



State of Louisiana

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

2015/2016 Annual Inspection Report

for

SABINE REFUGE MARSH CREATION PROJECT (CS-28-2)

State Project Number CS-28-2
Priority Project List 8



June 22, 2016
Cameron Parish

Prepared by:

Darrell J. Pontiff, P.E., Engineer Supervisor
CPRA/ Office of Coastal Protection and Restoration
Lafayette Field Office
635 Cajundome Blvd.
Lafayette, LA 70596

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 Sabine Refuge Marsh Creation Cycle-2 Project consists of approximately 19,000 linear feet of 29 inch I.D. steel pipeline installed in the Calcasieu/Sabine Basin. The location of the project commences near Mile 13.2 of the Calcasieu River Ship Channel and terminates at the northeastern corner of the Sabine National Wildlife Refuge. (See Appendix A).

The Sabine Refuge Marsh Creation Cycle-2 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 first Priority Project List. The Sabine Refuge Protection Project has a twenty-year (20 year) economic life, which began in April 2010.

II. Inspection Purpose and Procedures

The purpose of the annual inspection of the Sabine Refuge Marsh Creation Cycle-2 Project (CS-28-2) 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 . 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 Sabine Refuge Marsh Creation Cycle-2 Project (CS-28-2) are outlined in Section IV.

An inspection of the Sabine Refuge Marsh Creation Cycle-2 Project (CS-28-2) was held on June 22, 2016 under sunny skies and hot temperatures. In attendance were Darrell Pontiff and Dion Broussard from CPRA, Chris Simon from Simon & Delany, and T-Pat Murphy (airboat services). Representatives from USACE were invited but could not attend. The inspection began at the western booster station.

The field inspection included an inspection of all of the project features. 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

The purpose of this project is designed to assist with marsh creation on the Sabine National Wildlife Refuge through beneficial use of dredged materials from the USACE maintenance dredging of the Calcasieu River Ship Channel. The marsh creation projects proposed in these areas will re-create brackish marsh habitat in the open water areas of the interior marsh primarily caused by saltwater intrusion and freshwater loss.

The project goals and objectives are:

1. To assist with marsh creation through beneficial use of dredged materials.

IV. Summary of Past Operation and Maintenance Projects

General Maintenance: Below is a summary of completed maintenance projects and operation tasks performed since April 2010, the construction completion date of the Sabine Refuge Marsh Creation Cycle-2 Project (CS-28-2).

There has been no required maintenance on this project other than quarterly grass cutting within the ROW.

