





Prepared By:

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## **Black Bayou Hydrologic Restoration (CS-27)** Coastal Wetlands Planning, Protection and Restoration Act 2010 Photomosaic and Land-Water Classification

Project Background:

The Black Bayou Hydrologic Restoration project (CS-27) is located approximately 18 miles (28.96 km) west-northwest of Hackberry, Louisiana, in northwest Cam-eron and southwest Calcasieu Parishes. The project is bordered to the north by the Gulf Intracoastal Waterway (GIWW), to the south by Black Bayou, to the east by Gum Cove Ridge, and to the west by the Sabine River. In the early 1900s the marshes in the project area supported vegetation typical of fresh or very low salinity conditions. The introduction of water and sedimentation into the project area was influenced by precipitation, local drainage, and water exchange generated by wind and tide. Marsh elevation was maintained through vegetative biomass production, which com pensated for losses caused by subsid-ence and sea level rise. More recently, wetlands in the Black Bayou area have suffered a loss of an estimated 10,00 acres (4,047 ha). Contributing factors t iodical cha es; reduced freshwater inflow from the GIWW; increased frequency, duration, and magnitude of tidal fluctuations; increased salinities; and higher water evels.

Project Objectives:

The Black Bayou Hydrologic Restoration project intends to increase fresh water through structural and nonstructural measures. The construction of weirs, culverts, and rock dikes will reestablish former hydrologic pathways and flow regimes in the project area.

Project Area Reference Area Parish Boundary Rock Dike | Culvert Weir

Class	Project Acres
Land	16,237
Water	11,708
TOTAL	27,945

Scale = 1:35,000 IN









Data Information: The land-water data were derived from 1:24,000 scale, color infrared aerial photography acquired November 5, 2010. All areas characterized by emergent vegetation, wetland forest, scrub-shrub, and upland were classified as land, while open water, mud flats, and aquatic beds were classified as water.

Federal Sponsor: National Marine Fisheries Service



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