



**State of Louisiana
Department of Natural Resources
Coastal Engineering Division**

**2005/2006 Annual Inspection
Report**

for

**SEDIMENT TRAPPING AT THE
JAWS PROJECT (TV-15)**

State Project Number TV-15
Priority Project List 9

October 11, 2005
Vermilion Parish

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I. Introduction

The Sediment Trapping at the Jaws Project (State Project No. TV-15) is located in the Teche/Vermilion Basin in the northeastern corner of West Cote Blanche Bay in St. Mary Parish near the intersection of the Charenton Drainage Canal and the bay. This area is known as “The Jaws”. (See Appendix A).

The Sediment Trapping at the Jaws 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 ninth Priority Project List. The Sediment Trapping at the Jaws Project has a twenty year (20 year) economic life, which began in December 2004.

II. Inspection Purpose and Procedures

The purpose of the annual inspection of the Sediment Trapping at the Jaws Project (T/V-15) 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, LDNR 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, 2003**). The annual inspection report also contains a summary of maintenance projects 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. A summary of past operation and maintenance projects completed since completion of the Sediment Trapping at the Jaws Project are outlined in Section IV.

In 2003, the CWPPRA Task Force determined, due to the fact that LDNR was responsible for the operation and maintenance phase of the vast majority of CWPPRA projects, that LDNR would be the responsible party for all Post Storm/Hurricane Assessments. After Hurricanes Katrina and Rita, every project appeared to have been impacted by the storms; therefore, LDNR determined that all projects should be assessed for damages (Broussard, 2006). With concurrence from the federal sponsor, LDNR has decided to use the information obtained during this post hurricane assessment in this Annual Maintenance Inspection.

An inspection of the Sediment Trapping at the Jaws Project (TV-15) was held on October 11, 2005 under clear skies and mild temperatures. In attendance were Stan Aucoin, Herb Juneau, Pat Landry, Darrell Pontiff, Dewey Billodeau, & Justin Price (DNR Lafayette); Ismail Merhli, and Shannon Haynes (DNR Baton Rouge). Representatives from NOAA Fisheries were invited but were unable to attend. The annual inspection began at the northern most terrace.

The field inspection included a visual inspection of randomly selected areas of the project site. Staff gauge readings and existing temporary benchmarks were used to determine approximate

elevations of water and terraces. Photographs were taken (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

Construction of the Gulf Intracoastal Waterway (GIWW) in the 1920's provided a connection between the Atchafalaya River and the project area resulting in major hydrologic changes. As the holding capacity of the Atchafalaya Basin decreased, more and more freshwater was forced down the river's main channel, Wax Lake Outlet, and the GIWW. The result was what was once considered to be brackish marsh converted to fresh.

Sediment laden water from the Atchafalaya River gets to the project area via the GIWW as well as through West Cote Blanche Bay from the Atchafalaya Delta and Wax Lake outlet during strong southeasterly wind events. Construction of the terraces provides protection to the northern shoreline of West Cote Blanche Bay by reducing fetch and turbidity. The channels used to construct the terraces provide a conduit directing sediment rich waters from the GIWW into the project area building additional acres of marsh.

The principal project features include:

- ~38,700 linear feet of earthen terraces in "The Jaws"
- ~38,500 vegetative plantings

IV. Summary of Past Operation and Maintenance Projects

General Maintenance: No maintenance has been required on this project.

