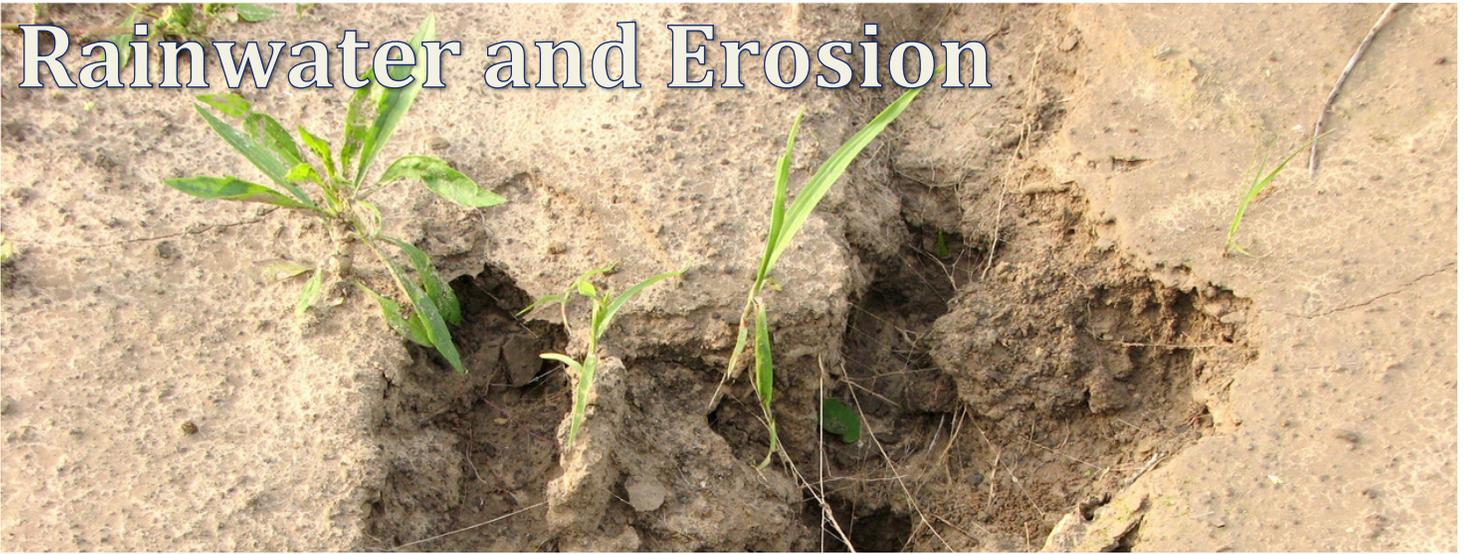


# Rainwater and Erosion



Fall 2015

City of Delaware Public Utilities Department

## Rain....again?

During the first part of our summer, it was estimated that Central Ohio received about 2.8 inches more rain than the normal baseline of precipitation, according to the Ohio Department of Natural Resources, Soil and Water Resources.

The excessive rainwater produced a larger amount of runoff throughout Delaware. Not only was the rain traveling off impervious surfaces (roofs, sidewalks, roads, etc.) but also the pervious surfaces (soil, gardens, grassed lawns, etc.) because they had become saturated. This saturation diverted rainwater across these surfaces instead of allowing any/much of it to percolate into the soils. This can lead to ditches, waterway banks, and areas that are not vegetated, eroding and creating a pollutant (sediment) in the water.

### Upcoming Events:

#### **-Register to Win a Free Tree**

Now through September 18<sup>th</sup>  
details at [olentangyriver.org](http://olentangyriver.org)

#### **-National Public Land Day - Army Corps of Engineers (volunteers needed)**

October 3 @ Army Corps of  
Engineers Office

Upcoming events are posted and updated on our website at:  
[http://www.delawareohio.net/Departments/Public\\_Uilities/storm\\_water.aspx](http://www.delawareohio.net/Departments/Public_Uilities/storm_water.aspx)

## Mowing



Leaving your grass slightly longer can help slow the water running across your yard. When mowing, consider setting the mower deck higher so the grass will be cut about 3-4 inches long. Longer grass will dissipate some of the energy from the runoff, lessen erosion and help manage larger volumes of rain.

For residents living along a river, stream, ditch, or area that holds standing water after a rainfall event, leaving grass longer can greatly benefit those areas. Many people try to mow as close to the water as possible and expect the banks to stay in place. Plant roots correlate in depth to the height of their stems. If you are cutting the grass at a 1-2" height, the roots will not expand deep in the soil. Without extensive roots holding the soil in place, rainwater is more likely to erode the soil, leaving a muddy depression or wall. Even if there

is not standing/running water in your yard at all times, water can rush through a ditch with a heavy rainfall and wash out some of the soil, starting the eroding process.

## Plantings

If you are already experiencing erosion on your property, planting native wetland plugs, stakes, shrubs, trees, or potted plants could help with the problem. Plugs are young plants that have a well-established root system. As soon as these plants are received from the nursery, they should be re-planted into larger pots or planted in the ground. Stakes are cuttings from a woody plant (tree or shrub) that when planted should develop roots and branches. Shrubs, trees, and potted plants



can be found at your local nursery. When deciding what to plant, remember that perennials will come back each year whereas annuals will die at the end of the growing season. Ohio Department of Natural Resources has developed a native wetland planting list. It can be found on their website at <http://ohiodnr.gov/portals/0/pdfs/invasives/Wetland-plants.pdf>. Using species off this list will maximize your chances of the plants' survival.

\*In the City of Delaware, residents are not permitted to plant willows and cottonwoods without the City arborist's approval due to their extensive root system possibly damaging water & sewer lines.

## Limit Pollutants

Several pollutants are washed into the City's stormwater pipes each time it rains. All of the City of Delaware's stormwater pipes are directed to waterways that eventually empty into the Olentangy or Scioto River, which means pollutants will travel there too. Residents can limit the pollutants that are directed to our waterways and help our aquatic life. The most frequent pollutants in Delaware are sediment, fertilizers, excess nutrients from plant waste, pesticides, pet waste runoff, cigarettes, and other floatables (plastic bottles, bags, glass, etc.).

Residents should try to minimize pollutants by securing the soil on their land (with vegetation); follow instructions on the lawn chemical containers and never apply it before a rainfall event; utilize yard waste pick-up or take the yard waste to Price Farms Organics (on Warrensburg Rd.) instead of dumping in your backyard, near a waterway or ditch; cleaning up after your pet; and never littering.

## Construction Runoff

On construction sites impacting larger than 1 acre, the City of Delaware is required to file a Storm Water Management Plan through the Ohio EPA. The plan outlines guidelines to retain the sediment onsite, so it does not runoff with the stormwater. However, there are times when the erosion control fencing falls down, a dandy bag (the orange filter bags over catch basins) is overloaded, or other sediment control structures fail. If you ever see sediment running off with the stormwater (as shown in the picture to the right) or anything else concerning a construction sites, please do not hesitate to contact the City of Delaware.



**If you wash your deck, car, lawn furniture, or other outdoor items do not allow any soaps or cleaners to discharge into the City's stormwater basins. This is considered an illicit discharge and is not permitted in the City of Delaware.**



*Protecting Public Health  
Promoting Environmental Responsibility*  
**City of Delaware  
Public Utilities Department  
MS4 Program**

For additional watershed information, contact Kristin Piper, City of Delaware Watershed Coordinator  
[kpiper@delawareohio.net](mailto:kpiper@delawareohio.net)  
740-203-1905