

**Coastal Protection and Restoration Authority of Louisiana** 

Office of Coastal Protection and Restoration

# **2013 Annual Inspection Report**

# Hopedale Hydrologic Restoration

State Project Number PO-24 Priority Project List 8

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### 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/sluice 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 in 2011 to provide regular maintenance and operations for the structure.

### **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 June 20, 2013, by Barry Richard (CPRA). Photographs from this inspection can be found in Appendix B.

### **IV.** Inspection Results

#### Water Control Structure

Hurricane Isaac passed through Southeast Louisiana on August 28, 2012. The only damage noted on this structure was a damaged stem cover on one of the Fish Gates.

The fish gates were open at the time of the inspection in accordance with the Operation and Maintenance Plan. Lake Borgne Basin Levee District personnel performed the first round of operations and routine maintenance on September 27, 2011. There have been no operations activities since due to personnel issues. The gates were hand cranked at the inspection to determine functionality and were determined to be in working order. No other issues present at the time of inspection.

### V. Conclusions

The Hopedale Hydrologic Restoration Project (PO-24) is performing as designed.

### VI. Recommendations

Perform preventative maintenance on a regular basis.

#### **Immediate Repairs**

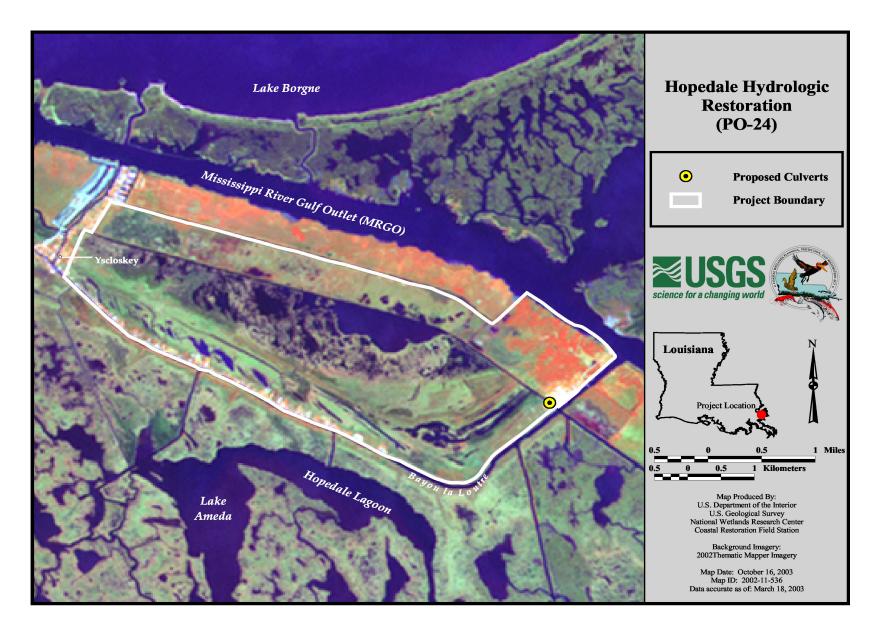
• None at this time.

#### **Programmed Maintenance**

• Continue to check gates on structure for operability.

Appendix A

**Project Features Map** 



Appendix B

Photographs







Appendix C

**Three Year Budget Projection** 

PPL 8

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

																Remaining	Current 3 year
Projected O&M Expenditures																Project Life	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	\$6,456
General Maintenance						\$14,000										\$14,000	\$14,000
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	\$23,760
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	\$8,242
State S&A			\$437	\$317	\$317	\$877	\$317	\$317	\$317	\$317	\$317	\$317	\$317	\$317	\$317	\$4,798	\$1,510
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	\$53,968

O&M Expenditures from COE Report	\$149,498	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	\$299,711	Total Projected Project Life Budget	\$337,697
Federal Sponsor MIPRs (if applicable)	\$0	Incremental Funding Request Amount FY14-FY16	-\$245,743	Project Life Budget Request Amount	-\$111,512
Total Estimated O&M Expenditures (as of April 2013)	\$149,498				

Appendix D

**Field Inspection Form** 

#### MAINTENANCE INSPECTION REPORT CHECK SHEET

Date of Inspection: 6/20/2013

Time: <u>10:30 am</u>

Inspector(s): Richard

Water Level Inside: <u>N/A</u> Outside: <u>N/A</u>

Weater Conditions: Clear Skies

Item	Condition	Pysical Damage	Corrosion	Photo #	Observations and Remarks
Swing Gates 84" D	Good	None	None		
Fish Gates 24" x 84"	Good	None	None		One stem cover damaged in Hurricane Isaac.
Handrails Grating Hardware etc.	Good	None	None		
Galv. Pile Caps	Good	None	None		
Signage /Supports	Good	None	None		
Riprap	Good	None	None		
Silt/Fill	Good	None	None		

Are there any signs of vandalism? No Conditions of existing levees? Good Noticable breaches? None

Project No. / Name: Hopedale Hydrologic Restoration Project (PO-24)

Structure No. \_\_\_\_\_

Structure Description: Gated Sheetpile Structure

Type of Inspection: Annual