

#10 in a series of informational brochures  
from the Delaware Department of Transportation.

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Office of External Affairs:

- #1 The Capital Improvement Program and the Council on Transportation** What are they? How do they work? How can the public get involved?
- #2 Corridor Capacity Preservation Program** What's being done to make sure existing roads can handle future economic growth?
- #3 Access Management** How can managing access reduce congestion, improve safety, preserve economic development opportunities and extend a road's service life?
- #4 Transportation & Delaware's Future** Highlights of DelDOT's Long-Range Transportation Plan
- #5 The Integrated Transportation Management System** A tool for reducing congestion.
- #6 Understanding the Pipeline Process** How ideas, plans and suggestions for transportation projects move from concept to completion.
- #7 Public Involvement** How you can be involved in shaping transportation decisions.
- #8 Highway Safety Improvement Program** How targeting improvements to high-accident sites is reducing the likelihood and severity of accidents on Delaware's roads.
- #9 Customer Satisfaction Surveys** Important feedback helps us serve you better. We're listening.

For more information please contact:

Delaware Department of Transportation  
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Delaware  
Department of  
Transportation

# F.Y.I.

# Storm Water Management

If you value Delaware's beautiful ocean,  
bays, rivers and streams, help us protect  
them by reducing water pollution  
*"at the source."*

A CLOSER LOOK...



# How Our Road System Contributes to Water Pollution

## A Closer Look



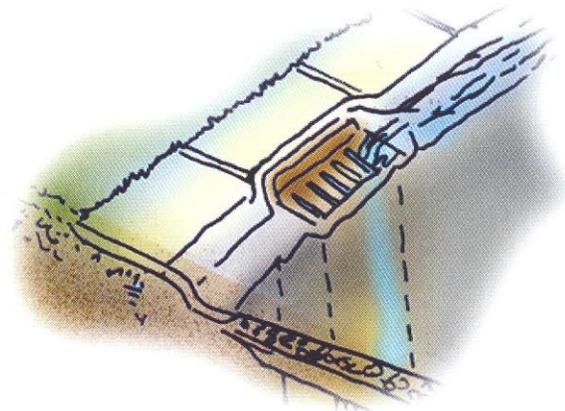
Storm water runoff is rainwater that doesn't soak into the ground. The rain that runs off often washes pollutants from lawns, parking lots, streets, and gutters into the storm drain system, which then flows into our streams, ponds, and bays. Pollution in storm water runoff is a growing concern in Delaware and across the nation, because of the adverse effects to ourselves and to our environment.

A roadway system is made of pavement, curbs, gutters, and storm drainage pipes. Developed areas are often built so rainwater drains into the street. Every drop of water that touches the ground has the potential to pick up pollutants. That means most of the pollution found on the surface of the ground drains through the roadway drainage system.

Why is DeIDOT interested in storm water pollution? DeIDOT owns and operates nearly all the roadway systems in Delaware from interstate highways to country lanes and neighborhood streets. That's over 5,000 miles of roads and storm drainage systems. One of our main goals is to keep pollution off the street and out of the drainage system.

The Clean Water Act requires state agencies to reduce water pollution from sources like industry and agriculture and to educate the public about what they can do to help. The Act imposes penalties if the State doesn't meet clean water standards. Delaware is building treatment facilities and developing management plans to reduce pollution before it gets into our streams and waterways.

But since storm water pollution comes from many sources, all of us have a stake in making sure we don't inadvertently contribute to the harmful materials that enter our storm drains. Look inside to see what you can do to help protect our precious waterways.



# How We're Improving the Quality of Storm Water Runoff

Delaware has a number of options available to improve the quality of runoff from streets and highways. Sometimes those options are as simple as increasing the vegetated areas next to the roadways, or as complicated as integrating new storm water management structures into an existing system. Following are some of the ways the Delaware Department of Transportation is reducing water pollution "At the Source."

## Street Sweeping

Sweeping decreases the litter and other debris that can be carried by storm water into nearby watercourses. DeIDOT's new vacuum sweepers can pick up fine particles that contribute to water pollution.



## Storm Water Ponds

Storm water ponds are designed to trap sediment and pollutants, reduce flooding, and provide wildlife habitat. DeIDOT will continue to look for opportunities to make drainage system improvements.

## Pro-Active Inspections Program

To increase the efficiency of the system, DeIDOT has begun a stepped-up inspection program to identify maintenance needs before a major problem arises. This includes internal pipe inspections to look for areas of cracked or partially blocked pipe.



## Regular Maintenance

Many inlets become clogged during the course of the year. District personnel perform maintenance that helps prevent ponding around

the inlets and helps stop the storm water system from being bypassed altogether.

# You Can Help Reduce Water Pollution "At the Source"

## 1 Don't dump motor oil, antifreeze or other chemicals down the storm drain

**Motor Oil** - Four quarts of motor oil can create an 8-acre oil slick and contaminate a million gallons of drinking water. Recycle used motor oil at local service stations and collection centers. Never dump it.

**Antifreeze** is a toxic pollutant that can kill not only aquatic life, but also pets when they drink from contaminated puddles.

**Herbicides and Pesticides**  
Spot treat only. Reduce the amount of herbicides and pesticides used on your lawn.



## 2 Dispose of trash, pet and yard waste properly

**Don't litter.** Styrofoam, plastics and other debris can injure and kill fish and wildlife. Join an Adopt-a-Highway program in your neighborhood.

**Mulch or compost grass clippings.** Leave them on the lawn and sweep them off the street.

**Pet waste** should be disposed of in the trash or flushed down the toilet.



## 3 Wash cars on grass surfaces and use biodegradable detergents

**Wash your car only when necessary,** on grass rather than paved driveways. This will reduce soapy water entering the storm water system. Wash water can contaminate streams with excess phosphorous.



## 4 Landscape! To reduce run-off, avoid paving

**Plant trees, shrubs and ground cover** to help rainwater soak into the ground. Keep bare soil covered; bare soil is the primary cause of erosion. Sod, or seed and mulch newly graded lawn areas.

**Pave as little as possible.** Paving increases impervious surface area, preventing rainfall from being absorbed and increasing runoff.

## 5 Sorry. Don't feed the geese.

**Prevent algae blooms.** If you have a lake or retaining pond with ducks and geese in your neighborhood, it's best not to feed them. Waterfowl waste pollutes the water, causing algae blooms and robbing the water of oxygen.

## 6 Report abuses of our natural resources.

**Watch for polluters** - If you notice a pipe or drainage inlet that is stained or emitting strong odors, someone may be illegally dumping pollutants into the storm drain. Contact one of the following agencies who will investigate: DelDOT (302) 323-1111, New Castle County (302) 395-5700, or DNREC 1-800-662-8802.

**Be a good neighbor.** If you see a clogged storm water drain in your neighborhood, clean it off or call DelDOT maintenance.

## Did You Know?

A sewer system and a storm drain system are not the same.

These two systems are completely different. The water that goes down a sink or toilet in your home or business flows to a wastewater treatment plant or to your on-site septic system, where it is treated and filtered. Water that flows down driveways and streets and into a gutter goes into a storm drain that flows directly to a lake, river or the bay. This water often picks up pollutants along the way. These pollutants can have harmful effects on drinking water supplies, recreational use, and wildlife.

