US Army Corps of Engineers
New Orleans District

Project Fact Sheet

Official Project Name
CAP - Vermilion River Ecosystem Restoration

Location
The study area is located in south central Louisiana, approximately 50 miles west of Baton Rouge. The proposed area extends along the Vermilion River from the Lafayette Regional Airport (north of the city of Lafayette) to Highway 726, approximately 37 miles of River. The Vermilion River is the major feature of the study and is located in Lafayette Parish. The study area also includes the Bayou Tortue Swamp, Ruth (Evangeline) Canal, and Lake Martin in Lafayette and St. Martin Parishes.

Purpose
The purpose of the proposed project is to restore fish and wildlife habitat along the Vermilion River through the re-establishment of riparian zones and the improvement of water quality in the river.

Background
The Vermillion River has a well-defined drainage basin with a watershed of approximately 625 square miles that lies between the Mermentau watershed on the west and the Bayou Teche ridge on the east. The Vermilion River additionally functions as a distributary of Bayou Teche, receiving, on average, about 25 percent of the flow of Bayou Teche via Bayou Fuselier. Flow rates on the river are slow with an average rate of less than 1 foot per second. These flow rates are due to the small relief differential between the upper part of the river and its mouth. With the urbanization of lands along the river as well as clearing operations for agricultural purposes above Lafayette, few barriers to water ingress into the river remain. Communities built without water retention features, lateral coulees dug for drainage, and agricultural practices up to the bank of the river result in rapid runoff from rainfall events. Thus, during high rainfall events, water rushes uninhibited into the Vermilion River and flooding occurs because of the river's inability to move the water out with sufficient flow. Erosion caused by unconstrained sheet flow across agricultural lands and livestock wandering the banks of the river result in increased sedimentation in the river. The elimination of wetlands adjacent to the river has destroyed the floodplain's natural capacity to remove excessive nutrients, sediments, and pollutants from surface flows resulting in eutrophication of the water column and low dissolved oxygen levels. Adding to these water quality problems is runoff from poorly managed sewer systems, faulty or non-existent septic systems and livestock excreta directly and indirectly entering the river resulting in elevated E. Coli bacteria counts.

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Authority
The study was conducted as part of the Continuing Authorities Program (CAP), under the authority of Section 206 of the Water Resources Development Act of 1996.

Scope
During the feasibility study phase several potential alternatives, and combination thereof, would be analyzed to restore the fish and wildlife habitats along the Vermilion River as well as reduce the amount of sediments and nutrients entering the river.

Partners/Sponsors
Lafayette Parish Bayou Vermilion District (www.bayouvermilion.org)