



Coastal Protection and Restoration Authority of Louisiana

Office of Coastal Protection and Restoration

2011 Annual Inspection Report

Hopedale Hydrologic Restoration

State Project Number PO-24
Priority Project List 8

February 1, 2012
St. Bernard Parish

Prepared by:

Barry Richard, P.E.
CPRA/ Office of Coastal Protection and Restoration
New Orleans Field Office
CERM, Suite 309
2045 Lakeshore Dr.
New Orleans, La 70122

Table of Contents

I. Introduction.....	1
II. Project Description and History.....	1
III. Inspection Purpose and Procedures.....	2
IV. Inspection Results	2
V. Conclusions.....	3
VI. Recommendations.....	3
Immediate Repairs	3
Programmed Maintenance	3

Appendices

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

I. Introduction

The 3,805 acre Hopedale Hydrologic Restoration Project (PO-24) is located southeast of Yscloskey, in St. Bernard Parish, Louisiana, and is bordered by LA Hwy 46 on the west, the Mississippi River Gulf Outlet (MRGO) spoil deposition area to the north, and Louisiana Highway 624 and Bayou La Loutre to the south and east (Appendix A). The area is predominately brackish marsh (3,086 acres) and open water (719 acres) with a small amount of saline marsh, bottomland hardwoods and bottomland scrub/shrub within the MRGO spoil deposition area.

II. Project Description and History

Wetlands in the Hopedale area have been adversely impacted because of altered hydrology and partial impoundment caused by the construction of LA Hwy 624 and the MRGO. During construction of LA Hwy 624, four sets of non-gated culverts were installed under the highway. These culverts connect Bayou La Loutre with wetlands north of the highway and south of the Bayou La Loutre Ridge, and allow water to enter and exit the general project area.

As part of the construction of the MRGO, a spoil containment dike (back dike) was constructed to allow placement of material from the MRGO dredging operation. The dike almost completely impounded the marsh within the Hopedale project area, with the exception of the back dike borrow canal, which directly connected to Bayou La Loutre. A plug and water control structure were originally placed in the borrow canal approximately 400 ft from its intersection with Bayou La Loutre. This structure, which consisted of three iron culverts with flap gates, provided drainage from the area, while limiting tidal increases in minimal storm events. By the mid 1990s, the plug had settled and the structure had deteriorated and become inoperable. The present project replaced the original structure with a water control structure fitted with three 82" diameter combination gates (flap/slucice gates) and two, 24"x 84" fisheries access slots (fish gates). The project was completed in December 2004.

In 2005, the Hopedale structure suffered minor damage due to Hurricane Katrina. In 2007/2008, the repairs, at a cost of \$64,900, were made as follows:

- Repaired and replaced all damaged fence panels.
- Replaced missing gate stem covers.
- Repaired damaged railing.
- Placed riprap into eroded areas.
- Replaced missing mechanical gate operator.
- Added support beam under walkway.

A maintenance contract was initiated this year, 2011, to provide regular maintenance and operations for the structure. Initial clean up is details are provided in section IV.

III. Inspection Purpose and Procedures

The purpose of the annual inspection of the Hopedale Hydrologic Restoration Project (PO-24) 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 (O&M Plan April 21, 2005). 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 projects completed since completion of the project can be found in Section II.

An inspection of the Hopedale Hydrologic Restoration Project (PO-24) was held on September 27, 2011, by Lake Borgne Basin Levee District during the first round of structure operations under the new contract. Photographs and an e-mail report of the operations and inspection are included in Appendix B.

IV. Inspection Results

Water Control Structure

Lake Borgne Basin Levee District personnel performed the first round of operations and routine maintenance on September 27, 2011. Two days were required to fully accomplish all tasks described in this section, but there is an e-mail report with pictures attached in Appendix B.

The unwanted vegetation was cleared and the area was sprayed to prevent more unwanted vegetation in the near future. Debris was cleared from around the structure and the ramp was repaired as it had been dislodged by excess vegetation. The gates were operated for functionality and all passed. The actuator needs to be worked on to improve functionality and the gate stem covers will be replaced this year.

