

## Abstract

On August 12, 1999, the St. Landry and Evangeline Soil and Water Conservation Districts (SWCD) entered into a cooperative agreement with the Louisiana Department of Environmental Quality (LDEQ) for the Upper Mermentau River Water Quality Project. The purpose of the project was to increase the level of agricultural BMP implementation in the Bayou Duralde-Des Cannes, Bayou Nezpique and Bayou Mallet watersheds in order to improve water quality. The bayous' reach of 151 miles is the receiving water body for several thousand acres. Ninety percent of these stream segments are utilized for cropland, mainly rice and soybeans. Less than one percent is urban land, and approximately seven percent is wetland. The state-designated uses for Bayou Duralde-Des Cannes, Bayou Nezpique and Bayou Mallet are primary contact recreation, secondary contact recreation and fish and wildlife propagation.

The types of water quality problems that exist in these watersheds include sediment, nutrients, fecal coliform bacteria and dissolved oxygen. In order to reduce the concentration of pollutants and restore the designated uses of fishing and swimming, agricultural BMPs were implemented. A mail-out was conducted by each of the Soil and Water Conservation Districts on September 6, 1999. Each producer in the project area received a mail-out and a newspaper article was published in the local newspapers. Applications were received in September 1999 and each one was ranked during the application process with emphasis placed on the applicants planting rice for 3 years. The producers had to be willing to utilize the riceland water quality improvement practice and follow the conservation plan at the Resource Management System (RMS) level.

After the selection process, 49 producers were accepted for the development of a conservation plan. A total of 93 plans were developed. The parish breakdown includes the following: St. Landry Parish -22 and Evangeline Parish-71. RMS plans were developed on 15,175 acres of which 6,748 acres were placed under contract for RMS plans. The types of practices that were implemented included:

- Integrated Crop Management (ICM) (nutrient management and pest management)
- Crop Residue Management
- Record Keeping
- Riceland Water Quality
- Wildlife Wetland Habitat Management

The USDA-NRCS provided technical assistance to the landowners and farmers in the project area. Through the USDA programs, producers in the Upper Mermentau River Basin implemented 500 acres of RMS plans, 13 grade stabilization structures and 100 acres of riceland water quality practices.

In addition to the implementation of BMPs, three field days were held in the project area, resulting in approximately 200 participants, who learned more about water quality, nonpoint source pollution and agricultural BMPs. The project was considered a success

and LDEQ continues to monitor the water quality to determine whether water quality has improved as a result of the project.