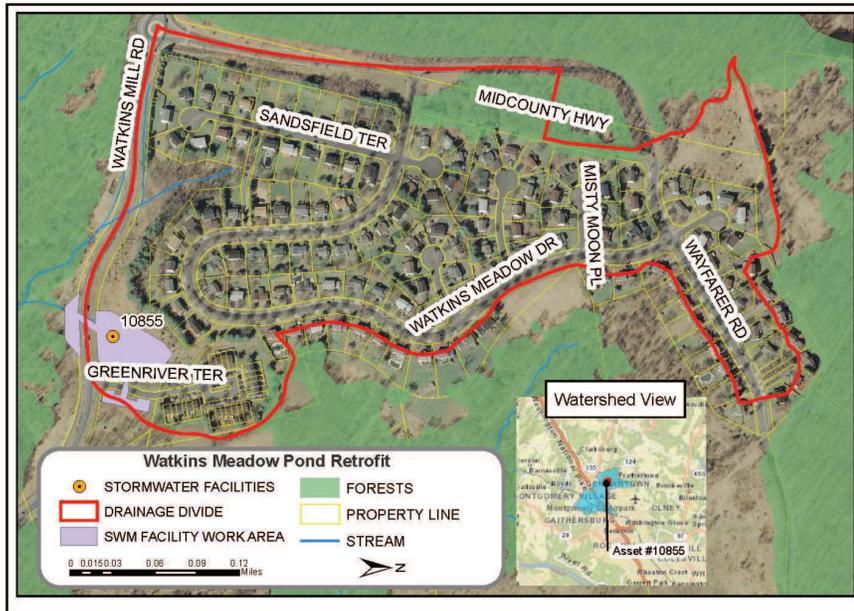




Watershed Restoration FACT SHEET

Watkins Meadow Stormwater Management Pond Retrofit



Watershed Facts

Subwatershed Drainage Area: 56.36 Acres
Subwatershed Imperviousness: 14.19 Acres

Property Ownership

Maryland National Capital Park and Planning Commission (M-NCPPC)

Restoration Goals

Upgrade stormwater pond to meet current MDE stormwater management regulation, repair and upgrade pond infrastructure to meet current safety standards, improve aquatic vegetation.

Restoration Project Facts

Project Length : N/A

Drainage Area Captured: 56.36 Acres

Estimated Costs:
\$791,000

Project Status:

Conceptual Design

Monitoring Facts

N/A

The facility is located in the Middle Great Seneca Creek watershed. The watershed originates in Damascus in the northwestern corner of Montgomery County and flows generally in a southwesterly direction before ultimately discharging to the Great Seneca Creek. Visit our webpage at <http://www.montgomerycountymd.gov/restorationprojects>, then click on Watkins Meadow

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 MS4 permit requirements. Additionally, this facility was chosen because of its age and need for maintenance.

The existing stormwater management facility meets the feasibility criteria for upgrading the stormwater management pond. The Department of Environmental Protection's stormwater management maintenance section identified the facility as being a good candidate for updating to current standards.



The existing channel will be realigned and stabilized to reduce discharge velocities to non-erosive levels and provide longer detention times to maximize treatment provided in the facility.

Pre-Restoration Conditions

The Watkins Meadow neighborhood was developed prior to current regulations for stormwater management control. Uncontrolled stormwater runoff from highly impervious areas creates erosive, high velocity or "flashy" stormwater that damages receiving streams and contributes to significant source of pollutants in those streams.

The existing stormwater management pond does not have sufficient room for storage and the bottom of the bottom of pond elevation will be lowered. The outlet works were not designed to meet current MDE stormwater management standards and over time, have both entered a state of disrepair and reached the end of their service life. Finally, the existing stormwater facility lacks the proper vegetation needed to enhance stormwater management treatment, and improve aquatic and semi-aquatic habitats to achieve a higher level of water quality.



Overview of facility; Outlet works will be replaced with a watertight concrete outlet structure.



Existing low flow channel; Low flow system will be upgraded to prevent debris blockage.



The pond will be converted to a wet pond and native plantings will be provided in and around the facility to improve water quality, aquatic habitat and aesthetics.

Restoration Actions

Expected construction activities for the retrofit includes:

- Convert existing dry stormwater management pond to a wet stormwater management pond to provide water quality treatment.
- Replace existing outlet control structure with watertight concrete outlet structure.
- Repair existing low flow channels to prevent future erosion and maximize water quality treatment.
- Upgrade low flow system to prevent debris blockage.
- Install landscaping to enhance aesthetics and water quality.
- Clear debris from facility and from facility outfall.



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Division of Watershed Management