V. Conclusions

The Hopedale Hydrologic Restoration Project (PO-24) is performing as designed. With the new operations contract in place the structure will continue to be maintained throughout the project life.

VI. Recommendations

Perform preventative maintenance on a regular basis.

Immediate Repairs

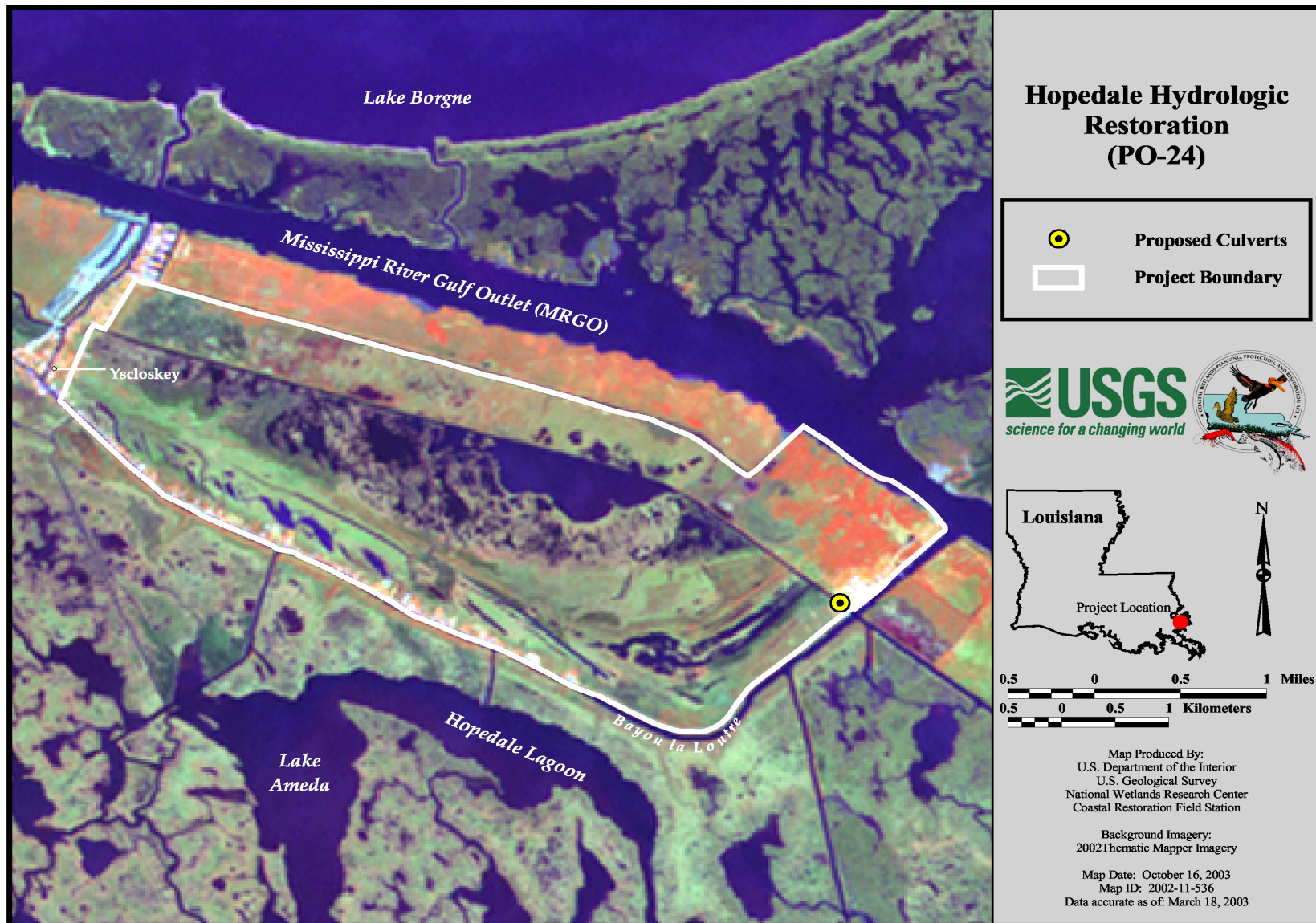
- Replace two vinyl gate stem covers.

