



US Army Corps  
of Engineers®

# Lake Pontchartrain & Vicinity Teammate Update May 27, 2011



## *Mission*

*We are committed to achieving the 100-year level of risk reduction in 2011 for the people of Orleans and St. Bernard parishes by constructing the Hurricane and Storm Damage Risk Reduction System.*

*The program also includes completing the permanent canal closures and pumps, the Grand Isle flood risk management project, Plaquemines Parish risk reduction projects, storm proofing and repair of existing pump stations.*

## Executive Summary

The Mississippi Valley Division currently has two major ongoing efforts. The first is fighting the record flooding throughout the Mississippi River Watershed; and the second is to ensure the Greater New Orleans Area Hurricane and Storm Damage Risk Reduction System (HSDRRS) is ready for the 2011 Hurricane Season. Fortunately, the vast majority of the HSDRRS perimeter work was completed before the flooding occurred, so the high flood water had minimal impacts on Lake Pontchartrain and Vicinity (LPV) projects.



Parish President Craig Taffaro and Col. Sinkler at the Caernarvon Floodgate Complex in St. Bernard Parish.

We do have four major projects to wrap up before the start of this year's Hurricane Season in the LPV area so that the larger system can defend against a 100-year storm surge event. We are working 24 hours a day and seven days a week to meet that goal. Our goal continues to be a solid, continuous system in place in advance of any hurricane that may strike the area this season. We have attached two slides that show the engineered interim structures that are in the LPV area this hurricane season. Work is ongoing to replace these structures with more permanent and substantial ones that are designed for the conditions that we expect to have in 2057. Elsewhere along the roughly 90 miles of the LPV portion of the perimeter system, the permanent 100-year structural system will be in place, and, of course, capable of defending against a 100-year hurricane storm surge.

Turf establishment in New Orleans East



Some work will continue on parts of the system beyond June 1 to complete non-storm surge related features at the canal and waterway crossings, further increase safety factors, overbuild for anticipated future settlement and sea level rise, increase resiliency of the system, further enhance armoring and mitigate for environmental damage, as well as wrap up some longer-term operations and maintenance

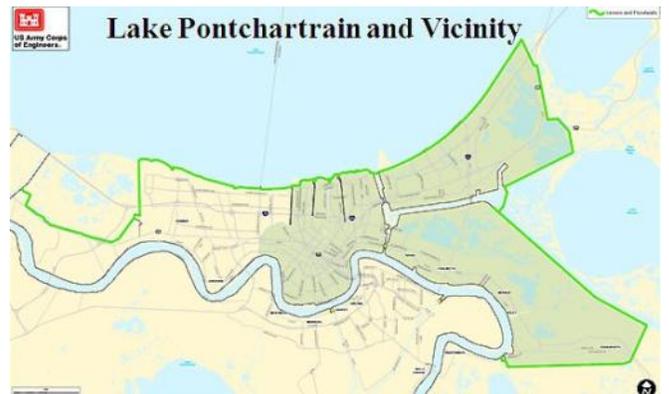
features.

We encourage elected officials, community leaders or their representatives to visit our construction projects before we wrap them up. We are rapidly demobilizing equipment and contractors from our construction sites and closing down many of our field offices. The sooner trips and visits can be scheduled to our project sites, the better. We do want people to see and understand this large Federal investment in the future of the greater New Orleans area.



Turf establishment in New Orleans East

Our biggest challenge right now is the weather. It is unusual that we have record flooding at the same time we are experiencing near-drought conditions. We hope that rain will come soon to assist with turf establishment on levees. The turf helps to beef up the levees with "green" armoring. Currently we have installed tens of miles of irrigation lines, and are delivering water by truck to help ensure the turf gets established well-before the height of this Hurricane Season.



