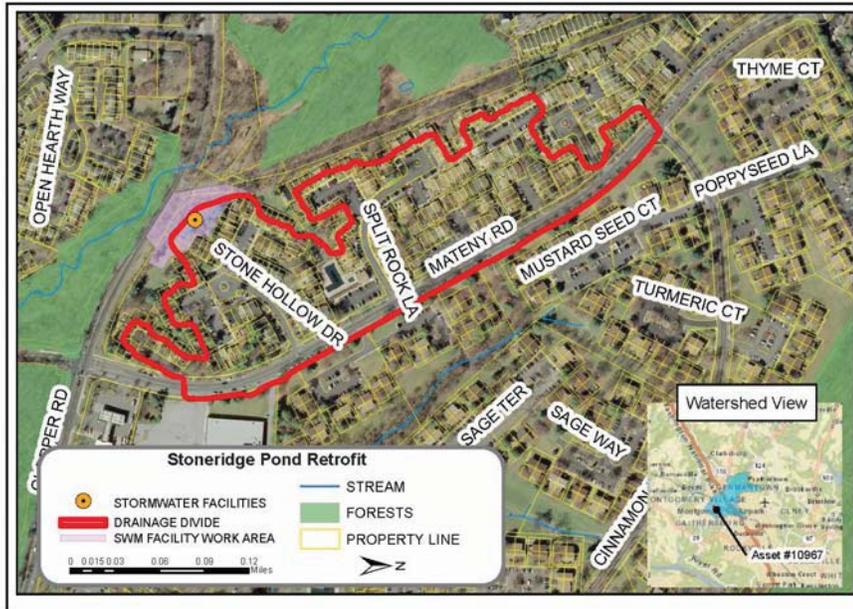




Watershed Restoration FACT SHEET

Stoneridge Stormwater Management Pond Retrofit



The facility is located in the Middle Great Seneca Creek watershed. The watershed originates in Damascus in northern Montgomery County and flows generally in a southwesterly direction before ultimately discharging to the Potomac River.

Watershed Facts

Subwatershed Drainage Area: 18.76 Acres

Subwatershed Imperviousness: 10.24 Acres

Property Ownership

Stoneridge Community Council Corporation

Restoration Goals

Upgrade the existing stormwater pond to improve stormwater management to the receiving stream. Repair existing riser to prevent slope erosion. In addition, the project will improve the pond to meet current regulations from MDE.

Restoration Project Facts

Project Length : N/A

Drainage Area Captured: 18.76 Acres

Estimated Costs:

\$587,000

Project Status:

Concept Design

Monitoring Facts

No Monitoring Present

Project Selection

Montgomery County has a continuing commitment to protect and improve its water resources. *The County wide 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 storm water management pond. The Department of Environmental Protection's storm water management maintenance section identified the facility as being a good candidate for updating to current standards.



Overview of existing facility. Channel lined with riprap to reduce velocity and prevent erosion in the facility.

Pre-Restoration Conditions

The Stoneridge 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 does not properly manage stormwater flows. The bottom of pond elevation will be lowered and a sand filter installed to filter stormwater and remove pollutants. The outlet works were not designed to meet current MDE stormwater management standards and over time, the outlet works have 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.

Restoration Actions

Expected construction activities for the retrofit includes:

- Convert existing dry stormwater management pond to a surface sand filter to provide water quality treatment.
- Replace existing metal outlet works with watertight concrete riser structure.
- Realign inflow storm drains
- Install pretreatment structures prior to entering sand filter to remove trash and debris
- Repair outlet channel to minimize erosion downstream.
- Repair access road for future maintenance access to the facility.
- Install landscaping to enhance aesthetics and water quality.



Existing metal outlet works will be removed & replaced with concrete outlet works which have a longer service life than their metal counterparts.



Existing outfall will be cleared of debris and riprap installed to reduce velocity and prevent erosion.



Existing dry pond will be converted to a sand filter similar to the one shown here and native planting will be provided around the facility to increase water quality semi-aquatic habitat and aesthetics.



Contact:

Rebecca Winer-Skonovd
240-499-8531
rebecca.winer-skonovd@montgomerycountymd.gov

Department of Environmental Protection
Division of Watershed Management