State of Louisiana
Coastal Protection and Restoration Authority

2015 Annual Inspection Report

for

Barataria Bay Waterway East
Shoreline Protection

State Project Number BA-26
Priority Project List 6

August 24, 2015
Jefferson Parish

Prepared by:

Coastal Protection and Restoration Authority
New Orleans Regional Office
CERM, Suite 309
2045 Lakeshore Dr.
New Orleans, LA 70122
Annual Inspection Report
Barataria Bay Waterway East Bank Protection
State Project No. BA-26

Table of Contents

I. Introduction ......................................................................................................................... 1
II. Project Description and History ....................................................................................... 1
III. Inspection Purpose and Procedures ............................................................................... 1
IV. Inspection Results ............................................................................................................. 2
V. Conclusions ....................................................................................................................... 2
VI. Recommendations ........................................................................................................... 2
    Immediate Repairs ............................................................................................................. 2
    Programmed Maintenance ................................................................................................. 2

Appendices

Appendix A  Project Features Map
Appendix B   Photographs
Appendix C   Three Year Budget Projections
Appendix D   Field Inspection Form
I. Introduction

The Barataria Bay Waterway East Bank Protection Project (BA-26) encompasses 2,790 acres (880 ha) of brackish marsh and open water habitat on the east bank of the Barataria Bay Waterway located in Jefferson Parish, Louisiana approximately 1.5 miles south of Lafitte. The Project is bounded by the Barataria Bay Waterway to the west, various canals to the east and south, and The Pen and Bayou Dupont to the north (Appendix A).

II. Project Description and History

The Barataria Bay Waterway East Bank Protection Project includes approximately 17,100 linear feet (3.2 miles) of foreshore rock dike bank line protection and an earthen hydrologic barrier created from dredged material from the Barataria Bay Waterway Channel placed to the East along the rock dike within the project area. The rock structure was constructed with a synthetic clay core to reduce its overall weight. The clay material was encapsulated in geotextile bags and placed along the centerline of the dike. The dike is intended to re-establish the eastern bank of the Barataria Bay Waterway and to protect the adjacent marsh from unnatural water exchange and subsequent erosion which is exacerbated by wakes from vessel traffic on the waterway.

Project construction began on February 19, 2001, and was completed on May 21, 2001. Project life is estimated to be 20 years. Annual project inspections are planned.

In December 2005, a contract to raise these structures was awarded and resulted in the placement of 17,417 tons of rock riprap on the settled sections of the structure. The work was completed on January 24, 2006.

III. Inspection Purpose and Procedures

The purpose of the annual inspection of the Barataria Bay Waterway East Bank Protection Project (BA-26) is to evaluate the constructed project features to identify any deficiencies and to prepare a report detailing the condition of project features and recommended corrective actions. Should it be determined that corrective actions are needed, CPRA shall provide a detailed cost estimate for engineering, design, supervision, inspection, and construction contingencies, and an assessment of the urgency of such repairs (O&M Plan August 9, 2002). 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 events completed on the project are outlined in Section II.
An inspection of the Barataria Bay Waterway East Bank Protection Project (BA-26) was held on June 17, 2015, by Luke Prendergast and Melissa Hymel of CPRA, along with Quin Kinler of NRCS. Photographs of that inspection are included in Appendix B of this report.

IV. Inspection Results

The overall condition of the rock shoreline protection structure was good (Photo #1). Some portions of the rock structure exhibited minor settlement adjacent to and south of the marsh creation portion of the South Shore of the Pen Project (BA-41, Photo #2). Accretion and vegetation were observed behind the rock structure at the north end of the project (Photo #3).

V. Conclusions

The Barataria Bay Waterway East Protection Project (BA-26) is performing adequately. The rock dike is protecting the existing marsh as designed. Some settlement has been observed and will continue to be monitored; however, no maintenance is required at this time.

VI. Recommendations

Immediate Repairs

- No immediate repairs are necessary at this time.

