

PHOENIXVILLE BOROUGH

MS4 - Stormwater Management Program

MCM #5 & #6: BMP Maintenance

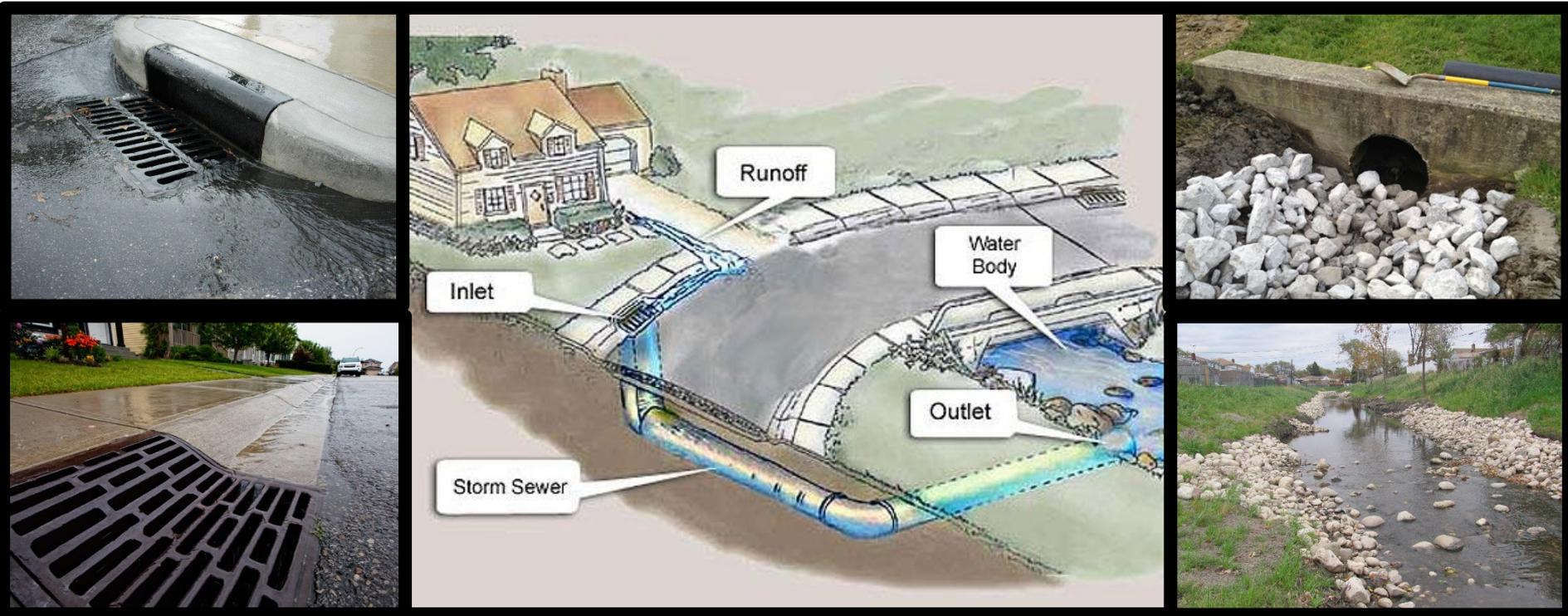


Presented By :
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MS4 : Municipal Separate Storm Sewer System:

- An MS4 is a collection of structures and conveyances designed to gather stormwater and discharge it into local waterways.
- Phoenixville's MS4 is permitted to discharge stormwater to local waterways under NPDES Permit #PAI130003 (effective from 2/1/2025 - 1/31/2030).
- Permit coverage requires implementation of a Stormwater Management Program, including addressing 6 MCMs.



MS4 Permit Requirements: *Minimum Control Measures*

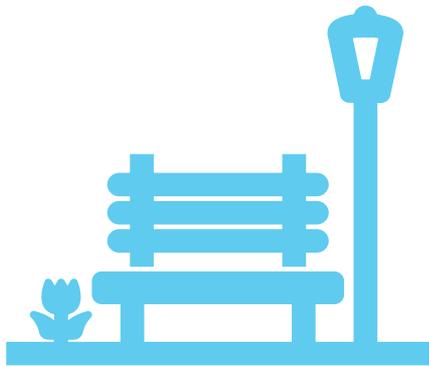
- ▶ MCM 1 - Public Education and Outreach
- ▶ MCM 2 - Public Involvement and Participation
- ▶ MCM 3 - Illicit Discharge Detection and Elimination
- ▶ MCM 4 - Construction Site Runoff Control
- ▶ **MCM 5 - Post-Construction Stormwater Management**
- ▶ **MCM 6 - Pollution Prevention & Good Housekeeping**
- ▶ Pollution Reduction Plan
- ▶ PCMs - Pollution Control Measures

MCM#5: Post-Construction Stormwater Management

- ▶ To reduce stormwater runoff and pollutant discharge from new development and redevelopment projects after construction is completed.
- ▶ Objectives:
 - ▶ Ensure long-term stormwater controls are in place.
 - ▶ Protect water quality in the local waterways.



