

Abstract

The Tensas River Watershed was targeted for a NPS Demonstration and Educational Program that focused on implementation of erosion control structures and conservation practices to reduce the number of silt bars along the main stem of the river. The 1996 Water Quality Inventory 305(b) Report indicated that the Tensas River was only meeting its designated uses because of sediments, nutrients, organic enrichment, pathogens, turbidity and low dissolved oxygen. The suspected causes of these water quality problems included irrigated crop production and a large percentage of the watershed is utilized for row crop agriculture. As water moves across these lands through field drains to the main stem of the Tensas River, silt bars are formed along the edge stream banks. Nutrients are also carried through these runoff waters, resulting in vegetation being established along the silt bars. Over time, the size of these silt bars increases and eventually the carrying capacity of the river is reduced. Therefore the Hydrology Subcommittee of the Tensas River Technical Steering Committee recommended working with landowners to implement erosion control structures to reduce the amount of sediment and nutrients leaving their fields.

The results of the project was that 10 sites were selected for installation of erosion control structures and 3000 feet of filter strips were established along the edge of the fields between the crop and the structure. Through the application of the revised universal soil loss equation (RUSLE), 395.79 tons of sediment was retained on the fields instead of being transported to the Tensas River. An educational field day was held for LDEQ, the Gulf of Mexico Program and the Barataria-Terrebonne National Estuary Program to tour the sites and see the progress that was made through this project. The project was considered a success and the water quality within the Tensas River continues to be monitored to determine whether water quality is improving as a result of the watershed management strategy.