



# REDUCE NONPOINT SOURCE POLLUTION

*in Louisiana Waters*

## Sedimentation Impairments

Limits on the amount of certain potential pollutants that can enter waterways have been set in many Louisiana water basins, and work is ongoing to complete this process in all of the watersheds in the state. This program, known more commonly as the Total Maximum Daily Load (TMDL) program, strives to set reasonable amounts of pollutants that can be discharged into Louisiana water bodies while assuring that water bodies maintain their designated uses.

Many bayous, lakes, and streams in the state do not meet minimum standards set by the Environmental Protection Agency (EPA) for one or more of their designated uses, such as fishing, swimming or drinking water. The Louisiana Department of Environmental Quality (LDEQ) has the responsibility of developing and implementing TMDLs as a mechanism to improve water quality in the impaired water bodies. As a result, both point source and nonpoint source contributors may be required to reduce their impact on surface waters.

Sediment is the largest pollutant by volume of surface water in the nation. Sediment comes from agricultural sources, construction sites and soil-disturbing activities in urban settings that leave the soil exposed to rainfall. Sediment increases with the turbidity of water, thereby reducing light penetration, impairing photosynthesis, altering oxygen relationships and may reduce the available food supply for certain aquatic organisms. It can adversely affect fish populations in areas where sediment deposits cover spawning beds. Increased sediment also fills lakes and reservoirs.

Sediment directly damages water quality and reduces the usefulness of streams and lakes in many ways. Problems include damaged fish spawning areas, reduced light penetration for aquatic life, increased water purification costs, lower recreational value, clogged channels that increase flooding, increased dredging to maintain shipping channels and reduced storage capacity for reservoirs.

In addition, sediment is often rich in organic matter. Nutrients such as nitrogen and phosphorous and certain pesticides may enter streams with sediment. The potentially harmful effects of these substances accompanying the sediment may include rapid algae growth, oxygen depletion from decomposing algae and organic matter, fish kills from oxygen depletion, toxic effects of pesticides on aquatic life and unsafe drinking water caused by nitrate or pesticide content.

To get details on ways homeowners and agricultural producers can reduce sediment runoff to our waterways go to [www.lsuagcenter.com](http://www.lsuagcenter.com) and read about Best Management Practices for agricultural commodities and homeowners. Also, refer to the Louisiana Yards and Neighborhoods handbook.



<p>Visit our Web site: <a href="http://www.lsuagcenter.com">www.lsuagcenter.com</a></p> <p>Authors: Brian LeBlanc and Carrie Castille</p> <p>This project was partially funded by the U.S. Environmental Protection Agency Grant #C9-996102-09-0 through the Louisiana Department of Environmental Quality.</p>	<p>Louisiana State University Agricultural Center, William B. Richardson, Chancellor Louisiana Agricultural Experiment Station, David J. Boethel, Vice Chancellor and Director Louisiana Cooperative Extension Service Paul D. Coreil, Vice Chancellor and Director Pub. 2994-L (10M) 9/07</p> <p>Issued in furtherance of Cooperative Extension work, Acts of Congress of May 8 and June 30, 1914, in cooperation with the United States Department of Agriculture. The Louisiana Cooperative Extension Service provides equal opportunities in programs and employment.</p>
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