

Systems

Multiple Parishes in South Louisiana

Owner US Army Corps of Engineers

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Periodic Inspection of East and West Bank HSDRRS Levee Systems (St. Charles/Jefferson/Orleans Metro Polder, New Orleans East Polder, St. Bernard Polder, Belle Chasse Polder, Westwego/Harvey/Algiers Polder), LA

This project was conducted as part of Corps of Engineers Disaster Recovery Work in the greater New Orleans area subsequent to the damages from Hurricane Katrina of 2005. COE undertook a series of massive storm hardening projects in the area termed the hurricane storm damage risk reduction system or HSDRRS. As of 2014, the HSDRRS is projected to be a \$14.5 Billion program, aimed at reducing risk of the area from 1% recurrent storm interval.

This project involved the inspection of two levee systems

Periodic Inspection of HSDRRS levees (2013-2014)

- HSDRRS East Bank: 129.6 miles, including 99.8 levee miles, 67.6 floodwall miles, 65 pump stations, 21 drainage structures (channel floodgates, water control structures, locks), 152 closure structures (roads, railroads, industrial, pedestrian).
- HSDRRS West Bank: 64.3 miles long, including 56.0 levee miles, 14.1 floodwall miles, 31 pump stations, 10 drainage structures (channel floodgates, water control structures and locks), and 73 closure structures (roads, railroads, industrial, and pedestrian).

Unwanted Vegetation Analysis along multiple USACE levees and floodwalls in New Orleans District (2012-2013)

- MRL (94 miles), HSDRRS levees (LPV and WBV), Orleans Outfall Canal, IHNC Corridor, Harvey (134 Miles)

Periodic inspection of MR&T levees and control structures (2013-2014):

- Terrebonne Basin (43.7 levee miles and drainage control structures.), West of Atchafalaya Basin (160.73 miles and drainage control structures), Simmesport Ring Levee (3.46 miles levee, one drainage structure.).

Objectives

- Levee Periodic Inspection, Geotechnical Engineering Inspection and Inspection reports of the following structures:
 - More than 450 levee miles
 - More than 100 miles of floodwall
 - More than 100 pump stations
 - More than 40 drainage structures

Work Elements

- Geotechnical engineering inspections in the field
- Design criteria review of geotechnical elements
- Rating of inspected items
- Meetings with and presentations to the Corps of Engineers
- Significant coordination effort with the local levee districts for access and system information
- Provide resolution comments for geotechnical and structural items for the ITR and DrChecks review
- Provide geotechnical engineering assistance for the outbrief.