

ATCHAFALAYA BASIN WATER MANAGEMENT UNIT INFORMATION*

Name of Unit: Buffalo Cove

Location and Boundaries: Located in the southwest portion of the Lower Atchafalaya Basin Floodway. Bordered generally on the northwest by Little Gonsoulin Bayou, Alligator Bayou and Bayou Chene (collectively the West Access Channel), on the west and south by the Lake Fausse Pointe Cut and the West Atchafalaya Basin Protection Levee, and on the east by the Atchafalaya Basin Main Channel (including Chicot Pass and Bayou Chene Cut).

Issues: Need to address sedimentation and poor water quality (low oxygen) associated with altered internal circulation. Continued sedimentation would eventually fill in viable fishery habitat, and worsen internal circulation problems that contribute to ponding and stagnant conditions of the water in the backswamp.

Primary hydrologic inputs are from Bayou Crook Chene through the West Access Channel and Bayou Eugene. Water from the Lake Fausse Point Cut enters the swamp interior at the Sibon Canal and from the south through the old Buffalo Cove Lake. It also flows through Little Lake Long and Little Pass into Grand Avoille Cove. From the east, water enters the swamp interior through Elements 9-1 and 9-2 of the Buffalo Cove pilot water management unit project. The primary outflow for the unit is through Grand Lake back into the main channel.

Strategies: The current strategies for this water management unit are to 1) introduce oxygenated, low temperature river water from the upper end, 2) improve interior circulation within the swamp, 3) remove barriers to north-south flow, and 4) prevent, reduce, or redirect sediment deposition in interior swamps.

Pilot Unit Objective: The objective of the Buffalo Cove pilot water management unit project is to determine the feasibility and level of federal participation for future Management Unit implementation.

Implementation Status: The Corps of Engineers began construction on the Buffalo Cove, Bayou Eugene, project in 2006. That work consists of a series of closures and sediment traps (to prevent sediment influx), measures to increase inputs of river water, and gaps placed in existing embankments to improve water circulation. Construction elements completed by the Corps to date include 1, 6, 7, 8, 9-1, and 9-2. The Corps is in the lengthy process of acquiring easements needed to complete the remaining construction elements of the Buffalo Cove pilot water management unit project. Once the last element is constructed, the Corps is required to monitor the project's effectiveness for 5 years.

Funding:

Federal Funding Available: Current funds are being used for construction easement acquisition.

State Funding Available: No state funds are currently required.

Additional Funding Needed: Approximately \$4.0M in federal funds is required to complete all elements of the Buffalo Cove pilot water management unit project.

* Focus is on measures needed to address issues related to maintaining, restoring and/or enhancing the Basin's aquatic and associated wetland habitats