



State of Louisiana

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

**2014/2015 Annual Inspection
Report**

for

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

State Project Number TV-15
Priority Project List 6

April 30, 2015
St. Mary Parish

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Table of Contents

I. Introduction.....	1
II. Inspection Purpose and Procedures.....	1
III. Project Description and History.....	2
IV. Summary of Past Operation and Maintenance Projects.....	2
V. Inspection Results	2
VI Conclusions and Recommendations	3

Appendices

Appendix A	Project Features Map
Appendix B	Photographs
Appendix C	Three Year Budget Projections
Appendix D	Field Inspection Notes

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 sixth Priority Project List. The Sediment Trapping at the Jaws Project has a twenty year (20 year) project life, which began in May 2005.

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, 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, 2005). 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.

An inspection of the Sediment Trapping at the Jaws Project (TV-15) was held on April 30, 2015 under clear skies and mild temperatures. In attendance were Stan Aucoin from CPRA Lafayette; John Foret and Jason Kroll from NOAA Fisheries. The annual inspection began at the northern most terrace at approximately 10:50am.

The field inspection included a visual inspection of randomly selected areas of the project site. Staff gauge readings, when available, 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: Below is a summary of completed maintenance projects and operation tasks performed since May 2005, the construction completion date of the Sediment Trapping at the Jaws Project.

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 entire terrace field remains in very good condition. Settlement/erosion on the ends of the terraces has not become any worse than noticed during previous inspections. Bullwhip plantings continue to expand and are doing extremely well. In the areas where not much terrace is left, large stands of whips still provide stilling effects. No evidence of damage from nutria was evident. Warning signs were all in place and stable. Submerged and emergent aquatic vegetation between the terraces continues to expand. Intersections of the dredged channels with the main channel are showing some signs of silting in. The borrow channels on terraces 6, 7, and 8 at the

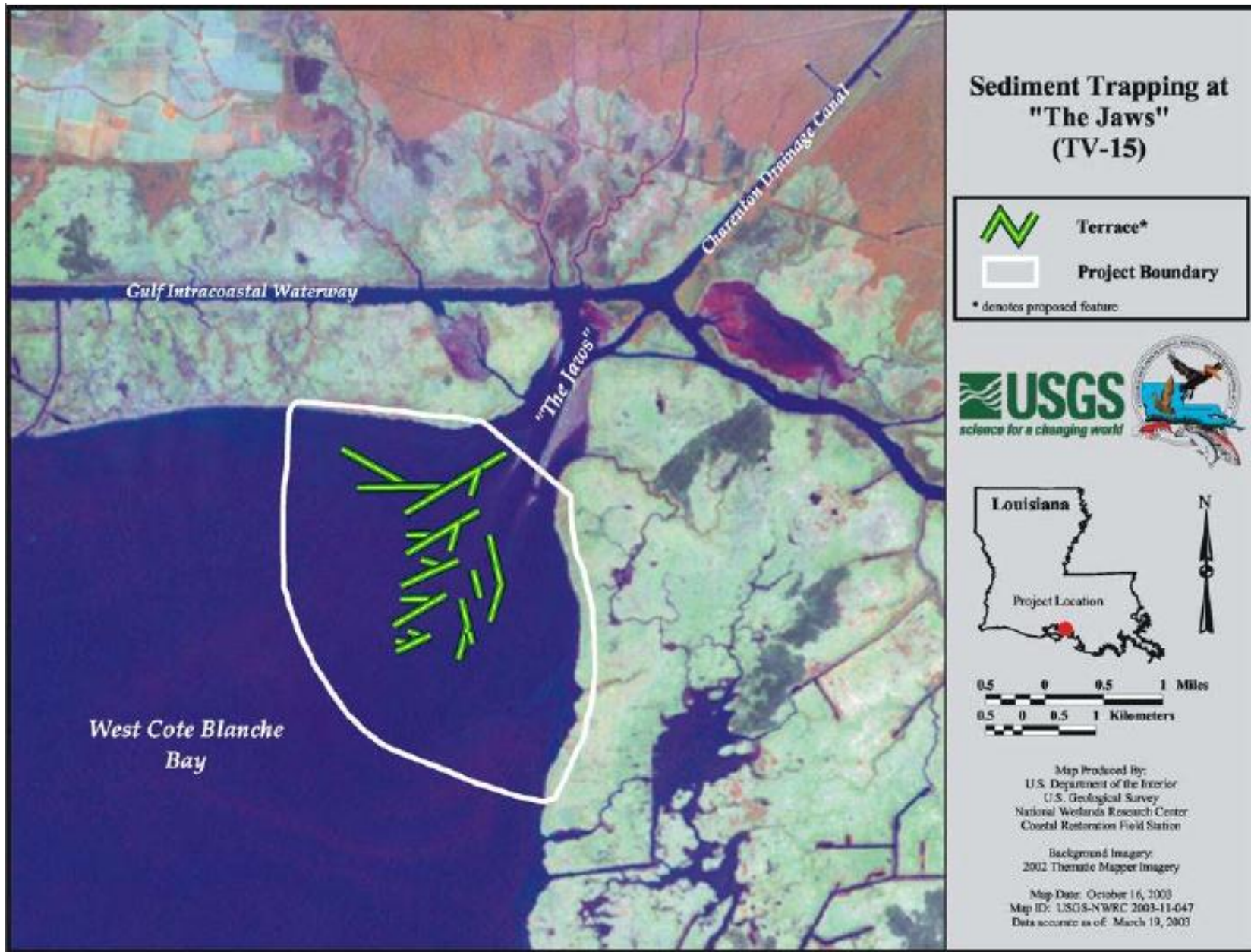
mouth of the main channel have silted in significantly making travel down these terraces during this inspection impossible. Once in, channel depths in the areas traveled were approximately 7-8 feet. No need for any maintenance at this time. (Photos: Appendix B, Photos 1-4)

