

**East Jefferson Levee District Status Report  
December 2011**

**East Jefferson Levee District LPV 27 26**

**The hurricane protection levee system is divided into five Reaches along Lake Pontchartrain, plus the East Return Levee on the 17<sup>th</sup> Street Canal and the West Return Levee on the St. Charles Parish Line. (Map of the East Jefferson Levee District is attached.)**

**LPV 27 26 WRL – West Return Levee**

**Description:**

The West Return Levee is located along the St. Charles Parish Line in Kenner and is comprised of floodwalls, earthen levees and floodgates. The earthen levees in this section are at the south end of the section surrounding the airport runway. This section was elevated in the spring of 2005 by the Louis Armstrong International Airport, to the pre-Katrina design elevation of 12' plus 2' of overbuild, or a total of 14', to account for subsidence. The sheetpile I-wall at the corner of the West Return levee wall and the airport runway extension that ties in to the earthen levee section were replaced with deeper, stronger 60' sheeting. The earthen berms along these sheetpile I-walls were enlarged and reinforced with concrete slope paving to provide additional stability and improve scour protection.

**Construction:**

The East Jefferson Levee District assisted the Corps' Memphis hired labor crew with modifications made to the earthen berms at the south end of the West Return levee to provide additional stability and improve drainage. A 1,500' section of I-wall along the West Return levee at Vintage, which was sinking and leaning, was reinforced with 60' sheetpile, which was strengthened further with an enlarged berm and concrete slope paving to prevent scour. Phase 2 100-year protection of the earthen levees surrounding the airport runway has been awarded with completion in the 1<sup>st</sup> Quarter of 2012. The West Return levee floodwall has been divided into North and South segments. Interim 100-year protection is in place. The north segment will be complete in the 2<sup>nd</sup> Quarter of 2012. The south segment will be complete in the 1<sup>st</sup> Quarter of 2012.

**Inspection:**

**Issues:** None

**LPV 27 26 R1 – Reach 1**

**Description:**

The Reach 1 levee is located between the Duncan Canal in Kenner and the St. Charles Parish Line and is comprised of floodwalls, earthen levees and floodgates. The earthen levees in this section were elevated in Phase 1 to the pre-Katrina authorized design elevation of 16' plus 1' of overbuild, to a total of 17', to account for subsidence. The Recurve I-wall at the St. Charles Parish line and the I-walls that tie the Duncan Canal Pump Station into the earthen levees were improved with interim protection. The earthen berms along these I-walls were enlarged and reinforced with concrete slope paving to provide additional stability and to improve scour protection.

**Construction:**

The project to build the breakwater designed to protect the Duncan Canal Pump Station is complete. The breakwater will provide 100-year protection for Duncan Pump Station. The contract for the construction of the Duncan Canal Pump Station fronting protection and the replacement of the I-wall tie-ins was awarded April 15, 2010 and should be complete in the 3<sup>rd</sup> Quarter of 2013. The Phase 2 100-year protection for the Reach 1 earthen levee is complete with the exception of turf establishment.

**Inspection:**

**Issues:** None

**LPV 27 26 R2 – Reach 2**

**Description:**

The Reach 2 levee is located between the Elmwood Canal in Metairie and the Duncan Canal in Kenner and is comprised of floodwalls, earthen levees and floodgates. The earthen levees do not meet the Corps' current stability requirements. Older sheetpile I-walls were replaced with deeper, stronger 60' sheeting on the west side of the Elmwood Canal. The I-walls at the Williams Blvd. roadway floodgates and the I-walls that tie in the Duncan and Elmwood Canal Pump Stations to the earthen levees were improved with interim protection. The earthen berms along these I-walls were enlarged and reinforced with concrete slope paving to provide additional stability and to improve scour protection.

**Construction:**

Phase 2 100-year protection for the Reach 2 earthen levee is complete with the exception of turf establishment. Interim 100-year protection for the Elmwood Canal Pump Station is in place. Permanent 100-year protection for the Elmwood Canal pump station and the replacement of the I-wall tie-ins will be complete by the 2<sup>nd</sup> Quarter of 2012 and the entire project will be complete by the 3<sup>rd</sup> Quarter of 2013. The Williams Boulevard floodgate project is essentially complete.

**Inspection:**

**Issues:** None

**LPV 27 26 R3 – Reach 3**

**Description:**

The Reach 3 levee is located between the Elmwood Canal in Metairie and the Suburban Canal in Metairie and is comprised of floodwalls and earthen levees. The earthen levees in this section were elevated during Phase 1 to the pre-Katrina authorized design elevation of 16' plus 1' of overbuild, to a total of 17', to account for subsidence. Older sheetpile I-walls were replaced with deeper, stronger 60' sheeting on the east side of the Elmwood Canal and the west side of the Suburban Canal. The I-walls that tie in the Elmwood and Suburban Canal Pump Stations to the earthen levees were improved with interim protection. The earthen berms along these I-walls were enlarged and reinforced with concrete slope paving to provide additional stability and to improve scour protection.