Recent Media Clips: [Corps races to finish New Orleans hurricane defense](#) | [Corps races deadline for hurricane protection](#) | [60 Minutes](#) | [2011 hurricane forecast and the high river](#) | [Corps prepares for flooding and hurricanes season](#) | [Work nearly complete on 100-year flood protection](#)

## *Updates from the New Orleans District - Protection & Restoration Office*

### **1. St. Charles Parish** *\$100 M construction value*

All 14 construction contracts have been awarded, seven are under construction and seven are complete.

Approximately 70 percent of the 9.5 miles of St. Charles Parish's perimeter levees have been raised to the 100-year level of risk reduction, and all of the remaining contracts are under construction.

New T-walls at the Almedia and Walker Drainage Structures, as well as the Goodhope Floodwall, are complete. The bridge at Cross Bayou Drainage Structure is complete and the Gulf South Floodwall, constructed as part of an ongoing levee contract, is substantially complete.



At the Bayou Trepagnier Complex and Levee Reaches 1A and 2A, work is substantially complete. Work continues at Shell Pipeline Floodwall, Cross Bayou Drainage Structure, St. Rose Drainage structure, I-310 Floodwall, Levee Reach 1B and the Illinois Central Railroad Gate. At structures and floodwalls where the existing protection is being degraded for construction purposes, Engineered Construction Closures will be in place to prevent flooding from high tides and storms.

Currently, St. Charles Parish levee work is scheduled for completion by June 2011.

### **2. Jefferson Parish** *\$450 M construction value*

All 16 contracts have been awarded, with 12 under construction and four complete. Nine are substantially complete.

All 9.1 miles of Jefferson Lakefront levees have been raised to the 100-year level of risk reduction as of January 2011. The only remaining work is turf establishment.

The breakwaters at Bonnabel Pump Station and Duncan Pump Station are complete. In addition, the floodgates and floodwalls at Bonnabel and Williams Boulevard are substantially complete.



Fronting protection at the four East Jefferson lakefront pump stations began last April and is progressing well.

There are two contracts to provide wave attenuation and foreshore protection for a large portion of the levee system on Lake Pontchartrain; both contracts have been awarded and construction is under way.

Jefferson Parish levee work was completed in January 2011. Structures and floodwalls will defend against the 100-year storm surge by June 2011.

The contract for Causeway modifications was awarded in August 2010; however, work was delayed until October due to a bid protest. Currently, the project is 16 percent complete and is on schedule to be able to defend against 100-year storm by June 1, 2011.

### 3. Orleans Metro (Main Supporting District - St. Louis) \$90 M - \$100 M construction value

We have reached the 100-year level of risk reduction on all of the Orleans Metro Lakefront reaches.

- Lakefront Roadway Ramps
- Pontchartrain Beach Floodwall
- Levee near Leroy Johnson Drive Ramp
- Levee between Topaz Street & Orleans Avenue Canal
- Bayou St. John Floodwalls & Sector Gate
- Floodgate at Marconi Drive
- Orleans Avenue Canal Floodwall Tie-in
- London Avenue Canal Floodwall Tie-in
- Vehicle floodgates near the Seabrook Boat Launch and the Leon C. Simon Westbound off-ramp to Lakeshore Drive
- Floodwall along Leon C. Simon Drive near the Seabrook Boat Launch
- Vehicle floodgates on Lakeshore Drive near Rail Street and Lake Terrace Drive



Between 17th Street and Topaz (LPV 101.02), the contractor has driven all piles and completed all wall monoliths for the project. This is the last perimeter project in the Orleans Metro area; the 100-year level of risk reduction was achieved two days ago when we hung the last vehicle gate.

[Corps reopens stretch of Lakeshore Drive](#) | [Corps says metro area will have 100-year protection by start of hurricane season](#) | [Drainage canal upgrades will allow city to pump more water during heavy rains](#)

### 4. New Orleans East (Main Supporting District - Memphis) \$800 M - \$1 B construction value

The 100-year level of risk reduction has been reached at the following locations in New Orleans East:

- I-10 Crossing at South Point to CSX Railroad Levee
- Lake Pontchartrain Levee between Paris Road & South Point and Collins Pipeline Floodwall
- Lake Pontchartrain Levee - Citrus
- Lincoln Beach Floodwall / Gate
- Levee between Michoud Canal and Michoud Slip
- CSX Railroad Crossing

Near the Lakefront Airport (LPV 105.01 and LPV 105.02), all of the H-piles have been driven and all of the wall monoliths have been completed; installation of the gates were finished this week



and the 100-year level of risk reduction was attained.

