COMMUNITY PARTNERS FOR CLEAN STREAMS

Storm Water Runoff and Water Quality

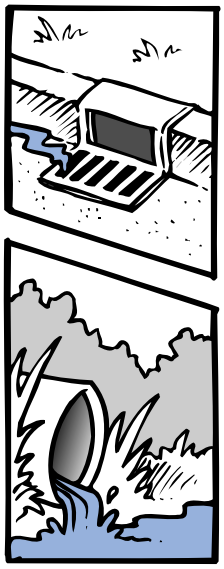
STORM WATER & POLLUTION

EPA studies show that up to 70% of all water pollution is caused by stormwater runoff. As it flows over land, stormwater picks up a variety of pollutants, including eroded soil, trash, fertilizers and pesticides. Vehicles and deteriorating urban surfaces deposit fluids and trace metals onto streets and parking lots. These and other pollutants are washed directly into the Huron River every time it rains.

Because this pollution comes from many sources, as opposed to a single source such as an industrial outfall pipe, it's often called ***nonpoint source pollution***. The EPA has classified nonpoint source pollution as a top priority environmental threat. In our area, nonpoint source pollution is threatening the health of the Huron River. Studies by the Michigan Dept. of Environmental Quality show that, even though industrial discharges have been regulated for 20 years, parts of the Huron still fail to meet federal water quality standards as much as 87% of the time.

Pollution Prevention Remains the Best Choice for Business

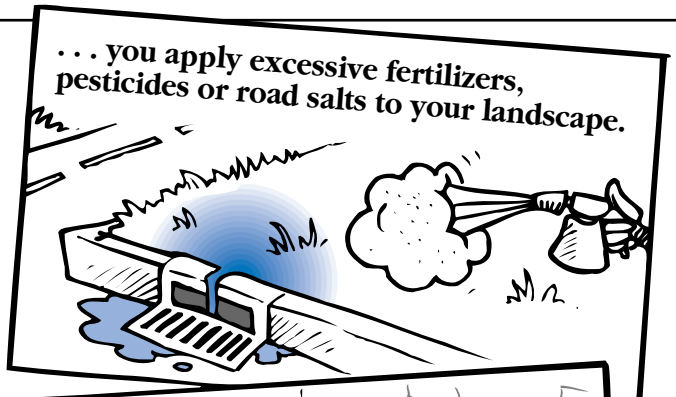
Despite advances in technology, environmental clean-up costs continue to increase every year. Many of these costs are paid for by the business community. This is true for employees as well as for business owners - both can be liable for the cost of cleaning up any pollution they cause. Preventing pollution is much easier and and less costly than trying to mitigate enviromental damage after it's occurred.

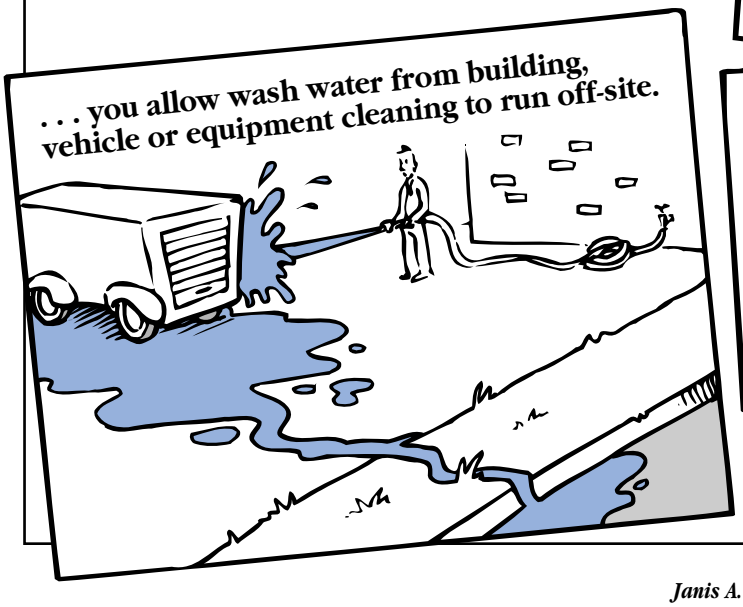


To prevent water pollution, first identify the drains on your site and determine where they lead. If you aren't sure where a drain leads, call the Drain Commissioner's office and request that it be dye-tested. Next, identify the materials that are allowed to enter these drains. Finally, take steps to prevent anything from entering storm drains that you wouldn't want to swim in!

