Cheniere Au Tigre Sediment Trapping Demonstration (TV-16)

Location
The project is located east of Cheniere Au Tigre along the Gulf of Mexico shoreline in southern Vermilion Parish, Louisiana.

Problems
The beach along the chenier plain protects thousands of acres of wetlands and is critical to diverse communities of fish and wildlife populations. This project area includes portions of a wildlife sanctuary and a state refuge. The wetlands north of the demonstration project contain several oilfields and navigation channels, one of which terminates only a few hundred feet from the existing shoreline. If the beach breaches into the nearby navigation channel, full strength Gulf of Mexico seawater will intrude into intermediate and brackish marshes and increase tidal action that will negatively impact 68,000 acres of marsh located north of the project area.

Restoration Strategy
This demonstration project will field test the effectiveness of segmented rock breakwaters to trap and retain sediment from gulf tides in this part of the gulf shoreline, potentially stabilizing the existing shoreline on Cheniere Au Tigre. Increased sediment accretion on the Gulf of Mexico side of the chenier is expected to act as an area of defense between the higher salinity seawater and the brackish marsh that lies immediately behind the chenier.

Progress to Date
The Louisiana Coastal Wetlands Conservation Restoration Task Force approved this project on April 24, 1997. Construction of six segmented breakwaters was completed in October 2001. A large amount of sediment has accreted behind the structures.

The 2005 AM&M Report concluded that initially, this demonstration project intended to use new innovative designs for shoreline protection. Feasible, cost-effective designs could not be developed by construction contractors, therefore rock was eventually incorporated into the design. This project has been so successful that LDNR/Coastal Engineering Division had funded a continuation of the existing project. This project is on Priority Project List 6.