

Abstract

The Louisiana Department of Environmental Quality worked with the Louisiana Cooperative Extension Service on an urban lawn care program for households along Bayou Desiard in the City of Monroe. Bayou Desiard is an 1100 acre oxbow lake and serves as one of the drinking water supplies for the City of Monroe. The water quality along Bayou Desiard is impacted by nutrients, pH, siltation and suspended solids from irrigated crop production, land development and urban runoff/storm sewers. A total maximum daily load (TMDLs) has been developed for Bayou DeSiard and indicated that nonpoint sources of pollution will need to be reduced in order for the water bodies to meet their designated uses.

The main objective of the project was to reduce nonpoint source pollution from urban areas by increasing the awareness, understanding and adoption of best management practices by the urban landowners along Bayou Desiard. A pre-project survey was developed and sent to 710 households within the neighborhoods along Bayou Desiard to measure the knowledge that existed about nonpoint source pollution. Two homes along the bayou were included in the demonstration project to educate the people along the bayou about best management practices (BMPs). The types of BMPs that were implemented at the two sites were:

- Organic filter strip and runoff landscaping at water's edge
- Water control and runoff diversion under large oak tree
- Fertilizer and weed control of existing lawn
- Compost Sites
- Terracing of lawn on slope in backyard to control erosion
- Re-do drainage system for better control of runoff
- Install catch basins and extend drainage into bog filter beds
- Establish erosion control through vegetation under various trees within the landscape

Five educational workshops were held within the watershed and information on nonpoint source pollution was disseminated to residents along the bayous. Educational brochures were developed for relevant topics, based on the pre-project survey forms. These topics included: Landscape Bed Preparation for Ornamental Plants, Don't Bag It: Lawn Care, Nonchemical Weed Control for Home Landscapes, Louisiana Lawns Fact Sheet, Louisiana Lawn Maintenance, Louisiana Lawn Fact Sheet-Turfgrass for Louisiana Lawns, Backyard Composting:Composting Mulch, Backyard Composting:Garbage Can Composter; A Drop in the Bucket-Practical Ways to Conserve Water in Your Yard, A Drop in the Bucket-Water Conservation in the Home Landscape. Educational materials were distributed to 600 individuals/households during the project. Additionally, 250 packets were mailed to the homeowners that live along Bayou Desiard. Local newspapers, radio and television were all utilized to publicize educational events.

The post-project survey was mailed to 250 households and 81 responses to the survey were received. The post-survey indicated that the program was successful, but that long-term educational programs need to be implemented to attain the level of BMP

implementation that will be necessary to achieve water quality improvements. One recommendation from the project was to expand the program to other areas of the state and to include the information at large home and garden shows.