Bioretention Systems
Collect and Filter Stormwater Runoff

How Do They Work?

Bioretention systems treat stormwater naturally. The basins collect stormwater runoff and allow it to absorb into the ground at a slower rate, reducing peak runoff volumes.

Specialized native plants uptake nutrients and filter suspended sediments. This improves the quality of the surface water entering the reservoir.

Follow the blue arrows to see stormwater's path as it enters and exits the system of basins.

How Can You Help Protect Stormwater?

- Minimize use of hard surfaces
- Use rain barrels, rain gardens and bioswales to capture the flow
- Maintain healthy vegetative buffers around waterways
- Keep oil, dirt, detergents and pesticides from entering storm drains

Stormwater begins as rainfall or snow melt flowing off of impervious surfaces such as roads, driveways and rooftops.

As it flows, stormwater can collect a variety of contaminants including oils, sediments and chemicals.

Bioretention Basins collect the stormwater and route it through a system of four connected basins. As the water soaks in, contaminants filter and settle out. Overflows will enter the reservoir through a culvert.

The Living Wall uses plant material to stabilize soil along a steep slope. The wall contains gravel and topsoil held in place by a honeycomb-style plastic framework. An attractive alternative to stone block, the plants help remove pollutants from water runoff.

Trees and Native Vegetation provide an important buffer around the water's edge. Trees and plants capture and hold nutrients, slow the flow of water runoff and return water to the atmosphere through evapotranspiration.

Stormwater flowing from the surrounding neighborhood enters the basins through an outflow pipe. A 3/4" rainfall here can amount to 1.22 million gallons of stormwater.

Stormwater from this 120 acre area drains through these 4 bioretention basins.

Did You Know?

Water Fact:
Sedimentation and habitat loss are Ohio's leading causes of water quality degradation.