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

V. Inspection Results

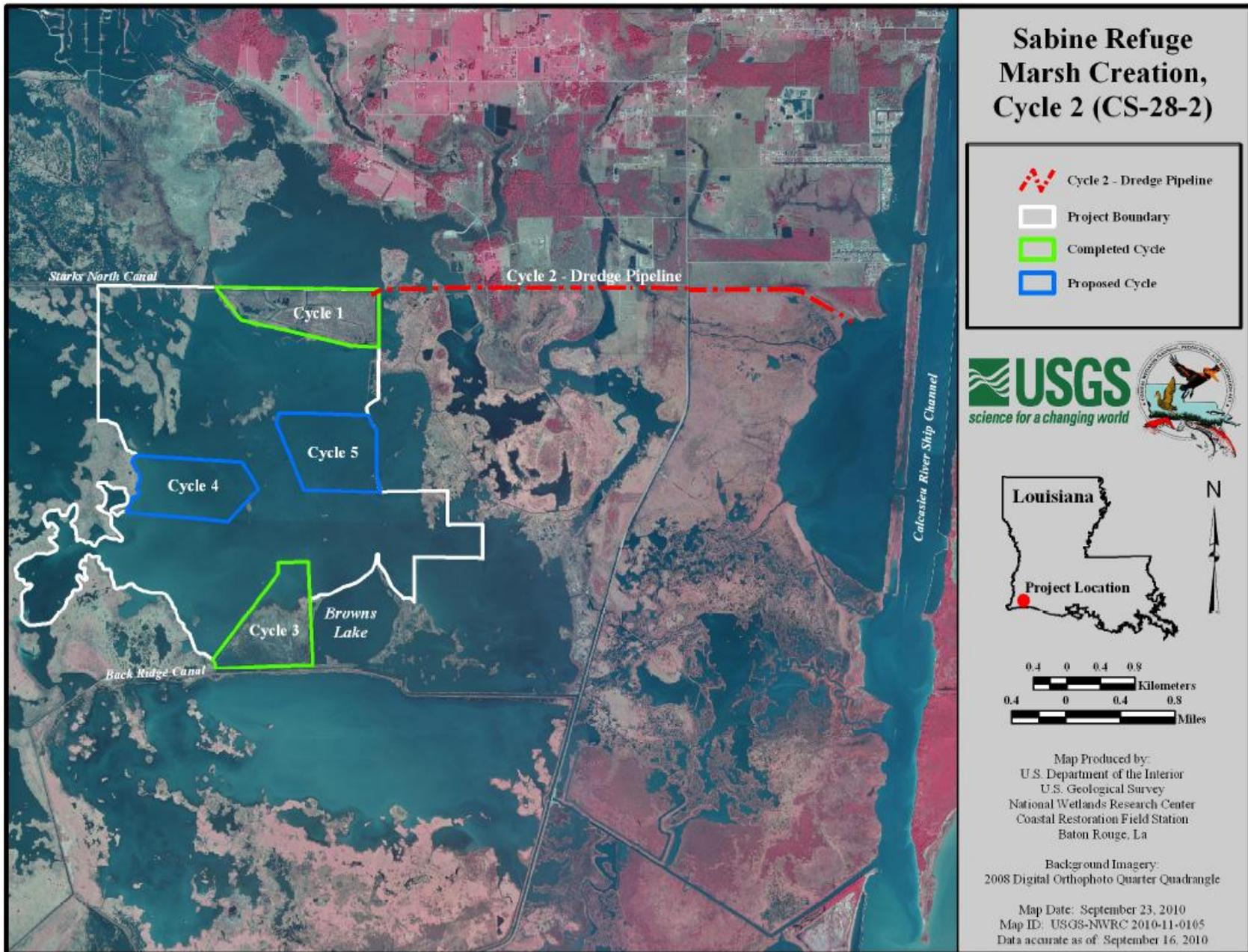
30 Inch Permanent Pipeline

The blind flange risers on each end of the pipeline are in good condition and have been recently painted after the pumping of cycles 4 and 5 on the Sabine Refuge. The above ground booster locations (east and west) are in good condition as well and the grass and vegetation are maintained within the fenced areas. The remainder of the pipeline below ground was inspected via airboat and no visible signs of erosion or leakage were apparent. No need for any maintenance in the foreseeable future. (Photos: Appendix B, Photos 1 - 6)

VI. Conclusions and Recommendations

Overall, the Sabine Refuge Marsh Creation Cycle-2 Project (CS-28-2) is in excellent condition with the permanent pipeline functioning as designed.

Appendix A
Project Features Map



Appendix B

Photographs



Photo No. 1, West end blind flange and riser



Photo No. 2, West end above ground booster station



Photo No. 3, East end blind flange and riser



Photo No. 4, East end above ground booster station



Photo No. 5, View of ROW, west end, looking east



Photo No. 6, View of ROW, east end, looking west

Appendix C

Three Year Budget Projection

SABINE REFUGE MARSH CREATION CYCLE 2/ CS-28-2 / PPL 8
Three-Year Operations & Maintenance Budgets 07/01/2016 - 06/30/2019

<u>Project Manager</u>	<u>O & M Manager</u>	<u>Federal Sponsor</u>	<u>Prepared By</u>
Darrell Pontiff	Darrell Pontiff	USACE	Darrell Pontiff

	2016/2017 (-3)	2017/2018 (-4)	2018/2019 (-5)
<i>Maintenance Inspection</i>	\$ 7,057.00	\$ 7,055.00	\$ 7,269.00
<i>Structure Operation</i>			
<i>State Administration</i>		\$ -	\$ -
<i>Federal Administration</i>		\$ -	\$ -
<i>Maintenance/Rehabilitation</i>	\$ 69,000.00	\$ 69,000.00	\$ 69,000.00

16/17 Description: Pipeline Inspection

E&D	
Construction	\$ 300,000.00
Construction Oversight	
<i>Sub Total - Maint. And Rehab.</i>	\$ 300,000.00

17/18 Description

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

18/19 Description: Pipeline Inspection

E&D	\$ -
Construction	\$ 300,000.00
Construction Oversight	\$ -
<i>Sub Total - Maint. And Rehab.</i>	\$ 300,000.00

	2016/2017 (-3)	2017/2018 (-4)	2018/2019 (-5)
<u>Total O&M Budgets</u>	\$ 376,057.00	\$ 76,055.00	\$ 376,269.00

<u>O & M Budget (3 yr Total)</u>	<u>\$ 828,381.00</u>
<u>Unexpended O & M Budget</u>	<u>\$ 3,320,451.00</u>
<u>Remaining O & M Budget (Projected)</u>	<u>\$ 2,492,070.00</u>

Annual Inspection Report
SABINE REFUGE MARSH CREATION
State Project No. CS-28-2

Appendix D
Field Inspection Form

Annual Inspection Report
 SABINE REFUGE MARSH CREATION
 State Project No. CS-28-2

MAINTENANCE INSPECTION REPORT CHECK SHEET

Project No. / Name: CS-28 Sabine Refuge Marsh Creation Cycle 2

Date of Inspection: June 22, 2016 Time: 9:30 AM

Structure No. N/A

Inspector(s): Darrell Pontiff, Dion Broussard (CPRA)
 Chris Simon (Simon and Delany), T-Pat Murphy (Airboat services)

Structure Description: Permanent Pipeline

Water Level Inside: N/A Outside:

Type of Inspection: Annual

Weather Conditions: Sunny and hot

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				
ROW	Good			5 and 6	
Booster Locations	Good			2 and 4	
Pipeline Connection SNWR	Good			1	
Pipeline Connection Calcasieu River	Good			3	
Fencing	Good			2 and 4	

What are the conditions of the existing levees? N/A
 Are there any noticeable breaches? N/A
 Settlement of rock plugs and rock weirs? N/A
 Position of stoplogs at the time of the inspection? N/A
 Are there any signs of vandalism? No