## REDUCE NONPOINT SOURCE POLLUTION in Louisiana Waters

## **Fecal Coliform**

Pollution sources that do not have a single point of origin and are not introduced into a receiving stream from a specific outlet are considered nonpoint sources of pollution. Nonpoint sources of pollution may include runoff from fields, farms, woodlands, urban lawns and streets. Point sources originate from a stationary or fixed facility from pipe or discreet locations from which pollutants are discharged directly into a water body.

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. The Louisiana Department of Environmental Quality (LDEQ) and EPA are implementing the Total Maximum Daily Load (TMDL) program in Louisiana and across the nation to improve water quality by setting reasonable amounts of pollutants that can be discharged into those water bodies while maintaining their designated uses. Both point source and nonpoint source contributors will be required to reduce their harm to surface waters.

Many of the water bodies in Louisiana that are listed as impaired and require a TMDL are polluted with fecal coliform bacteria and do not meet their designated use for swimming. Fecal coliform is a term used to describe bacteria found in the intestinal tract of warm-blooded animals. Surface waters are monitored for the presence and concentration of fecal coliforms. Not all coliforms are harmful to human health; in fact, some fecal coliforms are normal and essential for human digestion. Without them, our digestive system would not function properly.

Why, then, is the presence of the organisms in certain concentrations in water considered to be a pollutant? If fecal material is present in excessive concentrations, the potential is there for other pathogens to be present. Some kinds of coliforms such as E. Coli can be transmitted from cattle to humans or from person to person and may be harmful to human health. Fecal material also contains nitrogen and phosphorus and can result in nutrient over-enrichment of water bodies, which can cause algae blooms and oxygen depletion.

Homeowners in non-incorporated areas of the state who use individual sewage treatment systems (sewage discharge not connected to a city or regional treatment system) can play an important role in reducing the amount of fecal coliform from entering ditches, drains and small creeks near their homes. Individual systems should be checked at least once a month to insure proper functioning. For example, mechanical treatment plants that require working mechanisms such as aerators and/or chlorination should check frequently to insure both are operational.

These systems should be pumped out by licensed contractors every 3 to 5 years depending on use. Homeowners who posses the older septic systems should have them pumped out every few years and follow other recommended practices such as eliminating the flushing of substances like pesticides, chlorine bleach and oven cleaners down the drain. To read more information on maintenance of home sewage systems see the AgCenter fact sheet: Home Sewage Treatment Plant Management.

Livestock producers also can do their part to reduce fecal coliforms from leaving their property by following and installing Best Management Practices (BMPs) on their operations. Livestock producers can get these practices by going to www.lsuagcenter.com and reading about BMPs for beef and dairy producers.

Visit our Web site: www.lsuagcenter.com

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