

TEXAS NATURAL RESOURCE
CONSERVATION COMMISSION

NONPOINT

SOURCE

POLLUTION

**ANSWERS TO FREQUENTLY
ASKED QUESTIONS**

GI-162 (12/00)



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What is nonpoint source (NPS) pollution and where does it come from?

We've all seen trash in our waterways following a storm. Other contaminants, not so easily seen, enter our waters in much the same way. When it rains, the rainwater soaks into the ground or runs off, picking up and carrying pollutants to our waterways as it flows. Some of these pollutants are natural, like sediment from erosion; many, however, are manmade, especially those from urban runoff, and include:

- excess fertilizers, herbicides, and insecticides from residential areas and agricultural lands;
- oil, grease, and other toxic chemicals from urban runoff;
- motor oil, car batteries, and home chemical containers that have been improperly disposed of;
- sediment from improperly managed construction sites, crop and forest lands, and stream banks; and
- bacteria and nutrients from livestock and pet wastes and faulty septic systems.

How does NPS pollution affect water quality?

Because nonpoint source pollution originates from widely scattered sources and enters receiving waters in a highly variable manner, it can be difficult to regulate. Consequently, it is a significant source of water





contamination in many watersheds. Here are just a few of the consequences of nonpoint source pollution:

- Nutrients from fertilizers can cause excessive growth of aquatic vegetation and can lead to eutrophic (oxygen depleted) conditions which seriously damage aquatic habitat and life;
- pesticides and automotive fluids can contaminate the food chain, causing long-term effects on wildlife and human health; and
- sediments that erode from construction sites and croplands can smother aquatic life and can increase the costs of operating water supply reservoirs.

How is NPS pollution measured?

Water quality standards are set by state and federal laws in order to protect our waters for the beneficial uses we all enjoy, like clean drinking water and recreational activities such as swimming, fishing, and boating. The Texas Natural Resource Conservation Commission (TNRCC) has the oversight for these laws in the state of Texas. Based on the laws, numeric and narrative criteria are established for protecting the water quality. Citizen volunteers from the Texas Watch program and TNRCC field representatives measure samples from rainfall runoff **2** before, during, and after storm events. Five principal water quality variables are measured: air and water temperature; conductivity or total dissolved solids; pH; dissolved oxygen; and water clarity and depth. These parameters are used to track trends in the water quality which can warn us of degradation of the water supply in time for corrective action to be taken. These measurements are also used to

track the effectiveness of preventive measures, called Best Management Practices (or BMPs), instituted to protect the water quality.

What can individuals do to decrease NPS pollution?

Nonpoint source pollution is everyone's responsibility because we all contribute to it. As an individual, you can practice these conservation habits daily:

Home and Garden

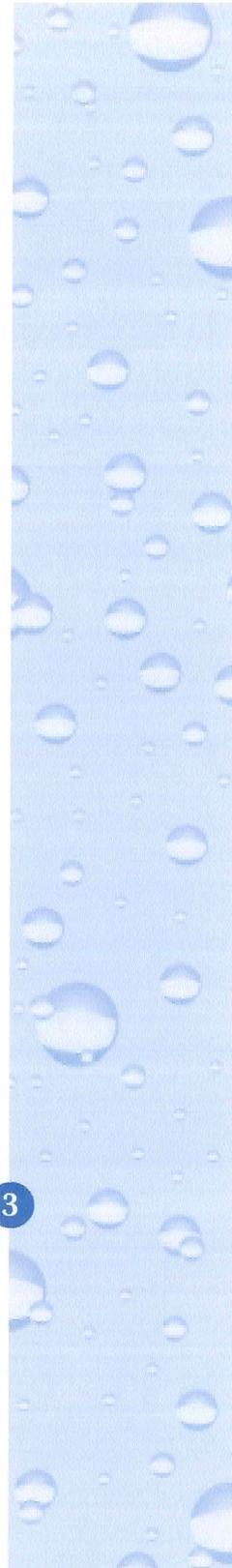
- Keep pet wastes, leaves, and debris out of gutters and storm drains — many of these drains flow directly to rivers and lakes.
- Apply lawn and garden chemicals sparingly, or use nontoxic products in your gardening.
- Control soil erosion by planting ground cover and stabilizing erosion-prone areas.

Household Hazardous Waste

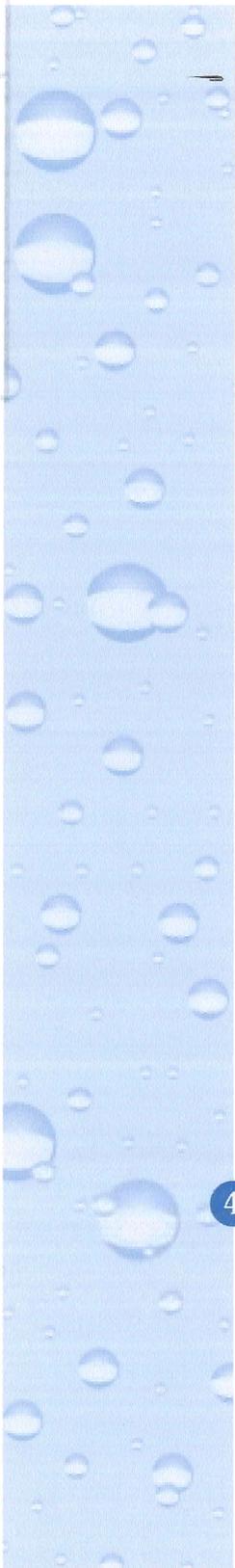
- Dispose of antifreeze, paints, and other household chemicals properly. For information about disposal of household hazardous waste, call (512) 239-3150.

Used Oil and Oil Filters

- Dispose of used oil and oil filters at recycling facilities or at a designated collection center. Many businesses that sell or change automobile oil will accept used oil from the public. The TNRCC Used Oil Program can provide more information at (512) 239-6413.



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Agricultural Chemicals

- Dispose of pesticides, containers, and container residue in an approved manner. Call (512) 239-3150 for information on agricultural chemical collection dates and sites.

Septic Systems

- Pump out your septic system regularly and have it inspected annually to avoid contaminating surface and ground waters with nutrients and pathogens. The TNRCC On-Site Wastewater Team can provide more information at (512) 239-0914.

Illegal Dumping

- Report illegal dumping to the TNRCC regional office in your area. Look in your local phone book for the number of the office nearest you.

Community Support

- Support environmental education in your community. The Teacher Education Team of the TNRCC provides training and resources for teachers of environmental science. Call (512) 239-3150 for more information.
- Participate in cleanup activities in your neighborhood. For information on volunteer water quality monitoring, contact Texas Watch at (877) 506-1401 or visit their Web site at www.texaswatch.geo.swt.edu.

***Think so you can drink.
Keep our waters clean.***