

# Stormwater Structures in the Parks

Summer 2015

City of Delaware Public Utilities Department

## Parks in the City of Delaware

It is time to enjoy the great outdoors and the City of Delaware encourages residents and visitors to make a trip to a City park. The City manages 19 neighborhood parks, 5 community parks, a nature walk and a golf course. Of those, eight neighborhood parks, three community parks and the golf course have “stormwater structures” designed to enhance local water quality.

Examples of stormwater structures that can be found in our parks and in surrounding communities include, rain gardens/bioretention areas, bioswales, wetlands, buffer strips, and pervious pavement.

## Rain Gardens

A rain garden or bioretention area is an attractive depression that catches stormwater runoff from rooftops, driveways, sidewalks, roads and other impervious surfaces. Deep-rooted, water and drought-tolerant plants are used in this garden to help absorb some of the rainfall. Some central Ohio plants that are recommended for rain gardens and bioretention areas are black-eyed Susan, blue flag iris, butterfly milkweed, marsh blazing star, purple coneflower, sedges, sweet flag, and wild geranium.

Where growth occurs, impervious surfaces (roads, sidewalks, rooftops, etc.) replace forests and agricultural fields which can cause stormwater runoff to increase, leading to flash flooding, more pollutants being carried to our waterways and less available habitat for wildlife. Rain gardens and bioretention areas help mitigate this.

Currently, the City of Delaware has two parks that have rain gardens; Kensington and Mingo. Blue Limestone Park also will have bioretention areas installed in 2015.

### Upcoming Events:

- Rain Barrel Workshop  
June 5 @ First Friday
- Northern Olentangy Watershed Festival  
June 20 @ Mingo Park
- Whetstone Creek Clean-up  
July 11 @ Delaware Reservoir
- Olentangy River Clean-up  
August 15<sup>th</sup> @ TBD

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)

## Bioswales

A bioswale is an engineered open channel or ditch-like feature, designed to remove silt and pollution from surface stormwater runoff. This swale is typically planted with native taller grasses to slow stormwater runoff. The slower runoff speed allows the silt and pollutants to settle out of the water as it is travelling through the open channel. You can find a bioswale at Stratford Park.

## Wetlands

Wetlands are areas that are dampened or saturated by surface or ground water at a frequency and duration sufficient to support vegetation. Wetlands generally include swamps, marshes, bogs and other similar areas. Wetland areas are able to absorb or filter out nutrients, sediment, bacteria, and harmful pollutants before they reach our major water bodies. In the event of river overflows, wetlands can also help absorb the water's momentum and slow the floodwaters. There are wetlands behind Glenwood Commons and north of Veterans Park.



Wetlands behind Glenwood Commons

## Buffer/Filter Strips

Filter or buffer strips are areas of land, either planted or of natural vegetation, situated between a potential pollutant-source and a surface water body that receives runoff. They are designed to protect the surface water body by filtering out pollutants such as excess nutrients (e.g. residential or agricultural fertilizers, plant/yard waste), sediment, pesticides, bacteria and other substances that can be carried by runoff. They are also used to slow the velocity of stormwater runoff, reducing erosion and localized flooding.

City parks with filter/buffer strips - either adjacent to a river, stream, catch basin, or low-lying area in the park - include Mingo, Belle Avenue., Nottingham, Oakhurst and Shelbourne Forest. The golf course has also implemented filter strips adjacent to water bodies.



Buffer strip at Hidden Valley

## Pervious Pavement

Pervious pavement is asphalt, concrete or pavers that are composed of porous material that allows water to seep into the ground. The material reduces stormwater runoff, filters pollutants from the water and traps solids that otherwise would travel with the stormwater runoff.

This year, pervious pavement will be added to Blue Limestone Park, along the driveway and in the parking stalls.

**Did you know that the Olentangy River is designated as a State Scenic River by the Ohio Department of Natural Resources? Please do your part to protect our local resource. To find out how, please visit [www.delawareohio.net/Department/Public\\_Uilities/storm\\_water.aspx](http://www.delawareohio.net/Department/Public_Uilities/storm_water.aspx)**



*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