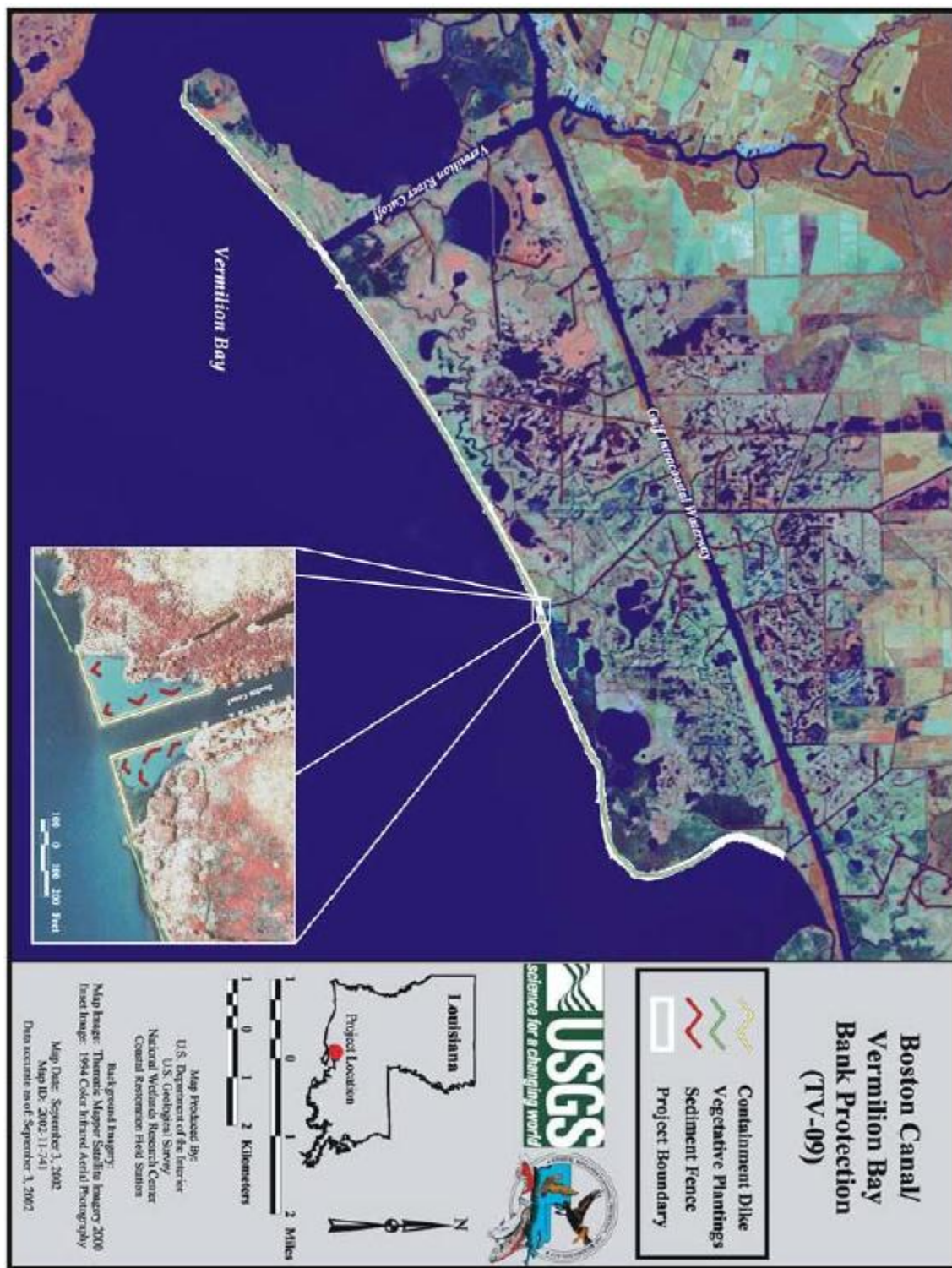
#### **Smooth Cordgrass plantings**

The shoreline plantings were not inspected on this trip. The vegetation in the area adjacent to the mouth of the Boston Canal, including the vegetation behind the rock dikes, is in good condition. (Photos: Appendix B, Photo 2-5)

## **VI. Conclusions and Recommendations**

The Boston Canal/Vermilion Bay Shore Restoration Project is in good condition and functioning as intended.