Many people know it's illegal to dump pollutants down a storm drain. But did you know that it's **also** illegal to allow pollutants to wash into a storm drain or stream with rain or waste water? For instance -

You May Be Polluting If . . .





Remember: virtually **anything** on the ground can wash straight into surface waters or soak through the soil, polluting groundwater.

Janis A. Bobrin, Washtenaw County Drain Commissioner • Winter 1996

POLLUTANTS: THEIR SOURCES AND IMPACTS

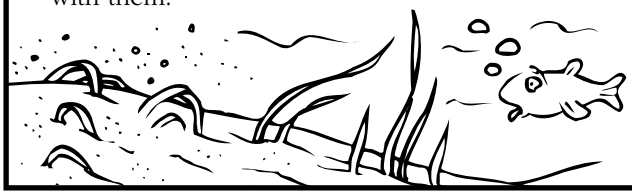
A pollutant is any substance that can harm living things. Pollutants commonly found in the Huron River include:

SEDIMENT

Source: Construction sites and other non-vegetated lands.

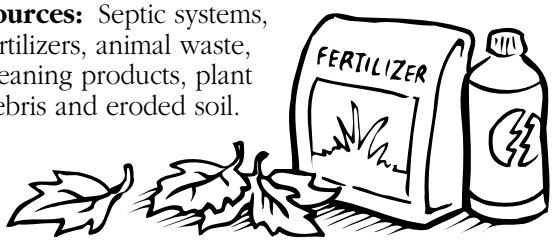
Impacts: Uncontrolled sediment can clog stormwater management systems, leading to higher maintenance costs and flooding. As it settles, sediment can smother fish eggs and bottom-dwelling organisms and destroy aquatic habitat. Suspended sediment can lower the transmission of light through water and interfere with the respiration and digestion of aquatic animals.

Other pollutants can attach to soil particles. When sediments wash off-site they carry these pollutants with them.

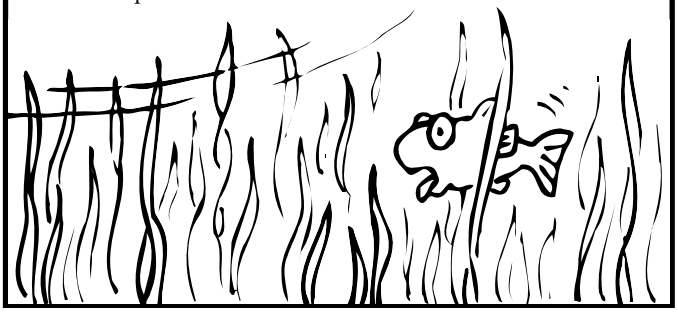


NUTRIENTS

Sources: Septic systems, fertilizers, animal waste, cleaning products, plant debris and eroded soil.



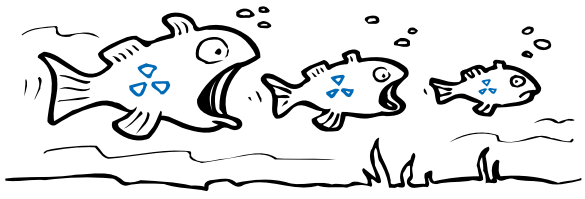
Impacts: Phosphorus, nitrogen and other nutrients can over-stimulate aquatic weed and algae growth. As they decay, excess weeds and algae take up oxygen in the water, which is needed by fish and other aquatic life.



TOXIC COMPOUNDS

Sources: Pesticides, equipment and vehicles, industrial activities and illicit dumping.

Impacts: Toxic substances include vehicle fluids, solvents, pesticides, paints and metals, such as chromium, copper, and mercury. Toxins can accumulate in the aquatic food chain, as one larger organism eats many smaller ones that have been contaminated. Even in very small concentrations, oil and other toxic substances can harm aquatic plants and animals.



LITTER AND DEBRIS

Sources: Landscaping practices contribute grass clippings and leaves. Litter is generated by careless disposal practices.

Impacts: Litter and leaves wash through drainage systems, clogging inlets and outlets, and depositing in waterways. Leaves and other organic materials require oxygen to decompose and so lower the amount of oxygen in the water available to aquatic life.

For information about how you can protect water quality, call Community Partners for Clean Streams at 994-8344.