



Storm Water Drains 101

Spring 2015

City of Delaware Public Utilities Department

Only Rain in Storm Water Drains

It is common for communities to have storm water drains that lead to a local river, lake, stream, or harbor. This is the situation in the City of Delaware. Our local storm drains are routed directly to the Olentangy River, and not to our treatment plant.

In Delaware, there are several pollutants that negatively affect the Olentangy River's water quality. These pollutants can travel to our waterways through the storm drains. The most frequent pollutants are litter, lawn/garden chemicals, pet waste, vehicle fluid, and increased levels of nutrients from plant material. All of these pollutants affect our local water quality and can harm aquatic life.

Upcoming Events:

- Tree Staking at Delaware Reservoir
April 18th @ East Bank of Lake
- Rain Barrel Workshop (tentative)
May 1st @ First Friday
June 5th @ First Friday
- Watershed Festival
June 20th @ Mingo Park

Upcoming events are posted and updated on our website at:
http://www.delawareohio.net/Departments/Public_Uilities/storm_water.aspx

Pollutants Found in Storm Drains

When hearing the word 'pollutant' people typically think of litter. Litter is one of the most common pollutants with cigarette butts being the most prevalent. (Despite popular belief, cigarette butts do not decompose, due to their main material being plastic - not cotton.) Littering, whether intentional or unintentional, can harm water quality and aquatic life. If you see litter on your property, along the roadway, at a local park or on any public property, please pick it up, if you can safely do so. Remaining on the ground, could cause it to wash to the nearest storm drain, ditch or stream. Eventually, it will travel to our local river.



Picture taken in 2014 – Olentangy River

Many people pollute our local waterways without even knowing or intending to do so. When lawn or garden chemicals are applied (fertilizers, pesticides, etc.), often times the directions on the label are not followed. These chemicals should never be applied prior

to a rainfall event; they should never be over-applied and, in certain cases, applying any chemical is not needed due to the current levels of nutrients in the soil. Excess lawn or garden chemicals will run off your lawn or garden during a rainfall event and travel to the nearest storm drain.

A large portion of households have a family pet. If your pet goes outside to do its business, please clean it up. Bacteria and viruses in your pet's waste can travel down our storm drains to our waterways and be detrimental to the aquatic life. High bacteria levels can also close recreational beaches for activities such as swimming or wading.

When vehicles leak oil or other fluids, those chemicals can get into our waterways through the storm drains. The vehicle may leak the chemicals in your driveway, the streets, parking lots, and other impervious surfaces. When it rains, the chemicals wash into the storm drains and into our waterways. Please fix your car leaks when they occur.



Lake Erie Algae Bloom - 2014

If not disposed of properly, grass cuttings, leaves, and other yard waste can travel to the storm drains and eventually to the river. Property owners should never rake or dispose of yard waste at the curb, ditch, storm drain, or nearby waterway. These plant materials can increase the levels of nutrients in our waterways and cause algae blooms. The algae prevents sunlight from penetrating below the surface, removes oxygen needed for fish and other aquatic life, and it can produce harmful toxins that effect aquatic life.

Protect the Water entering Storm Drains

There are many simple actions that can be done every day to help improve the water quality in our waterways. Many of these actions may seem like common sense to some of us, but until they are implemented, the water quality will suffer while the population becomes denser. Several ideas were mentioned in the section above, but additional actions include:

- Some storm drains are located in grassed areas. To help the water quality leaving that area, property owners can leave the grass slightly longer to help filter out any pollutants that may be in the storm water runoff.
- Increased storm water leads to increased localized flooding. Installing a rain barrel or rain garden can help minimize stormwater runoff and localized flooding.
- Trees can help absorb some of the pollutants in the storm water and slow down the storm water runoff traveling to the storm drains, also minimizing localized flooding.
- Properly store any unused chemicals, paints, oil, etc. by placing them in a covered area such as a garage or shed. Never dump these kinds of liquids down storm drains or clean out paint brushes/containers in or near a drain.

The City of Delaware and other local communities have placed “Don’t Pollute; Flows to Waterways” decals on storm drains around the city. These decals serve as a reminder to local members of the community. Spread the word!



*Protecting Public Health
Providing Environmental Responsibility*

**City of Delaware
Public Utilities Department
MS4 Program**

For additional watershed information, contact Kristin Piper, City of Delaware Watershed Coordinator
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