Programmed Maintenance

- Continue to monitor the settlement of the rock structure.
Appendix A

Project Features Map
Appendix B

Photographs
Annual Inspection Report
Barataria Bay Waterway East Bank Protection
State Project No. BA-26

Photo #1 – Shoreline Protection

Photo # 2 – Some Settlement Noted
Photo # 3 – Accretion & Vegetation
Appendix C

Three Year Budget Projection
Barataria Bay Waterway East Bank Protection (BA-26)

Federal Sponsor: NRCS

Construction Completed: 5/2001

PPL 6

Current Approved O&M Budget

<table>
<thead>
<tr>
<th>Year</th>
<th>FY02</th>
<th>FY03</th>
<th>FY04</th>
<th>FY05</th>
<th>FY06</th>
<th>FY07</th>
<th>FY08</th>
<th>FY09</th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
<th>FY13</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
<th>FY20</th>
<th>FY21</th>
</tr>
</thead>
<tbody>
<tr>
<td>State O&amp;M</td>
<td>$1,228,500</td>
<td>$1,228,500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corps Admin</td>
<td>$0</td>
<td>$0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal S&amp;A</td>
<td>$0</td>
<td>$0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$1,228,500</td>
<td>$1,228,500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Projected O&M Expenditures

<table>
<thead>
<tr>
<th>Category</th>
<th>FY02</th>
<th>FY03</th>
<th>FY04</th>
<th>FY05</th>
<th>FY06</th>
<th>FY07</th>
<th>FY08</th>
<th>FY09</th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
<th>FY13</th>
<th>FY14</th>
<th>FY15</th>
<th>FY16</th>
<th>FY17</th>
<th>FY18</th>
<th>FY19</th>
<th>FY20</th>
<th>FY21</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance Inspection</td>
<td>$4,159</td>
<td>$4,267</td>
<td>$4,378</td>
<td>$4,492</td>
<td>$4,609</td>
<td>$4,728</td>
<td>$26,633</td>
<td>$12,804</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Maintenance</td>
<td>$0</td>
<td>$0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surveys</td>
<td>$0</td>
<td>$0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sign Replacement</td>
<td>$0</td>
<td>$0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Federal S&amp;A</td>
<td>$0</td>
<td>$0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintenance/Rehabilitation</td>
<td>$0</td>
<td>$0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E&amp;D</td>
<td>$0</td>
<td>$0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>$0</td>
<td>$0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction Oversight</td>
<td>$0</td>
<td>$0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>$4,159</td>
<td>$4,267</td>
<td>$4,378</td>
<td>$4,492</td>
<td>$4,609</td>
<td>$4,728</td>
<td>$26,633</td>
<td>$12,804</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

O&M Expenditures from COE Lana Report: $778,468
Remaining Available O&M Budget: $387,959
Current 3-Year Budget: $12,804
Current Project Life Budget less COE Admin: $1,228,500

Add'l Funding amount needed thru FY16-FY18: ($375,155)
Project Life Budget Request Amount: ($361,326)

Total Estimated O&M Expenditures (as of May 2015): $840,541
Appendix D

Field Inspection Form
# Annual Inspection Report

Baratia Bay Waterway East Bank Protection  
State Project No. BA-26

## Project Information

- **Project No. / Name:** BA-26 Baratia Waterway (East) Shoreline Protection  
  - **Date of Inspection:** 6/17/2015  
  - **Time:** 11:45 am

## Inspector Details

- **Inspector(s):** Prendergast, Kinler, Hymel

## Structure Information

- **Structure No.:** n/a  
  - **Structure Description:** Foreshore Rock Dike
  - **Water Level:** Inside: N/A, Outside: 1.34'

## Type of Inspection

- **Type of Inspection:** Annual

## Weather Conditions

- **Weather Conditions:** Mostly sunny, light wind

## Inspection Report

<table>
<thead>
<tr>
<th>Item</th>
<th>Condition</th>
<th>Physical Damage</th>
<th>Corrosion</th>
<th>Photo #</th>
<th>Observations and Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreshore Rock Dike</td>
<td>Good</td>
<td>None</td>
<td>N/A</td>
<td>1, 2, 3</td>
<td>Minor settlement noted at some locations. No maintenance needs identified at this time.</td>
</tr>
<tr>
<td>Settlement Plates</td>
<td>Good</td>
<td>None</td>
<td>None</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