Between South Point and the CSX Railroad crossing (LPV 109), the contractor is placing clay and working on the T-wall monoliths at Highways 11 and 90. Approximately 4.2 million tons of clay has been placed as of May 6. The contractor is scheduled to reach the 100-year level of risk reduction on May 31. Overall progress on this project is 95 percent.



Between the CSX Railroad Crossing and Inner Harbor Navigation Canal Surge Barrier (LPV 111), work is progressing well on all project features. At the west tie-in and at Pump Station 15, all of the T-wall monoliths are complete. All three of the embankment reaches will be at the 100-year level on May 31. Overall progress on this project is 96 percent.



LPV 111 - Levee Construction

### 5. St. Bernard Parish (Main Supporting District - St. Paul) \$1 B - \$1.5 B construction value

Construction is progressing well all around St. Bernard Parish; 23 miles of new T-wall have been constructed. The 100-year level of risk reduction has been reached at the following locations:

- Mississippi River Gulf Outlet Floodwall between Bayou Bienvenue and Bayou Dupre
- Highway 46 Floodgate
- Floodwall between Bayou Dupre and Highway 46
- Bayou Dupre Sector Gate
- Caernarvon Canal Sector Gate, Floodwall, Railroad and Highway Gate

Between Verret and Caernarvon (LPV 148.02), the contractor has driven all of the H-piles for the project. There are seven base slabs and nine walls that remain to be formed and poured. All five roller gates have been installed. Overall progress on this project is 96 percent complete.

[Chalmette Loop levee system moves forward toward expected June completion](#)

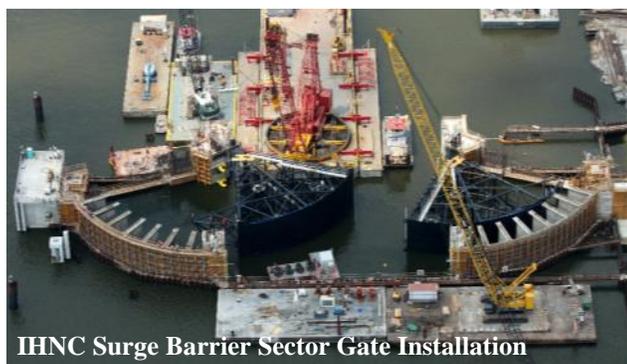


LPV 148.02 Floodwall Construction

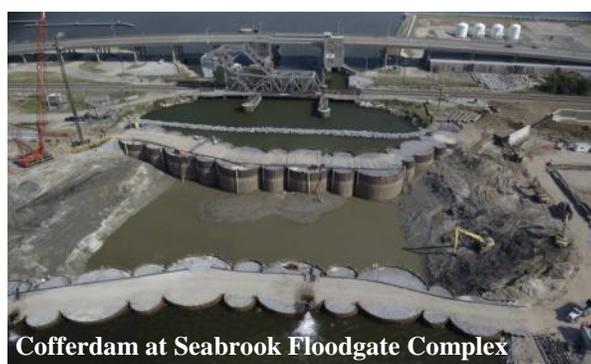
### 6. Inner Harbor Navigation Canal (Corps-wide Support)

**Surge Barrier** \$1.1 B construction value / **Seabrook Floodgate Complex** \$155 M construction value

We achieved a major HSDRRS milestone with the placement of the Gulf Intracoastal Waterway (GIWW) sector gate leafs in the closed position at the Inner Harbor Navigation Canal (IHNC)-Lake Borgne Surge Barrier. Last week, we finished the floodwall and installed the Norfolk Southern Railroad gate south of the Senator Ted Hickey Bridge and west of the Seabrook Floodgate Complex. These join the already-completed Seabrook cofferdam to effectively block 100-year storm surge generated in Lake Pontchartrain from entering the north end of the IHNC. The entire IHNC (also known locally as the Industrial Canal)-GIWW polder can now defend against a 100-year storm surge event.



