

Louisiana Coastal Wetlands Conservation and Restoration Task Force

October 2003

Cost figures as of: July 2025

# Castille Pass Channel Sediment Delivery (AT-04)

**De-authorized** 

### **Project Status**

Approved Date:2000Project Area:5,368 acresApproved Funds:\$2 MTotal Est. Cost:\$2 MNet Benefit After 20 Years:577 acresStatus:De-authorizedProject Type:Water DiversionPPL #:9

#### Location

Castille Pass is located off of East Pass in the Atchafalaya Delta in St. Mary Parish, Louisiana.

#### **Problems**

Growth of the lower Atchafalaya Delta has been reduced as a result of maintenance of the Atchafalaya River navigation channel. Delta development in the shallow waters of Atchafalaya Bay is dependent on distributary flows and the diversion of sediments into overbank areas through crevasse (an opening within a levee)channels.

The open crevasse channels are frequently short-lived because sediment accumulation within the channels decreases flow efficiency. Also, maintenance dredging, the placement of material dredged from the navigation channel has an effect on riverflow efficiency. As riverflow through a crevasse channel is reduced, the amount of sediment that can be deposited in the delta is likewise reduced, resulting in decreased marsh development.

## **Restoration Strategy**

The Castille Pass project will re-establish the sedimentation processes that lead to subdelta development in this area of the Atchafalaya Delta. This project consists of dredging and extending Castille Pass to promote subdelta development. Castille Pass would be dredged, extending it towards Fourleague Bay and ending near South Point. This channel will provide water and sediment through distributary channels to the area among several U.S. Army Corps of Engineers' beneficial use disposal islands located on the east side of the Atchafalaya River. Excavated sediment would be placed to create delta lobes between the confluence of the main and distributary channels. Approximately 150 acres of marsh would be created from the initial construction of the Castille Pass and distributary channels.

Scheduled maintenance activities are expected to create another 73 acres of marsh.

#### **Progress to Date**

The cooperative agreement was awarded September 29, 2000. Hydrodynamic modeling and engineering and design are underway. This project is currently de-authorized.

This project is listed on Priority Project List 9.



This restoration technique is an example of what is proposed in the Castille Pass.

For more information, please contact:



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Local Sponsor: Coastal Protection and Restoration Authority Baton Rouge, LA (225) 342-4736