Programmed Maintenance

- Continue to check gates on structure for operability.

Appendix A

Project Features Map



Appendix B

Operations Report

Annual Inspection Report
Hopedale Hydrologic Restoration
State Project No. PO-24

Barry,

We removed 2 large trees, 1 from the far outside structure and 1 from the far inside structure. We also removed several small trees growing through the rip rap. Let me know if you need more photos. I have them!



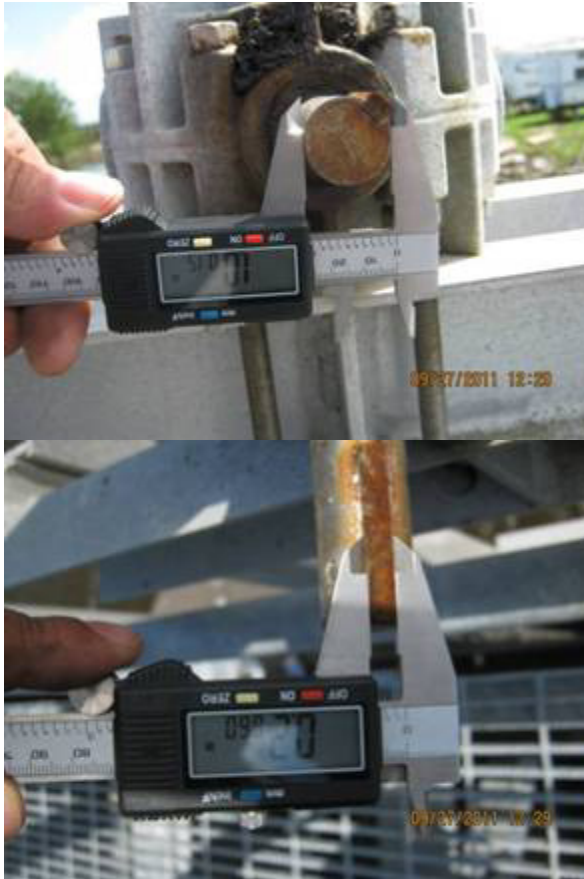
Annual Inspection Report
Hopedale Hydrologic Restoration
State Project No. PO-24



Annual Inspection Report
Hopedale Hydrologic Restoration
State Project No. PO-24



Annual Inspection Report
Hopedale Hydrologic Restoration
State Project No. PO-24



Thanks,

Mark Wick
Supervisor of Levees and Canals
Lake Borgne Basin Levee District
P.O. Box 216 (Mailing)
6136 E. St. Bernard Hwy. (Physical)
Violet, Louisiana 70092
Mark@LBBLD.com
Office: (504) 682-5941
Fax: (504) 682-5942
Cell : (504) 512-0105

From: Mark Wick [mailto:mark@lbbld.com]
Sent: Tuesday, September 27, 2011 4:30 PM
To: Barry Richard (CPRA)
Subject: Hopedale

Barry,

Crews made the initial visit to the Hopedale Hydrologic Project today. We were able to clear the entire area of unwanted vegetation. We sprayed with a 1% RoundUp + 1% Platoon + surfactant mixture. We really soaked the area well. Hopefully this will ease maintaining control of the situation in the future.

Annual Inspection Report
Hopedale Hydrologic Restoration
State Project No. PO-24

Slim fell out after working for about an hour. This event has been thoroughly documented in other reports.

We were only able to exercise 1 of the 3 flap gates, 2 were completely frozen. We greased the screw that we were able to operate.

It was as we were doing this that I recalled our conversation regarding lubricating the screws.

We will go out with PB Blaster and heavy gauge oil next time in hopes of freeing the 2 that were frozen.