IHNC Surge Barrier Sector Gate Installation



Cofferdam at Seabrook Floodgate Complex

[New Orleans Flood defenses detailed with operations and maintenance in mind](#) | [Massive surge gate is installed across Lake Borgne marshes](#)



Robert A. Sinkler  
Colonel, U.S. Army Corps of Engineers  
Commander, Hurricane Protection Office  
Mississippi Valley Division

## The Secretary of the Army and Chief of Staff of the Army receive status updates on the Hurricane & Storm Damage Risk Reduction System



The Honorable John McHugh, Secretary of the U.S. Army, and MG Michael Walsh, Mississippi Valley Division Commander, fly over the IHNC Surge Barrier.



GEN Martin Dempsey, U.S. Army Chief of Staff, addresses the media at the Bonnet Carre Spillway about the Mississippi River flooding and HSDRRS.



Mayor Mitch Landrieu and the Honorable John McHugh return from a flyover.



MG Walsh and COL Greg Gunter, G-3 of Task Force Hope, brief Secretary McHugh and the Honorable Jo Ellen Darcy, Assistant Secretary of the Army for Civil Works, on the status of the HSDRRS.



Terral Evans, star of the History Channel's popular show "Swamp People," visited HSDRRS projects in St. Bernard on 20 May, including the Caernarvon Sector Gate, shown here.

## Recent Visitors to East Bank Construction Sites



St. Bernard Parish President Craig Taffaro visits the sector gate, floodwall, highway gate and railroad gate at Caernarvon.



Chalmette High School students visit the IHNC Surge Barrier in St. Bernard Parish.



Georgia Tech Alumni visit the IHNC Surge Barrier and LPV 145 in St. Bernard Parish (Bus 1).



Georgia Tech Alumni visit the IHNC Surge Barrier and LPV 145 in St. Bernard Parish (Bus 2).



Girl Scout members visit the IHNC Surge Barrier and LPV 145 in St. Bernard Parish.



Insurance industry representatives visit the IHNC Surge Barrier and LPV 145 in St. Bernard Parish.

## Recent Visitors to East Bank Construction Sites



Department of Transportation and Development employees visit the IHNC Surge Barrier in St. Bernard Parish.



St. Bernard Parish District Attorney Jack Rowley visits the IHNC Surge Barrier and other risk reduction projects in St. Bernard Parish.



Operation Helping Hands & Parc Oaks Plantation representatives visit the IHNC Surge Barrier and LPV 145 in St. Bernard Parish.



Sarah T. Reed Senior High School Academy of Engineering and Frederick Douglass High School students visit the IHNC Surge Barrier and LPV 145 in St. Bernard Parish.



Saudi Arabian National Guard Generals visit the IHNC Surge Barrier in St. Bernard Parish and floodwall in the Lower Ninth Ward.



Seabrook Neighborhood Association members visit the Seabrook Floodgate Complex.

## Recent Visitors to East Bank Construction Sites



**Times-Picayune editors and staff visit the IHNC Surge Barrier and LPV 145 in St. Bernard Parish.**



**Tulane University faculty and students visit the IHNC Surge Barrier and LPV 145 in St. Bernard Parish.**



**Metairie Park Country Day High School's visit to the IHNC Surge Barrier and LPV 145 in St. Bernard Parish.**



**U.S. Army Corps of Engineers, Task Force Hope visit the Seabrook Floodgate Complex in Orleans Parish.**



**Louisiana State University professors visit the IHNC Surge Barrier and LPV 145 in St. Bernard Parish.**



**Tour Guides Association of Greater New Orleans, Inc. visit the IHNC Surge Barrier and LPV 145 in St. Bernard Parish.**