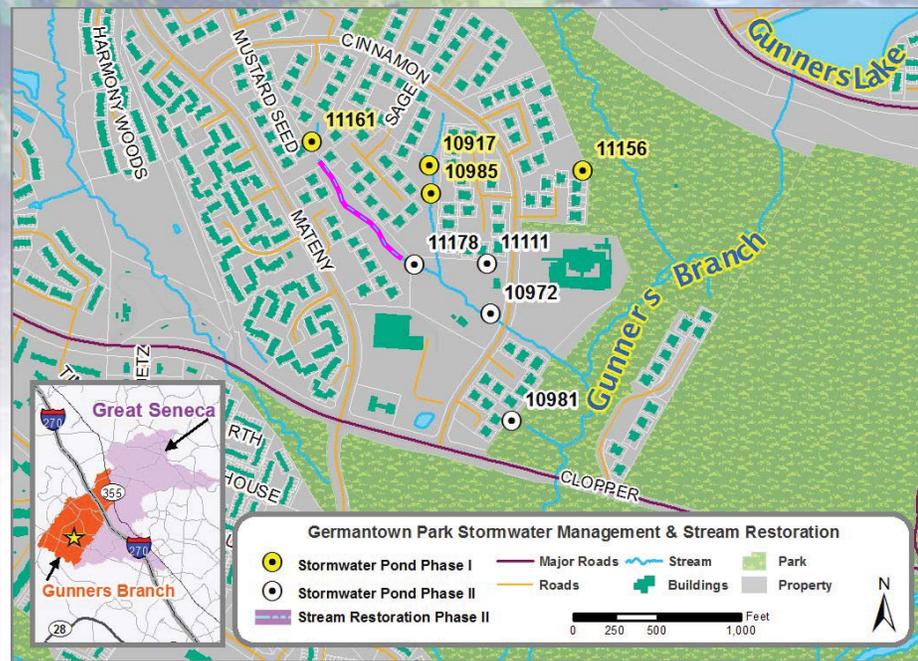




Watershed Restoration FACT SHEET

Germantown Park Stormwater Management & Stream Restoration Project



Watershed Facts

Subwatershed Drainage Area: 81 acres
Subwatershed Imperviousness: 38%

Property Ownership

Germantown Park Homes Association and Maryland-National Capital Park and Planning Commission

Restoration Goals

Upgrade existing stormwater ponds to improve water quality, meet current safety standards, and improve aquatic and wetland vegetation. Stabilize eroded stream to reduce sediment loads, enhance water quality, improve habitat, and protect infrastructure.

Restoration Project Facts

Project Length : 800 feet of stream

Drainage Area Captured: 81 acres

Estimated Costs:

To be determined at next design phase

Project Status:

Phase I: Construction fall 2015 - spring 2017

Phase II: Currently In Design

Monitoring Facts

Pre- and Post-Restoration Monitoring will be conducted following MCDEP Protocols

Stormwater Management and Stream Restoration Project Location along the Gunners Branch tributary of Great Seneca Creek

Visit our Project Webpage at www.montgomerycountymd.gov/restorationprojects and click Germantown Park Phase I or Phase II

Project Selection

Montgomery County has a continuing commitment to protect and improve its water resources. The *Countywide Stream Protection Strategy*, (CSPS, 1998, updated 2003), published by the Department of Environmental Protection (DEP), evaluated biological, chemical, and habitat conditions of streams in the county, and identified impaired "priority" sub-watersheds for restoration.

These stormwater facilities were identified for retrofit in the Great Seneca Watershed Implementation plan, which details how the county will meet its regulatory obligations for watershed restoration. Additionally, these facilities were chosen because of their age and need for maintenance.



Existing safety issues will be remedied, such as this failed slope and riser at Pond 11161. The riser will be replaced with a concrete structure with a longer service life than the original metal components.

Pre-Restoration Conditions



Pond 11111 will be converted to a combination dry detention pond / bioretention cell. The upper portion (shown in photo above) will be the dry detention pond which will release water slowly to a bioretention cell below (not pictured).



The existing walking path at Ponds 10917 and 10985 will be rerouted slightly away from the proposed retrofit, and native vegetation will be planted.



Example of current conditions in the stream reach, with unstable bed and banks. The stream will be stabilized and planted with native vegetation.

The Germantown Park community was developed prior to current stormwater management regulations. Uncontrolled stormwater runoff from impervious areas creates erosive, high velocity, and "flashy" flows that damage receiving streams and contribute to pollution in those streams and the Chesapeake Bay.

The stormwater management ponds in Germantown Park currently provide few ecological and water quality benefits and have also reached the end of their service life. The stream that is being restored in this project is severely downcut and unstable, with little habitat value currently.

Both the ponds and the stream provide excellent opportunities to improve aquatic and semi-aquatic habitat and achieve a higher level of water quality, as well as meet current safety and design standards.

Restoration Actions

The stormwater ponds' outlet structures, such as the riser structure and outfall pipe, will be replaced with modern components that safely convey runoff.

The first phase of work includes four ponds. Ponds 10917, 10985 and 11161 will be upgraded to dry extended detention ponds, reducing flows to downstream channels. An infiltration basin is proposed for pond 11156.

In the second phase of work, Pond 11111 will improve water quality through the use of an infiltration berm and a new bioretention cell. Pond 10972 will be converted to a bioretention cell. A submerged gravel wetland is proposed for Pond 10981, and a wet pool is proposed for Pond 11178.

All facilities will be planted with attractive native vegetation, including flowering perennials, grasses, trees and shrubs.

In the stream, the banks and streambed will be stabilized with a goal of minimizing tree impacts. Stabilization and revegetation of the stream banks will improve stream habitat.



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 Division of Watershed Management