Storm Water Pollution Solution

Below are ways each resident can help reduce storm water pollution. If every resident practiced the steps listed below, it would significantly improve our water quality and lessen the amount of treatment provided by the City of Delaware.

Lawn Care

- Use the recommended amount of fertilizer and pesticide indicated on the packaging. Excessive amounts wash off and pollute streams.
- Sweep grass clippings and leaves off sidewalks and driveways to prevent them from washing down storm drains. They can add to the existing nutrient levels in the storm water.
- Do not put yard waste along roads, near storm drains, or streams because they can wash into waterways.
- Use yard waste bags to dispose of grass clippings, weeds, leaves, and other unwanted yard waste. The City of Delaware provides regular pickups for residents.

Auto Care

- Wash your car on your yard so the water can filter through your lawn or at a commercial car wash that treats/recycles its wastewater.
- Repair leaks and dispose of used auto fluids and batteries at designated drop-off or recycling centers.

Pet Waste

- Pick up your pets' waste and dispose of it properly to reduce bacteria runoff.

City of Delaware Ohio

Public Utilities Department

MS4 Program

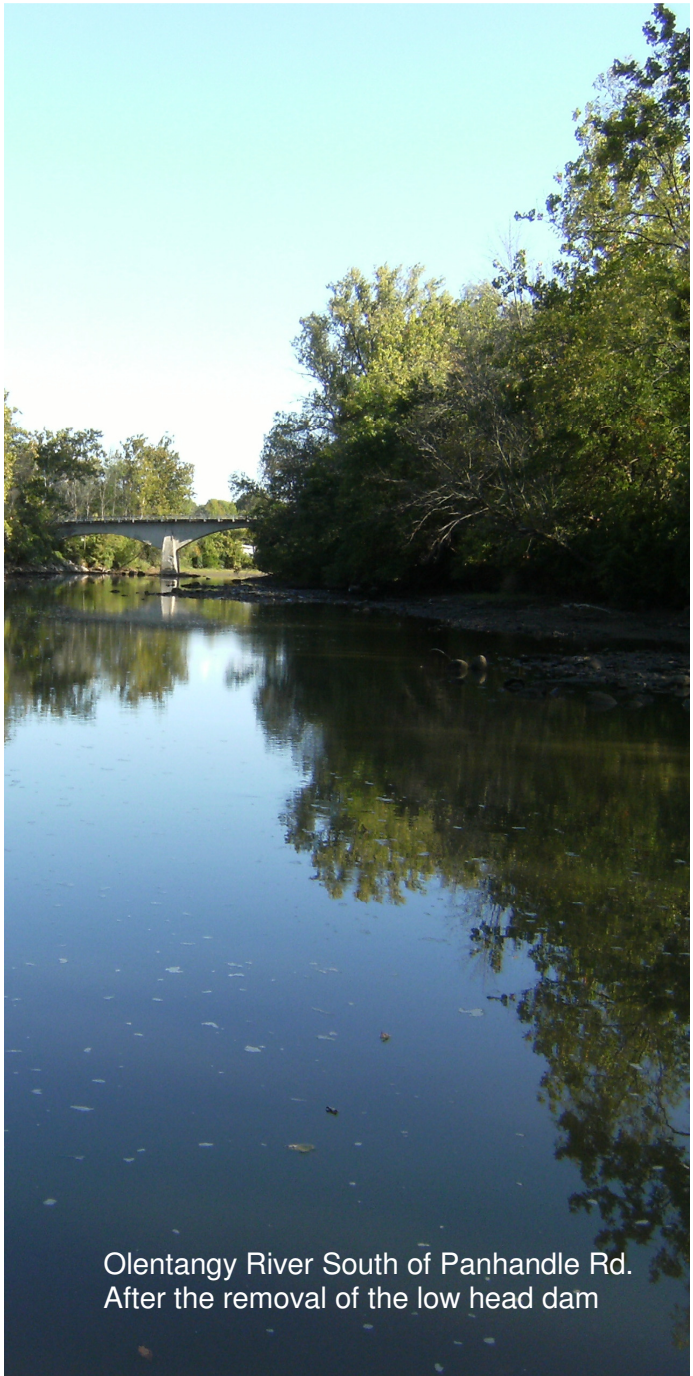
Protecting Public Health
Providing Environmental Responsibility

Questions or concerns?

If you have a question or concern about storm water quality, please do not hesitate to let us know.

Kristin Piper
Upper Olentangy River
Watershed Coordinator
740-203-1905
kpiper@delawareohio.net

Storm Water Quality Implementations



Olentangy River South of Panhandle Rd.
After the removal of the low head dam

What is storm water runoff?

Storm water runoff is any form of precipitation that flows or “runs off” the surface of lawns, fields, roofs, roads, etc. Some surfaces, such as roofs, driveways, parking lots, streets, and compact soils are harder surfaces that prevent any water from soaking into the ground.

There are two problems associated with storm water runoff.

1. How quickly is the water traveling?
2. What is being carried in the water?

Top left picture shows the bank eroded due to the water traveling quickly.
Bottom right shows a tire found during one of the Olentangy River clean up days.

The two problems associated with storm water runoff

The speed of the water affects the animals that can survive in our waterways. As water travels over the surface of impermeable structures (streets, roofs, driveways) it increases its velocity. While the velocity is increasing, the temperature is also rising. Certain aquatic life cannot survive in increased temperatures and will eventually die off.

Also, along its journey to our streams, the water will erode a path, picking up sediment along the way. The suspended soil can destroy aquatic habitats, in turn killing off animals that rely on those habitats.

Sediment clouding Mill Run due to polluted storm water runoff.

Water can carry all forms of pollutants. Some common pollutants that the City of Delaware treat are nitrates, atrazine, sediment, phosphorus, bacteria, and litter. Each of these can be very harmful for the environment and humans.

What effect does pollution have on our storm water quality?

Excessive nutrients can cause algae blooms. When the algae die, they sink to the bottom and decompose. The decomposing process requires oxygen, which is removed from the water. Fish and other aquatic organisms cannot survive in low dissolved oxygen levels.

A chemical spill in a ditch along Houk Rd.

Chemicals, bacteria, and other pathogens can runoff into our swimming areas and create health hazards. When these substances are present in large volumes, some treatment facilities are unable to remove all of the pollutants. Approved traces may be found in some drinking water.

Litter, such as plastic bags, bottles, and cigarette butts can wash into our waterways and choke, suffocate, or destroy local aquatic life.

A storm sewer catch basin clogged with litter and lawn debris (leaves and grass clippings).