The Lake Pontchartrain Basin consists of a series of rivers that drain to Lake Pontchartrain and Lake Maurepas, the lakes themselves and a wide expanse of coastal wetlands that bleed into Breton Sound, the coastal bays and estuaries. Historically, this basin was inhabited by Native Americans who relied upon the diversity of fish and seafood that flourished in these fresh waters and estuarine systems. As the Spanish, French, Germans, African Americans and the English began to settle in the basin, they practiced their own cultures upon which future generations built a mixture of customs. The Tangipahoa and Tchefuncte rivers were named by the Indians that lived in the basin. Early settlers relied upon cypress trees, cotton, oysters, shrimp and fresh water fisheries for their livelihood. The rivers and lakes provided access for commerce and ports, which flourished, as did the people who lived along the lake and rivers in the Lake Pontchartrain basin. Oil and gas exploration and flood control projects changed the landscape and economy of the basin, allowing people to live and work in areas that could be drained and protected by levees and pumps. All of these changes led to local prosperity but also brought environmental problems, resulting in the closing of Lake Pontchartrain to swimming in the early 1970's.

## **Success through Partnerships**

Watershed protection and water quality restoration depends on the cooperation and partnership of landowners, homeowners, city planners, police jury members and other local, state and federal agencies. All of these stakeholders can make a real difference in whether water quality and special habitats are protected and restored. The Louisiana Department of Environmental Quality (LDEQ) is working with the Lake Pontchartrain Basin Foundation and local parish and city governments to assist the stakeholder in improving water quality within the basin. Some of the partners include:

- East Baton Rouge Parish Planning Commission
- St. Tammany Parish Task Force
- USDA Natural Resource Conservation Service
- Local Soil and Water Conservation Districts
- Louisiana Department of Health and Hospitals
- The Louisiana Nature Conservancy
- U.S. Fish and Wildlife Service

If you would like to become more involved in working with these partners or to help form partnerships in you watershed, please contact the Louisiana Department of Environmental Quality or the Lake Pontchartrain Basin Foundation.





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# Lake Ponícharírain **River Basin**

### Wafer Qualify Concerns

Much progress has been made to improve water quality since that time, but many of the water bodies are still not meeting the fish and wildlife propagation uses because of mercury and dissolved oxygen. Some of the rivers close to Baton Rouge are not meeting the contact recreation use because of high concentration of bacteria. Mercury prevents other water bodies from meeting the fish and wildlife propagation use, with sources ranging from atmospheric deposition and old manometers that were used in oil and gas fields to natural sources. Dissolved oxygen is a response to high sediment and nutrient loads in some of the water bodies and may result from agricultural, forestry and urban storm water runoff. Bacteria concentrations are associated with pastureland grazing, dairies, onsite wastewater treatment systems and urban storm water runoff. Many of these pollutants are associated with nonpoint sources which will need to be controlled through application of new technologies and best management practices.

## **Restoring the Water Quality**

There have been water quality improvements in several of the rivers on the north shore of Lake Pontchartrain, including Tangipahoa, Tickfaw and Tchefuncte. Much of these improvements can be attributed to the Lake Pontchartrain Basin Foundation and the federal, state and local governments who have worked with the people that live within the basin. Additional water quality improvements will rely upon the continued cooperation of government, non-profit organizations and the public as they implement smart growth policies for cities and best management practices for rural agricultural and forested lands. The types of practices include:

• AGRICULTURE – erosion control practices, fertilizer and pesticide management, conservation tillage and residue management for row crops and rotational grazing for cattle;

• FORESTRY - streamside management zones, erosion control on harvested sites and forest roads, fertilizer and pesticide management;

• INDIVIDUAL HOME SEPTIC SYSTEMS - maintenance of existing systems and repair or replacement of failing systems;

• URBAN RUNOFF – pre and post development management practices, rain gardens, porous pavements, construction management practices, fertilizer and pesticide management;

• CHANNELIZATION- protect streamside management zones, prevent dredging of natural water bodies, and protect wetlands.



Lake Pontchartrain Basin has many special habitats and scenic rivers, including cypress-tupelo forests, riparian forests, marshes ranging from freshwater to intermediate and salt types, longleaf pine forests and savannahs, and bottomland hardwood forests. Rare, threatened and endangered species such as the bald eagle, brown pelican, reddish egret, paddlefish, Bachman's sparrow, red-cockaded woodpecker, pallid sturgeon, gopher tortoise, Alabama heelsplitter, Louisiana quillwort, parrot pitcher plant, and the ornate chorus frog rely upon these types of habitats. The types of stressors to these species and habitats include construction of roads, pipelines and utilities, residential, commercial and industrial development, fertilizer and pesticide runoff, subsidence and saltwater intrusion (Louisiana Natural Heritage Program). Many of the best management practices that are utilized to reduce nonpoint source pollution and protect water quality will also protect these special habitats and the species that reside within them.

# Lake Ponícharírain River Basin

#### **Protecting and Restoring** Native Habitats