city of fairlawn Croghan Park Raingarden Demonstration Project

Fairlawn, Ohio



Photo simulation of stormwater treatment feature with inset of initial conditions

Whith 2.4 acres of playgrounds, basketball courts, tennis courts, trails, lawn, and picnic areas, Croghan Park is a recreation destination for thousands of Fairlawn, Ohio residents. But after heavy rain storms, three large, bowl-shaped lawn areas that collect rainfall and runoff are rendered unusable for extended periods of time.

These three depressional lawn areas bisect and drain the park in a southeast to northwest direction. The central lawn area is drained by a series of under drains where water is infiltrated, collected and directed to a sump pump which then directs water under the northwest lawn area through a pipe and into a stormwater outlet. The Stormwater Wetland Garden at Croghan Park shows how difficult stormwater management issues can be addressed in a manner that not only reduces and cleans the amount of stormwater leaving the site, but provides an aesthetically pleasing garden feature and amenity to the community.

Biohabitats was approached to develop a stormwater treatment feature for this bypassed, northwest lawn area that not only mimics the appearance of a rain garden, but addresses the existing complex site hydrology while serving as a demonstration project to educate park visitors about the importance of stormwater management and show them techniques they can use at their own homes.

Biohabitats' approach was to create a two-tiered rain garden in the depressional area into which the pumped discharge is redirected. First, the discharge flows to the upper terrace, where it will can slowly infiltrate into the soil media and flow into the lower terrace. Stormwater will not only be treated by the soil media, but by a complex suite of native plants selected for the unique site conditions. The plants not only help filter the stormwater, but provide year-round interest to visitors and attract local pollinators and wildlife.

Biohabitats led the design of the entire system, including sizing, soils and materials specifications, planting plan, interpretative signage and construction cost estimate.

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