



BAYOU LAFOURCHE

Watershed Restoration

PROJECT STATUS

Project Year: 2019 - Present
Status: Ongoing
Category: Water Quality
Location: Ascension, Assumption and Lafourche Parishes (Bayou Lafourche Watershed)
Project Partners: Gulf of Mexico Division and South Central Planning and Development Commission

BACKGROUND AND PROBLEM ADDRESSED

Bayou Lafourche was the main channel of the Mississippi River about 1,000 years ago. Currently, it serves as the main drinking water source for six public water systems and over 300,000 residents in four parishes. Bayou Lafourche watershed (HUC 08090301) is part of the Barataria basin in southeast Louisiana. Bayou Lafourche watershed has a mixed land use of agricultural, industrial and residential. The headwaters of Bayou Lafourche begin in Donaldsonville where it is connected to the Mississippi River through pumps. Bayou Lafourche stretches the length of 106 miles flowing through Ascension, Assumption and Lafourche parishes and eventually emptying into the Gulf of Mexico. In addition to being the drinking water source for the region, Bayou Lafourche also supplies vitally-important freshwater to coastal wetlands in the lower part of the Barataria Terrebonne estuarine system.

The main goal of this project is to improve the surface drinking water quality by reducing the non-point source or rainfall runoff pollution in the watershed.



PROJECT DESCRIPTION

According to the Louisiana 2016 Water Quality Integrated report, Bayou Lafourche watershed is not supporting its designated uses for Primary Contact Recreation and Fish and Wildlife Propagation. The non-point source related suspected causes of impairment are fecal coliform, dissolved oxygen, nitrate/nitrite and total phosphorus. Malfunctioning individual sewage treatment systems, present significant nutrient, solids and pathogen loading problems in Bayou Lafourche. Because this drinking water source is a surface water source, it is especially susceptible to contamination from nonpoint sources of pollution.

Barataria-Terrebonne National Estuary Program (BTNEP) received a grant from the U.S. EPA Gulf of Mexico Division (GMD) to provide cost-share assistance and educational programs to homeowners in the Bayou Lafourche watershed. The Gulf of Mexico Division is providing funding to pay homeowners to fix their broken home sewage systems. Funds from GMD are being used as a cost incentive (50% of costs up to \$1000) to pay for repairing or replacing the onsite disposal systems for 200 homes with malfunctioning systems in targeted parts of the watershed.

BTNEP staff is collecting twice-monthly water quality samples and in-situ readings at 10 sampling site locations for field parameters (pH, Temperature, Dissolved oxygen, Salinity, and Specific Conductivity) fecal coliform, and nutrients (phosphorus and nitrogen) using USEPA-approved methods for the duration of the project in the Bayou Lafourche watershed. The water quality data that is collected will be used to identify the problem communities to be targeted for repair or replacement of failing individual sewage systems in the watershed.

The project will also conduct educational outreach activities, including the development of outreach materials; investigate local government interest in partnering to provide home sewage assistance; and present findings to stakeholder groups.

For this project, BTNEP is partnering with EPA's Gulf of Mexico Division (GMD), Louisiana Department of Environmental Quality (LDEQ), Louisiana Department of Health (LDH), the Bayou Lafourche Freshwater District (BLFWD) and the South Central Planning and Development Commission (SCPDC).



CCMP ACTION ITEMS ADDRESSED

EM = Ecological Management

- EM-10: Improvement of Water Quality through Reduction of Sewage Pollution
- EM-11: Reduction of Agricultural Pollution
- EM-12: Improvement of Water Quality through Stormwater Management