**Appendix A**  
**Project Features Map**



**Appendix B**  
**Photographs**





**Photo No. 1,** View of Boston Canal Looking North into Canal



**Photo No. 2,** Rock Dike along the Bay Shore Looking West, Vegetation behind Rock



**Photo No. 3, View of East Rock Dike, Vegetation, and Signs**



**Photo No. 4, East Tie In at Shoreline**



**Photo No. 5, West Tie In at Shoreline**

## **Appendix C**

### **Three Year Budget Projection**

**BOSTON CANAL/ TV-09 / PPL 2**  
**Three-Year Operations & Maintenance Budgets 07/01/2012 - 06/30/2015**

<u>Project Manager</u> Pat Landry	<u>O &amp; M Manager</u> Mel Guidry	<u>Federal Sponsor</u> NRCS	<u>Prepared By</u> Mel Guidry
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	2012/2013 (-17)	2013/2014 (-18)	2014/2015 (-19)
<b>Maintenance Inspection</b>	\$ 6,269.00	\$ 6,457.00	\$ 6,651.00
<b>Structure Operation</b>			
<b>State Administration</b>		\$ -	\$ -
<b>Federal Administration</b>		\$ -	\$ -

**Maintenance/Rehabilitation**

12/13 Description: Install staff gage

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

13/14 Description

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

14/15 Description:

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

	2012/2013 (-17)	2013/2014 (-18)	2014/2015 (-19)
<b>Total O&amp;M Budgets</b>	\$ 6,269.00	\$ 6,457.00	\$ 6,651.00

<b>O &amp; M Budget (3 yr Total)</b>	\$ 19,377.00
<b>Unexpended O &amp; M Budget</b>	\$ 129,095.00
<b>Remaining O &amp; M Budget (Projected)</b>	\$ 109,718.00

**Appendix D**  
**Field Inspection Form**

Annual Inspection Report  
 BOSTON CANAL/VERMILION BAY SHORE RESTORATION PROJECT  
 State Project No. TV-09

MAINTENANCE INSPECTION REPORT CHECK SHEET							
Project No. / Name:		Boston Canal/Vermilion Bay Bank Protection		Date of Inspection:	May 16, 2012	Time:	12:50 p.m.
Structure No.						Inspector(s): Mel Guidry, Stan Aucoin, Jody White, Garrett Broussard (CPRA) Dale Garber (NRCS)	
Structure Description:		Rock Dike		Water Level Inside: _____ Outside: <u>0.2 ft at Maxie Pierce Landing Staff Gauge</u>			
Type of Inspection:		Annual		Weather Conditions: sunny and mild temperatures			
Item	Condition	Physical Damage	Corrosion	Photo #	Observations and Remarks		
Steel Bulkhead / Caps	N/A						
Steel Grating	N/A						
Stop Logs	N/A						
Hardware	N/A						
Timber Piles	N/A						
Timber Wales	N/A						
Galv. Pile Caps	N/A						
Cables	N/A						
Signage / Supports	Good			2,3,4	Day mark sign is in place on east dike. Only piling is present on west dike. New day and night markers installed by others.		
Rock Dike	Excellent			1,2,3	Rock Dike is in excellent condition. Southeast and southwest tie-ins not significantly worse. Will continue to be monitored.		
Vegetative Plantings	N/A			4	Not inspected on this trip.		
What are the conditions of the existing levees? Are there any noticeable breaches? Settlement of rock plugs and rock weirs? Position of stoplogs at the time of the inspection? Are there any signs of vandalism?							