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
The Gulf Intracoastal Waterway - West Closure Complex is a major feature of the HSDRRS which reduces risk for residences and businesses in three parishes on the west bank of the Mississippi River: Orleans, Jefferson and Plaquemines parishes. This risk reduction feature is located approximately one half mile south of the confluence of the Harvey and Algiers canals on the Gulf Intracoastal Waterway. Constructing the complex at this location eliminates 26 miles of levees and floodwalls parallel to the canals from the west bank’s perimeter risk reduction system and allows the Harvey and Algiers canals to serve as a detention basin for rainwater draining from the three parishes.

The structural features of the project reduce the risk associated with a storm surge event that has a one percent chance of occurring in any given year, or a 100-year storm surge. The total construction value for the West Closure Complex is an estimated $1 billion.

Project Features
The GIWW - West Closure Complex consists of a navigable floodgate, a pumping station, floodwalls, water control structures, foreshore protection and an earthen levee. The project also required the dredging of Algiers Canal, as well as the realignment of Bayou Road. Project challenges include maintaining navigation traffic on the GIWW (a Federal navigation channel with heavy commercial barge traffic) and the location of the complex in relationship to the Environmental Protection Agency’s Bayou aux Carpes Clean Water Act (CWA) 404(c) area, a wetland area of national significance.

The complex significantly reduces the risk to a large area of the west bank by removing 26 miles of levees, floodwalls, a gate and pumping stations along the Harvey and Algiers canals from the direct impacts of storm surge.

Project Status
Construction of this risk reduction feature began in August 2009 and all features provide the 100-year level of risk reduction. Operations and maintenance responsibility has been transferred to the non-Federal sponsor.
West Closure Complex features include:

- 19,140 cfs Drainage Pumping Station (11 x 1740 cfs vertical “Flower Pot” pumps)
- 225-foot Navigable Floodgate
- 5 Sluice Gates (each 16’ x 16’)
- 4200 ft Concrete T-Wall along edge of Bayou aux Carpes CWA 404(c) wetlands (4200’ X 100’ construction corridor)
- Water Control Structure (with two – 8’x 8’ gates)
- Levee and East Bayou Road Realignment
- Environmental Mitigation and Augmentations
- Foreshore Protection
- Algiers Canal Dredging

Image of the GIWW-West Closure Complex