**Construction:**

Interim 100-year protection for the Suburban Canal Pump Station is in place with permanent 100-year protection for the pumping station and replacement of the I-wall tie-ins completed by the 2<sup>nd</sup> Quarter of 2012. The entire project is expected to be complete

by the 3<sup>rd</sup> Quarter of 2013. The construction for the Phase 2 100-year earthen protection is complete with the exception of turf establishment.

**Inspection:**

**Issues:** None.

#### **LPV 27 26 R4 – Reach 4**

##### **Description:**

The Reach 4 levee is located between the Suburban Canal in Metairie and Causeway Blvd. in Metairie and is comprised of floodwalls and earthen levees. The earthen levees in this section were elevated in Phase 1 to the design elevation of 16' plus 1' of overbuild, to a total of 17', to account for subsidence. Older sheetpile I-walls were replaced with deeper, stronger 60' sheeting on the east side of the Suburban Canal. The Lake Pontchartrain protection at Causeway Boulevard formally consisted of a crib wall under the bridge spans. The 100-year project will consist of a floodwall with the Causeway bridge spans atop the wall. The wall is being built to 2057 standards for strength, height and stability. This project incorporates the all-weather access road passing under the bridge to allow for maintenance and construction vehicles of the levee district to access both sides of Causeway.

##### **Construction:**

The construction for the Phase 2 100-year earthen protection is complete with the exception of turf establishment. 100-year interim protection is in place at Causeway and permanent 100-year protection will be in place by the 1<sup>st</sup> Quarter of 2012. The entire Causeway project should be complete in the 4<sup>th</sup> Quarter of 2012.

##### **Inspection:**

**Issues:** None

#### **LPV 27 26 R 5 – Reach 5**

##### **Description:**

The Reach 5 levee is located between Causeway Boulevard in Metairie and the 17th St. Canal at the Orleans Parish Line and is comprised of floodwalls, earthen levees and floodgates. The earthen levees are about 2' low. To provide interim protection until the permanent levee project can be constructed, the earthen sections were elevated 3' using HESCO baskets filled with sand. The construction contract for the permanent lift was awarded in the 4<sup>th</sup> Quarter of 2008. The I-walls at the Bonnabel Blvd. roadway gates and the I-walls that tie in the Bonnabel Canal Pump Station to the earthen levees have been improved with interim protection. The earthen berms along these I-walls have been enlarged and reinforced with concrete slope paving to provide additional stability and to improve scour protection.

##### **Construction:**

The lift for this levee section elevated the Reach to 16.5' with 10' crowns. This lift brings the levee section to 100-year protection and satisfies the new design criteria. The construction of the breakwater designed to protect the Bonnabel Canal Pump Station is complete. The Bonnabel Boulevard floodgate project is essentially complete. The contract for the construction of the Bonnabel Canal Pump Station fronting protection and replacement of the I-wall tie-ins should be complete by the 3<sup>rd</sup> Quarter of 2013.

**Inspection:**

**Issues:** None

**LPV 27 26 ERL**

**Description:**

The **East Return Levee** is located between the Hammond Highway Bridge and Pump Station 6 along the 17<sup>th</sup> St. Canal and is comprised of floodwalls, earthen levees and floodgates. Post-Katrina interim closure gates and temporary pumps were constructed at the lakefront outfall of the 17<sup>th</sup> Street Canal to eliminate the risk from lake waters filling the canal and causing failure of the canal walls as happened during Katrina. This interim protection will remain in place until a permanent structure can be installed.

**Construction:**

Work on the 17<sup>th</sup> Street Canal Remediation project, which is intended to increase the safe water elevation in the canal is complete with the exception of grass growth.

**Inspection:**

Erosion and nutria burrowing along the canal bank are being monitored.

**Issues:** None

**LPV 27 26 MRL**

**Description:**

The **Mississippi River Levee** is located between the Orleans Parish Line and the St. Charles Parish line and is comprised of earthen levees only. The levees are constructed between an elevation of 24.5' and 26.5'.

**Construction:** The Corps has not yet provided information for the upcoming Mississippi River Levee lift. The bike paths will be replaced because they serve as an access road for routine inspections and emergency responses.

**Inspection:** Good

**Issues:** The Corps and the levee district will be compiling an inventory of trees within 6' of the toe of the levee that will need to be removed.

**LPV 27 26 Special Issues**

**Shoreline Protection – Reaches 4 and 5**

The levee district has contracted with Burk-Kleinpeter, Inc. to replace the shoreline rock lost during Hurricane Katrina. This approximately \$11.3 million project being funded by FEMA was awarded July 17, 2008, and will hopefully be completed before the end of 2011.

**Shoreline Protection – Reaches 1, 2, 3 and 1000' of 4**

The Corps of Engineers has designed foreshore protection along the lake shoreline from St. Charles Parish to 1000' east of the Suburban Canal. The work is covered by two projects and will build out the shoreline approximately 90' with a rock berm at the shoreline's edge. The contracts have been awarded and completion is expected by the 2<sup>nd</sup> Quarter of 2012.