VI. Conclusions and Recommendations

The Sediment Trapping at the Jaws Project remains in excellent condition and functioning as designed. There is no need for any maintenance at this time. The terraces are in very good condition and settlement as well as erosion has stabilized. Vegetation on the terraces is thriving and continues to expand. Nutria damage noted in prior inspections is no longer apparent.

In order to evaluate earthen terrace settlement and any vertical accretion between the terraces, a structural assessment survey performed by a licensed engineering/ land surveying firm is still planned to be performed closer to the end of the project life. Also as previously mentioned capturing land water analysis that also categorizes the amount of mud flat present would be a powerful quantitative assessment of the project's performance.

Appendix A
Project Features Map



Appendix B

Photographs

Annual Inspection Report
SEDIMENT TRAPPING AT THE JAWS PROJECT
State Project No. TV-15



Photo No. 1--typical terrace



Photo No. 2--typical terrace and warning sign



Photo No. 3--typical terrace



Photo No. 4—plantings and new vegetation between terraces

Appendix C

Three Year Budget Projection

SEDIMENT TRAPPING AT THE JAWS/ TV15 / PPL 6
Three-Year Operations & Maintenance Budgets 07/01/2015 - 06/30/2018

<u>Project Manager</u> Pat Landry	<u>O & M Manager</u> Stan Aucoin	<u>Federal Sponsor</u> N/A	<u>Prepared By</u> Stan Aucoin
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	2015/2016 (-11)	2016/2017 (-12)	2017/2018 (-13)
Maintenance Inspection	\$ 6,851.00	\$ 7,057.00	\$ 7,269.00
Structure Operation			
State Administration		\$ -	\$ -
Federal Administration		\$ -	\$ -

Maintenance/Rehabilitation

15/16 Description: Structural Assessment Survey of Terraces and Accretion between Terraces

E&D	\$15,000.00
Construction	
Construction Oversight	
Sub Total - Maint. And Rehab.	\$ 15,000.00