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

V. Inspection Results

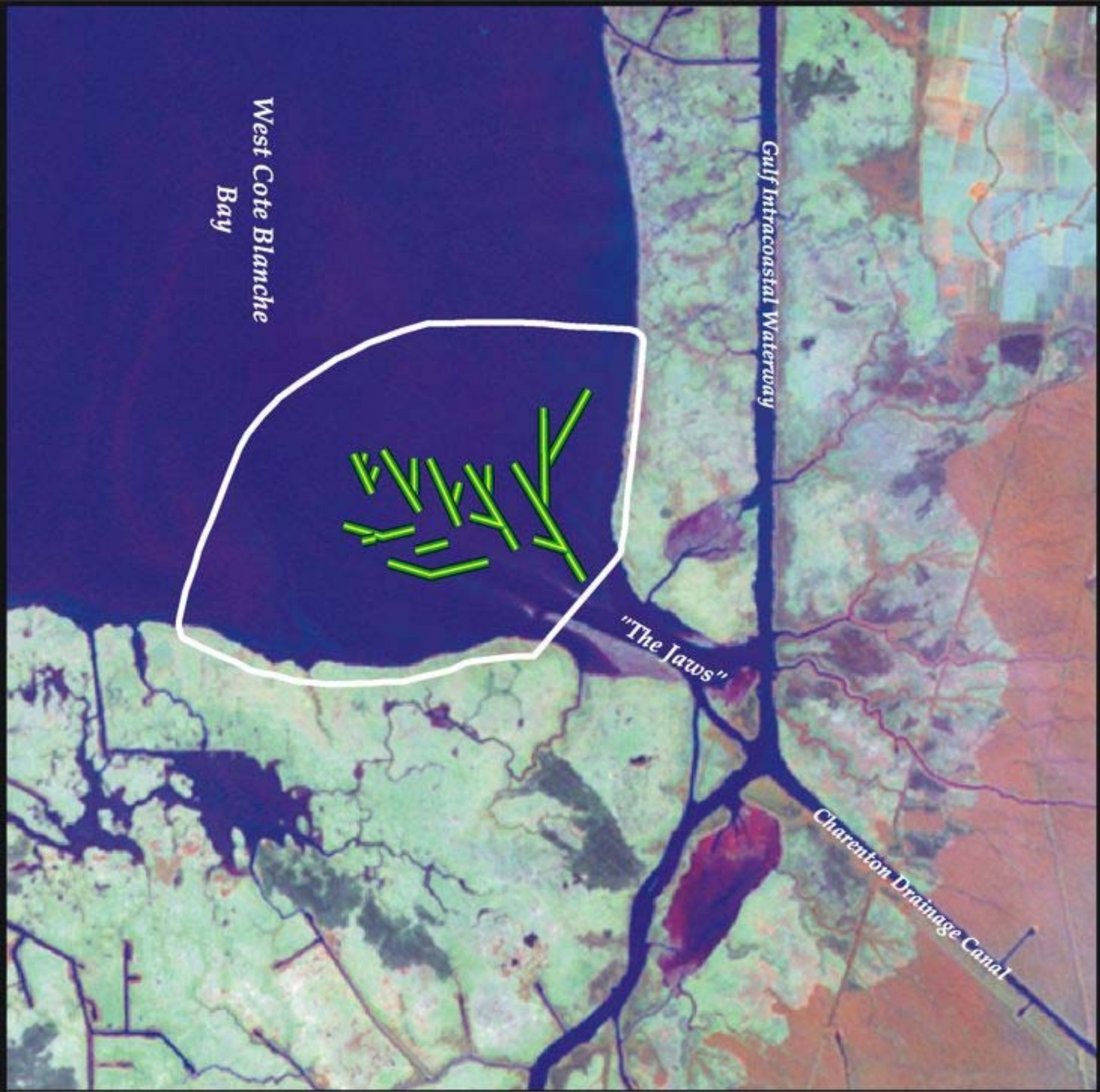
Earthen Terraces/Vegetation

The terraces appear to be in excellent post-construction condition. Erosion as a result of Hurricane Rita was not nearly as severe as anticipated. Warning signs were all in place and stable. Vegetation was stressed due to inundation with high salinity water but is expected to recover. Submerged aquatic vegetation between the terraces that was abundant prior to the storm was gone; however, this also, is expected to recover. No need for any maintenance at this time. (Photos: Appendix B, Photos 1-4)

VI. Conclusions and Recommendations

The Sediment Trapping at the Jaws Project is good condition and functioning as designed. There is no need for any maintenance at this time.

Appendix A
Project Features Map



Sediment Trapping at "The Jaws" (TV-15)


 Terrace*
 Project Boundary
 * denotes proposed feature




 science for a changing world



Louisiana
 Project Location



 N

0.5 0 0.5 1 Miles
 0.5 0 0.5 1 Kilometers

Map Produced By:
 U.S. Department of the Interior
 U.S. Geological Survey
 National Wetlands Research Center
 Coastal Restoration Field Station

Background Imagery:
 2002 Thematic Mapper Imagery

Map Date: October 16, 2003
 Map ID: USGS-NWRC 2003-11-047
 Data accurate as of: March 19, 2003

Appendix B
Photographs



Photo 1—typical terrace and warning sign



Photo 2—vegetated terrace



Photo 3—gap left during construction with vegetation filling in



Photo 4—view of southern most terrace facing NW

Appendix C

Three Year Budget Projection

SEDIMENT TRAPPING AT THE JAWS/ TV15 / PPL 6
Three-Year Operations & Maintenance Budgets 07/01/2005 - 06/30/08

<u>Project Manager</u> Stan Aucoin	<u>O & M Manager</u> Stan Aucoin	<u>Federal Sponsor</u> N/A	<u>Prepared By</u> Stan Aucoin
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	2005/2006	2006/2007	2007/2008
Maintenance Inspection	\$ 4,955.00	\$ 5,250.00	\$ 5,407.00
Structure Operation			
Administration		\$ -	\$ -
Maintenance/Rehabilitation			

05/06 Description:

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

06/07 Description:

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

07/08 Description:

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

	2005/2006	2006/2007	2007/2008
<u>Total O&M Budgets</u>	\$ 4,955.00	\$ 5,250.00	\$ 5,407.00

<u>O & M Budget (3 yr Total)</u>	\$ 15,612.00
<u>Existing O & M Budget</u>	\$ 250,250.00
<u>Remaining O & M Budget (Projected)</u>	\$ 234,638.00

Appendix D

Field Inspection Form

MAINTENANCE INSPECTION REPORT CHECK SHEET

Project No. / Name: TV-15 Sediment Trapping at the Jaws

Date of Inspection: October 11, 2005 Time:

Structure No. N/A

Inspector(s): Stan Aucoin, Pat Landry, Darrell Pontiff, Herb Juneau,
Dewey Billodeau, Justine Price, Shannon Haynes, & Ishmail Merhli (DNR)

Structure Description: Terraces/Vegetation

Water Level +1.4

Type of Inspection: Annual

Weather Conditions: Clear and mild

Item	Condition	Physical Damage	Corrosion	Photo #	Observations and Remarks
Steel Bulkhead / Caps					
Steel Grating					
Stop Logs					
Hardware					
Timber Piles					
Timber Wales					
Galv. Pile Caps					
Vegetation	Good				Stressed due to hurricane, however, stable & well established. No maintenance required.
Signage /Supports					
Rip Rap (fill)					
Earthen Embankment (terraces)	Excellent				Terraces are in good condition. No repairs needed.

- 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?

Appendix E

Locations to be Monitored