Once we freed the gate that we exercised we were able to cycle it completely in about 20-25 minutes.

I noticed that there were no grease fittings on any of the screw gearboxes. I will contact the manufacturer for details on O & M.

The studs on the keys to the 2 fish gates were of a completely different size than those on the flap gates.

We had no way to operate them. We will have a new connection machined.

We also affected repairs to the grating ramp to the structure which had fallen away from the structure.

I have plenty of photos. If you would care for me to forward any, please inform.

Thanks,

Mark Wick
Supervisor of Levees and Canals
Lake Borgne Basin Levee District
P.O. Box 216 (Mailing)
6136 E. St. Bernard Hwy. (Physical)
Violet, Louisiana 70092
Mark@LBBLD.com
Office: (504) 682-5941
Fax: (504) 682-5942
Cell : (504) 512-0105

Appendix C

Three Year Budget Projection

Annual Inspection Report
Hopedale Hydrologic Restoration
State Project No. PO-24

Hopedale Hydrologic Restoration

Federal Sponsor: NMFS
Construction Completed : January 6, 2005
PPL 8

Current Approved O&M Budget June 2009	Year 0 FY05	Year - 1 FY06	Year -2 FY07	Year -3 FY08	Year -4 FY09	Year -5 FY10	Year -6 FY11	Year -7 FY12	Year -8 FY13	Year -9 FY14	Year -10 FY15	Year -11 FY16	Year -12 FY17	Year -13 FY18	Year -14 FY19	Year -15 FY20	Year -16 FY21	Year - 17 FY22	Year -18 FY23	Year -19 FY24	Project Life Budget	Currently Funded
State O&M																					\$449,209	\$449,209
Corps Admin																					\$0	\$0
Federal S&A																					\$0	\$0
Total																					\$449,209	\$449,209

Projected O&M Expenditures																	Remaining Project Life	Current 3 year Request			
Maintenance Inspection (State)				\$1,992	\$2,044	\$2,097	\$2,151	\$2,207	\$2,265	\$2,324	\$2,384	\$2,446	\$2,510	\$2,575	\$2,642	\$2,711	\$30,347	\$6,133			
General Maintenance							\$14,000										\$14,000	\$0			
Operations				\$10,920	\$7,920	\$7,920	\$7,920	\$7,920	\$7,920	\$7,920	\$7,920	\$7,920	\$7,920	\$7,920	\$7,920	\$7,920	\$105,960	\$26,760			
Federal S&A				\$2,647	\$2,467	\$2,467	\$3,307	\$2,467	\$2,467	\$2,467	\$2,467	\$2,467	\$2,467	\$2,467	\$2,467	\$2,467	\$33,094	\$7,582			
State S&A				\$437	\$317	\$317	\$877	\$317	\$317	\$317	\$317	\$317	\$317	\$317	\$317	\$317	\$4,798	\$1,070			
Maintenance/Rehabilitation																	\$0	\$0			
E&D																	\$0	\$0			
Construction																	\$0	\$0			
Construction Oversight																	\$0	\$0			
Total				\$0	\$0	\$0	\$15,996	\$12,748	\$12,801	\$28,255	\$12,911	\$12,969	\$13,028	\$13,088	\$13,150	\$13,214	\$13,279	\$13,346	\$13,415	\$188,199	\$41,545

O&M Expenditures from COE Report	\$121,340	Current O&M Budget less COE Admin	\$449,209	Current Project Life Budget less COE Admin	\$449,209
State O&M Expenditures not submitted for in-kind credit	\$0	Remaining Available O&M Budget	\$327,869	Total Projected Project Life Budget	\$309,539
Federal Sponsor MIPRs (if applicable)	\$0	Incremental Funding Request Amount FY12-FY14	-\$286,324	Project Life Budget Request Amount	-\$139,670
Total Estimated O&M Expenditures (as of April 2010)	\$121,340				

Appendix D

Field Inspection Form (N/A This Year)