16/17 Description:

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

17/18 Description:

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

	2015/2016 (-11)	2016/2017 (-12)	2017/2018 (-13)
Total O&M Budgets	\$ 21,851.00	\$ 7,057.00	\$ 7,269.00

O & M Budget (3 yr Total)	\$ 36,177.00
Unexpended O & M Budget	\$ 236,278.00
Remaining O & M Budget (Projected)	\$ 200,101.00

Annual Inspection Report
 SEDIMENT TRAPPING AT THE JAWS PROJECT
 State Project No. TV-15

OPERATION AND MAINTENANCE BUDGET WORKSHEET
 SEDIMENT TRAPPING AT THE JAWS / PROJECT NO. TV-15 / PPL NO. 6 / 2015-2016

DESCRIPTION	UNIT	EST. QTY.	UNIT PRICE	ESTIMATED TOTAL
O&M Inspection and Report	EACH	1	\$6,851.00	\$6,851.00
General Structure Maintenance	LUMP	0	\$0.00	\$0.00
Engineering and Design	LUMP	0	\$0.00	\$0.00
Operations Contract	LUMP	0	\$0.00	\$0.00
Construction Oversight	LUMP	0	\$0.00	\$0.00

ADMINISTRATION

OCPR / CRD Admin.	LUMP	0	\$0.00	\$0.00
FEDERAL SPONSOR 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:	Structural Assessment Survey of Terraces and Accretion between Terraces				
	Secondary Monument	EACH	0	\$0.00	\$0.00
	Staff Gauge / Recorders	EACH	0	\$0.00	\$0.00
	Bathymetry / Topography	LUMP	1	\$15,000.00	\$15,000.00
	TBM Installation	EACH	0	\$0.00	\$0.00
	Other	LUMP	0	\$0.00	\$0.00
TOTAL SURVEY COSTS:				\$15,000.00	

GEOTECHNICAL

GEOTECH DESCRIPTION:					
	Borings	EACH	0	\$0.00	\$0.00
	OTHER				\$0.00
TOTAL GEOTECHNICAL COSTS:				\$0.00	

CONSTRUCTION

CONSTRUCTION DESCRIPTION:						
	Rip Rap	LIN FT	TON / FT	TONS	UNIT PRICE	
	Rip Rap	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	0	\$0.00	\$0.00	
	Materials	LUMP	0	\$0.00	\$0.00	
	Mob / Demob	LUMP	0	\$0.00	\$0.00	
	Contingency (25%) (1,795,650 x 0.25)	LUMP	0	\$0.00	\$0.00	
	General Structure Maintenance	LUMP	0	\$0.00	\$0.00	
			0	\$0.00	\$0.00	
			0	\$0.00	\$0.00	
		0	\$0.00	\$0.00		
TOTAL CONSTRUCTION COSTS:				\$0.00		

TOTAL OPERATIONS AND MAINTENANCE BUDGET: \$21,851.00

Appendix D

Field Inspection Form

Annual Inspection Report
 SEDIMENT TRAPPING AT THE JAWS PROJECT
 State Project No. TV-15

MAINTENANCE INSPECTION REPORT CHECK SHEET

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

Date of Inspection: April 30, 2015 Time: 10:50 am

Structure No. N/A

Inspector(s): Stan Aucoin (CPRA)
 John Foret and Jason Kroll (NMFS)

Structure Description: Terraces/Vegetation

Water Level Inside: Outside: N/A
 Weather Conditions: Sunny and warm

Type of Inspection: Annual

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				
Vegetation	Good			1-4	Vegetation is thriving and expanding. SAV are plentiful in shallow water. Bullwhip plantings continue to expand.
Signage / Supports	Good			2	Signs are intact.
Rip Rap (fill)	N/A				
Terraces	Excellent			1, 2, 4	Terraces are in very good condition. Borrow channels have begun silting in.

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?