



Water Quality Program

Pollution Source Tracking

Waterway Impairments

When pollutants enter our waterways, they become contaminated and, according to the Clean Water Act, have “impaired” water quality. Impairments restrict uses such as primary contact (swimming), secondary contact (boating), and fish and oyster production.

To clean the waterway, we have to address the pollution sources within the watershed (all of the land contributing pollution to the river and its tributaries).



LPBF Pollution Source Tracking- The Watershed Approach

LPBF began water quality monitoring in 1994, upgrading the program in 2001. Based on results from our program, we began the watershed approach in 2002, piloting the program on the Bogue Falaya Watershed in St. Tammany Parish. So far, we have worked in the Bogue Falaya/Abita/Tchefuncte Watershed (St. Tammany Parish), the Tangipahoa Watershed (Tangipahoa Parish), and the Tickfaw Watershed (Tangipahoa, St. Helena, and Livingston Parishes).

Our approach has been multidisciplinary-

- 1) Water Quality Monitoring
- 2) On the ground source tracking
- 3) GIS and mapping of everything
- 4) Education at all levels
- 5) “Partners”- Coordination with agencies



1) Monitoring Water Quality



- First Step- We monitor the main river and all major tributaries.
- Understanding the water quality throughout the watershed- along the main stem of the river and contributions of each tributary.
- Gives first indication of where the pollution is entering the system
- Allows us to approach agencies and interested parties with facts-in-hand. (Make the issue worth their time, energy, money)
- In time, allows us to track progress.

We find that it is important to invest in professional monitoring with quality assurance. Volunteer monitoring is not viewed to be of the same high standard and may be disregarded. Also, monitoring must be performed on a regular basis for months to years to track progress.

2) Tracking Sources

LPBF uses a step-wise process to track pollution sources:

- 1) Big point sources (large direct discharge pipes),
- 2) Small point sources (small direct discharge pipes),
- 3) Non-point sources (contaminants flow over land).

We track point sources first because they are easiest to find and are likely contributing much of the problem in urban setting.

Tracking Point Sources- Wastewater Sources

- For waterways impaired for fecal coliform and/or dissolved oxygen, this is imperative.
- We perform on the ground door-to-door inspections and assistance
- Research on LDEQ's EMDS (Electronic Document Management System) website to locate information on permitted commercial facilities.
- However, facility may not be permitted. Historic disconnect between LDHH and LDEQ.

3) GIS/ Mapping

- Excellent tool to visually synthesize data
- Shows potential sources in relation to each other and waterways
- GPS units inexpensive- some under \$100.
- Good free tools- Google Map- on LPBF website, www.saveourlake.org

4) Education

LPBF performs education at any and all levels, from the general public, to school children, to voters, to decision-makers.

5) Partners

We can't do it alone and there isn't enough money out there to duplicate efforts. We piggy back our efforts with those occurring in a local community. Most places will need help in addressing sources that impact their area and will support research to clean that pollution.

Some of our many great partners include:

- EPA- Gulf of Mexico Program
- EPA- Region 6
- Louisiana Department of Environmental Quality
- Louisiana Department of Health and Hospitals
- Louisiana Department of Agriculture and Forestry
- St. Tammany Parish, including municipalities
- Orleans Parish
- Tangipahoa Parish, including municipalities
- Jefferson Parish
- Louisiana Sea Grant
- LSU Ag Center
- Louisiana RC&D's
- And many others....

Point Sources



Non-Point Sources



Wastewater Sources



GIS



Education

