



Permanent Canal Closures & Pumps

Construction Impact Hotline at: 1-877-427-0345

Updated May 2015

U.S. ARMY CORPS OF ENGINEERS

Congress has fully authorized and funded the Hurricane and Storm Damage Risk Reduction System (HSDRRS) for southeast Louisiana. The \$14.45 billion HSDRRS includes five parishes, consists of 350 miles of levees and floodwalls; 73 non-Federal pumping stations; 3 canal closure structures with pumps; and 4 gated outlets.

Project Summary / Background

The three main outfall canals in New Orleans are a critical element of the flood control system, serving as drainage conduits for much of the city. The canals run south-to-north near the Orleans Parish lakefront between the Jefferson Parish line and the Inner Harbor Navigation Canal (IHNC) with floodwall-topped levees lining each canal. The 17th Street Canal extends 13,500 feet from Pump Station 6 to Lake Pontchartrain along the Jefferson Parish line. The Orleans Avenue Canal, between the 17th Street Canal and the London Avenue Canal, runs approximately 11,000 feet from Pump Station 7 to Lake Pontchartrain. The London Avenue Canal extends 15,000 feet north from Pump Station 3 to Lake Pontchartrain about halfway between the Orleans Avenue Canal and the IHNC.

The Corps awarded the approximately \$615 million contract to construct Permanent Canal Closures & Pumps (PCCP) at the mouths of the 17th Street, Orleans Avenue and London Avenue outfall canals on April 17, 2013 to *PCCP Constructors JV*. The PCCP will provide a permanent and more sustainable measure for reducing the risk of a 100-year level storm surge entering the outfall canals. The PCCP will replace the Interim Closure Structures, which were constructed in 2006. The notice to proceed was issued on May 6, 2013, and construction will be complete by the 2017 hurricane season. The existing Interim Closure Structures will continue to provide 100-year levels of risk reduction until construction of the PCCP is complete.

Project Features

The PCCP will be composed of permanent gated storm surge barriers and brick façade pump stations at or near the lakefront. The pumps will move rainwater out of the canals, around the gates and into Lake Pontchartrain during a tropical weather event, and be equipped with a stand-alone emergency power supply capacity so that it can operate independently of any publically provided utility.

When complete, the PCCP at 17th Street will consist of six 1,800 cubic feet per second (cfs) pumps and two 900 cfs pumps and have a total pumping capacity of 12,600 cfs; the PCCP at Orleans Avenue will consist of three 900 cfs pumps and have a total pumping capacity of 2,700 cfs; the PCCP at London Avenue will consist of four 1,800 cfs pumps and two 900 cfs pumps and have a total pumping capacity of 9,000 cfs.

BUILDING STRONG®



Rendering of the 17th Street Canal Pump Station



Rendering of the Orleans Avenue Canal Pump Station



Rendering of the London Avenue Canal Pump Station

U.S. ARMY CORPS OF ENGINEERS – TEAM NEW ORLEANS

7400 Leake Avenue, New Orleans, LA 70118 | www.mvn.usace.army.mil

www.facebook.com/permpumps | www.twitter.com/teamneworleans | www.flickr.com/teamneworleans



OUTFALL CANAL CLOSURE STRUCTURES

August 2015

U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG®

Public safety is the Corps of Engineers' top priority. Congress has fully authorized and funded the Hurricane and Storm Damage Risk Reduction System (HSDRRS) for southeast Louisiana. The \$14.45 billion HSDRRS includes five parishes and consists of 350 miles of levees and floodwalls; 73 non-Federal pumping stations; 3 canal closure structures with pumps; and 4 gated outlets.

Project Summary

There are three main drainage outfall canals in the City of New Orleans. These canals are a critical element of New Orleans' flood control system, serving as drainage conduits for much of the city. Levees line the sides of the canals and floodwalls are situated on the top of each levee. The canals run south-to-north near the Orleans Parish lakefront between the Jefferson Parish line and the Inner Harbor Navigation Canal (IHNC; also known locally as the Industrial Canal). The 17th Street Canal extends 13,500 feet from Pump Station 6 to Lake Pontchartrain along the Jefferson Parish line. The Orleans Avenue Canal, between the 17th Street Canal and the London Avenue Canal, runs approximately 11,000 feet from Pump Station 7 to Lake Pontchartrain. The London Avenue Canal extends 15,000 feet north from Pump Station 3 to Lake Pontchartrain about halfway between the Orleans Avenue Canal and the IHNC.



Following Hurricane Katrina, the Corps constructed Interim Closure Structures at the mouths of the three outfall canals to provide the 100-year level of storm surge risk reduction. These structures were completed prior to the 2006 hurricane season, the first full hurricane season after Hurricane Katrina, at a cost of about \$400 million.

Project Features

The interim closure structures at the three outfall canals are composed of both gated structures and various pumps. These pumps move rainwater out of the canals, around the gates and into Lake Pontchartrain during a tropical weather event. The 17th Street Canal consists of 18 hydraulic pumps, 11 direct drive pumps, 14 bridge pumps, and has a pumping capacity of 9,200 cubic feet per second (cfs).

The Orleans Avenue Canal consists of 10 hydraulic pumps and has a pumping capacity of 2,200 cfs. The London Avenue Canal consists of 12 hydraulic pumps, 8 direct drive pumps, and has a pumping capacity of 5,200 cfs.

-over-

U.S. ARMY CORPS OF ENGINEERS – TEAM NEW ORLEANS
7400 Leake Avenue, New Orleans, LA 70118 | www.mvn.usace.army.mil
Visit the following links to follow us on Facebook, Twitter and Flickr:
www.facebook.com/usacenola
www.twitter.com/teamneworleans
www.flickr.com/teamneworleans



OUTFALL CANAL CLOSURE STRUCTURES

August 2015

U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG®

The decision to close the gates is based on predicted storm surge and water elevations in Lake Pontchartrain. Once the Corps makes the decision to lower the gates, local officials are notified. Once conditions improve, the gates will be raised as soon as possible.

Project Status

The interim closure structures at the three outfall canals currently provide the 100-year level of risk reduction. Since their installation, the pumps have run successfully for tropical weather events such as Hurricanes Gustav and Ike in 2008 as well as during Hurricane Isaac in 2012. These interim closure structures have a limited design life, though, and are being replaced with permanent canal closures and pumps. Construction began in fall 2013 and is expected to take approximately 44 months. Questions about construction may be directed to the **Construction Hotline** at 877-427-0345.



17th St. Canal



Orleans Ave. Canal



London Ave. Canal

U.S. ARMY CORPS OF ENGINEERS – TEAM NEW ORLEANS
7400 Leake Avenue, New Orleans, LA 70118 | www.mvn.usace.army.mil
Visit the following links to follow us on Facebook, Twitter and Flickr:
www.facebook.com/usacenola
www.twitter.com/teamneworleans
www.flickr.com/teamneworleans