



**State of Louisiana
Coastal Protection and Restoration Authority**

2018 Annual Inspection Report

for

Hopedale Hydrologic Restoration

State Project Number PO-24
Priority Project List 8

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St. Bernard Parish

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(PO-24)**

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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 new maintenance contract was initiated in 2017, 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, 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 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 July 3, 2018, by Barry Richard (CPRA), Erin Plitsch (CPRA), Jacinta Gisclair (CPRA), Twyla Cheatwood (NMFS), Craig Gothreaux (NMFS), John Lane (St. Bernard Parish Government), and Louis Pomes (St. Bernard Parish Government). 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 due to the water levels and 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. This Contract has expired and the CPRA has since replaced it with a new contract as of 2017. The gates were visually inspected but not cranked at the inspection; St. Bernard Parish personnel will inform CPRA to be available for the next gate exercising to determine functionality and if 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 to the gate actuator, as well as maintaining the locks and gates that secure the structure on a regular basis.

Immediate Repairs

- Replace one vinyl gate stem cover.

Programmed Maintenance



- Continue to check gates on structure for operability.
- Sandblasting and painting of the structure is recommended prior to the End of Life for the project.

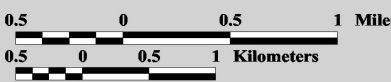
Appendix A

Project Features Map



Hopedale Hydrologic Restoration (PO-24)

 **Proposed Culverts**
 **Project Boundary**



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

Background Imagery:
 2002Thematic Mapper Imagery

Map Date: October 16, 2003
 Map ID: 2002-11-536
 Data accurate as of: March 18, 2003

Appendix B

Photos



Photo 1: Structure taken from Upstream Northeast Bank looking south



Photo 2: Gates taken from Downstream Northeast Bank looking west

Appendix C

Three Year Budget Projection

Appendix D

Field Inspection Form

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

Date of Inspection: 7/3/2018

Time: 10:00 am

Structure No. _____

Inspector(s): Richard, Plitsch, Gisclair, Cheatwood, Gothreaux, Lane, and Pomes

Structure Description: Gated Sheetpile Structure

Water Level Inside: N/A Outside: N/A

Type of Inspection: Annual

Weater Conditions: Partly Cloudy Skies

Item	Condition	Physical Damage	Corrosion	Photo #	Observations and Remarks
Swing Gates 84" D	Good	None	None	1,2	
Fish Gates 24" x 84"	Good	None	None	1,2	One stem cover damaged in Hurricane Isaac.
Handrails Grating Hardware etc.	Good	None	None	1,2	
Galv. Pile Caps	Good	None	None		
Signage /Supports	Good	None	None		
Riprap	Good	None	None	1,2	
Silt/Fill	Good	None	None		

Are there any signs of vandalism? No

Conditions of existing levees? Good

Noticable breaches? None