

What role do we have in water quality?

Threats to water quality have shifted from pollution that comes from pipe discharges, such as industrial wastes, to a form that is harder to trace called non-point source pollution. Improvements in technology and adherence to water quality standards have helped reduce the impact of industry on water resources. However, 39% of the assessed rivers and streams in the US still have water quality impairment. Non-point source pollution results from the accumulative affect of small pollutant sources making their way to streams by overland flow paths and through storm sewers. Many of these pollution sources can be found around our own homes. Responsible action taken by us all can help protect and improve the quality of our water resources.

Learn more and get involved with water resource protection

Ohio EPA
www.epa.state.oh.us/water

Ohio Department of Natural Resources
www.dnr.state.oh.us

Delaware Soil & Water Conservation District
www.delawareswcd.org

Local Organizations

Friends of the Lower Olentangy Watershed
www.olentangywatershed.org

Friends of Alum Creek and Tributaries
www.friendsofalumcreek.org

Scioto River Valley Federation
www.sciotoriver.org



**Delaware County
Engineer's Office**



**Delaware County
Commissioners**



**Delaware Soil and Water
Conservation District**
557-A Sunbury Road
Delaware, Ohio 43015
Phone: 740/368-1921 ext. 4

A Homeowner's Guide to Reducing Storm Water Pollution



What is storm water runoff?

Storm water runoff occurs when rain or snowmelt flows over the ground. Hard surface-like driveways, sidewalks, streets and parking lots prevent storm water from naturally soaking into the ground.



Storm water runoff in a paved parking lot.

Why is storm water runoff a problem?

Storm water can pick up debris, chemicals, dirt, and

other pollutants and flow into a storm sewer system or directly to a lake, stream, river, or wetland. Anything that enters a storm sewer system is discharged untreated into the waterbodies we use for swimming, fishing, and drinking water.

The effects of pollution

Polluted storm water runoff can have many adverse effects on plants, fish, animals, and people.

- Soil can cloud the water and make it difficult or impossible for aquatic plants to grow. Sediment also can destroy aquatic habitats.



Sediment being carried to storm drain. This could be discharged directly to a stream

- Excess nutrients can cause algae blooms. When algae die, they sink to the bottom and decompose in a process that removes oxygen from the water. Fish and other aquatic organisms can't exist in water with low dissolved oxygen levels.



Sediment plume caused by polluted storm water runoff.

- Bacteria and other pathogens can wash into swimming areas and create health hazards.
- Debris— plastic bags, six-pack rings, bottles and cigarette butts- washed into waterbodies can choke, suffocate, or disable aquatic life like ducks, fish, turtles, and birds.



Debris accumulated on a storm sewer grate

- Household hazardous wastes like insecticides, pesticides, paint, solvents, used motor oil, and other auto fluids can poison aquatic life. Land animals and people can become sick or die from eating diseased fish or ingesting polluted water.
- Polluted storm water often affects drinking water sources. This, in turn, can affect human health and increase drinking water treatment costs.

Storm water pollution solutions

Lawn Care

Excess fertilizers and pesticides applied to lawns and gardens wash off and pollute streams. In addition, yard clippings and leaves can wash into storm drains and contribute nutrients and organic matter to streams.

- Use pesticides and fertilizers sparingly. When use is necessary, use these chemicals in the recommended amounts. Use organic mulch or safer pest control methods whenever possible.
- Compost yard waste. Do not leave it in the streets or put it into storm drains or streams.
- Cover piles of dirt or mulch being used in landscape projects.

Auto Care

Washing your car and degreasing auto parts at home can send detergents and other contaminants through the storm sewer system. Dumping automotive fluids into storm drains has the same result as dumping directly into a waterbody.

- Use a commercial car wash that treats or recycles its wastewater, or wash your car on your yard so that water infiltrates into the ground.
- Repair leaks and dispose of used auto fluids and batteries at designated drop-off or recycling centers.

Pet Waste

Pet waste can be a major source of bacteria and nutrients in local waters.

- When walking your pet, remember to pick up the waste and dispose of it properly. Flushing pet waste in the toilet is the best disposal method. Leaving pet waste on the ground increases public health risks by allowing bacteria and nutrients to wash into the storm drain and eventually into local waterbodies.