

# Cleaning Up Stormwater Runoff

**What is stormwater runoff? It is the rain and melting snow that flows off streets, rooftops, lawns, and farmland. The flowing water carries salt, sand, soil, pesticides, fertilizers, leaves and grass clippings, oil, litter, and many other pollutants into nearby waterways. Since these pollutants are washed off a wide area and cannot be traced to a single source, they are called nonpoint source or runoff pollutants.**

## Storm Sewers – Rivers Beneath Our Feet

In developed areas, much of the land surface is covered by buildings and pavement which do not allow water to soak into the ground. Instead, storm sewers are used to carry the large amounts of runoff from these roofs and paved areas to nearby waterways. Storm sewers are simply pipes laid underground, often below streets. Inlets or drains located along curbs and in parking areas collect the runoff, which then flows to nearby streams or lakes. A common misconception is that water running off streets goes into a sewage treatment plant. It does not. In fact, stormwater usually receives no treatment. Water that runs off lawns, streets, and parking lots flows directly into lakes and streams.

*For more information, please visit the Minnesota Pollution Control Agency website at [pca.state.mn.us](http://pca.state.mn.us). This modified article is courtesy of the University of Wisconsin Extension Services.*

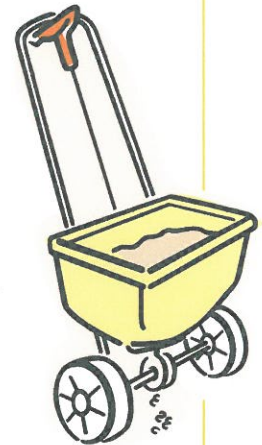
## Stormwater is Not Clean Water

Stormwater runoff carries pollutants that seriously harm our waters:



**Sediment.** Soil particles washed off construction sites or farm fields into a lake or stream make the water cloudy or turbid. When sediment settles out of the water, it gradually fills in the stream or lake bed.

**Phosphorus.** This nutrient, often attached to soil particles, fuels the growth of algae and aquatic weeds. These plants are important in providing habitat for fish and wildlife. However, rapid and excessive growth of algae and aquatic plants can degrade water quality and interfere with swimming, boating and fishing.



**Micro-organisms.** Bacteria, viruses and other disease causing organisms make waterways unsafe for swimming, wading and other types of recreation. Some of these organisms, notably *Cryptosporidium*, are difficult to remove through water treatment and may endanger people who depend on drinking water supplies drawn from lakes or streams.

**Toxic chemicals.** Motor oil, lead from gas and auto exhaust, zinc from roof drains and tires, and pesticides in stormwater runoff may kill aquatic organisms or impair their health, growth or ability to reproduce.