MCM#6: Pollution Prevention & Good Housekeeping



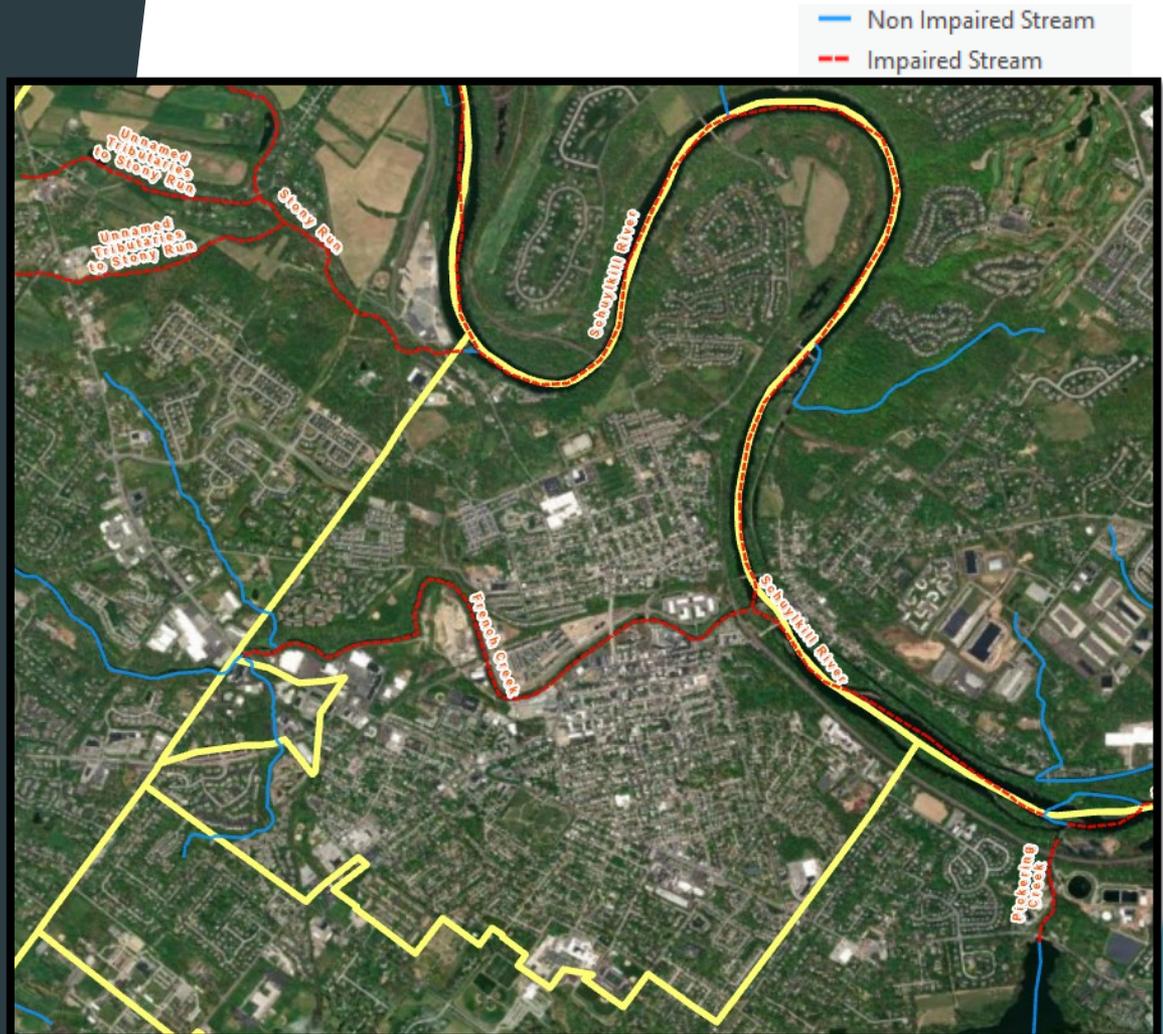
- ▶ To reduce pollutants from municipal operations and maintenance activities into the stormwater system.
- ▶ Objectives:
 - ▶ Minimize pollutant runoff from municipal facilities and/or activities.
 - ▶ Update operational practices at municipal facilities.
 - ▶ Train municipal staff on proper stormwater practices.

The background features abstract, overlapping geometric shapes in various shades of blue, ranging from light sky blue to deep navy blue. These shapes are primarily located on the right side of the frame, creating a modern, dynamic feel.

Stormwater Best Management Practices (BMPs)

Impaired Waters in Phoenixville

- ▶ Impaired waterways are bodies of water that do not meet water quality standards.
- ▶ Impaired Waterways:
 - ▶ Schuylkill River (PCBs)
 - ▶ French Creek (pathogens)



Why We Need BMPs

- ▶ 34% of streams in PA are Impaired.
- ▶ Top Reasons for BMPs:
 - ▶ Reduce the spread of pollutants
 - ▶ Protect aquatic ecosystems
 - ▶ Improve Water Quality
 - ▶ Conserve Water Resources
 - ▶ Minimize Flooding



Best Management Practices (BMPs)

- ▶ BMPs are strategies or practices (structural & non-structural) to control our impacts on waterways.
- ▶ Phoenixville currently has 110 BMPs inventoried (mostly detention basins)
 - ▶ Detention basins
 - ▶ Infiltration basins
 - ▶ Infiltration trenches
 - ▶ Rain gardens
 - ▶ Snouts





Maintenance of BMPs PA DEP BMP Manual

- ▶ Detention Basins - Quarterly
 - ▶ Inspect structures expected to receive and/or trap sediment and debris
 - ▶ Trash Racks, Outlets, Riprap, Gabion structures, Inlets
 - ▶ Sediment should be removed only when the basin is dry
 - ▶ Inspect that the basin maintains 95% vegetated area
 - ▶ If less, revegetate where necessary



Maintenance of BMPs PA DEP BMP Manual

- ▶ Infiltration Basins - As Necessary
 - ▶ Inspect the vegetation within the basin and revegetate where necessary
 - ▶ Ensure the basin drains within 72 hours (3 days)
 - ▶ Inspect around the outfalls for an accumulation of sediment and erosion
 - ▶ Mow only as appropriate for planted species



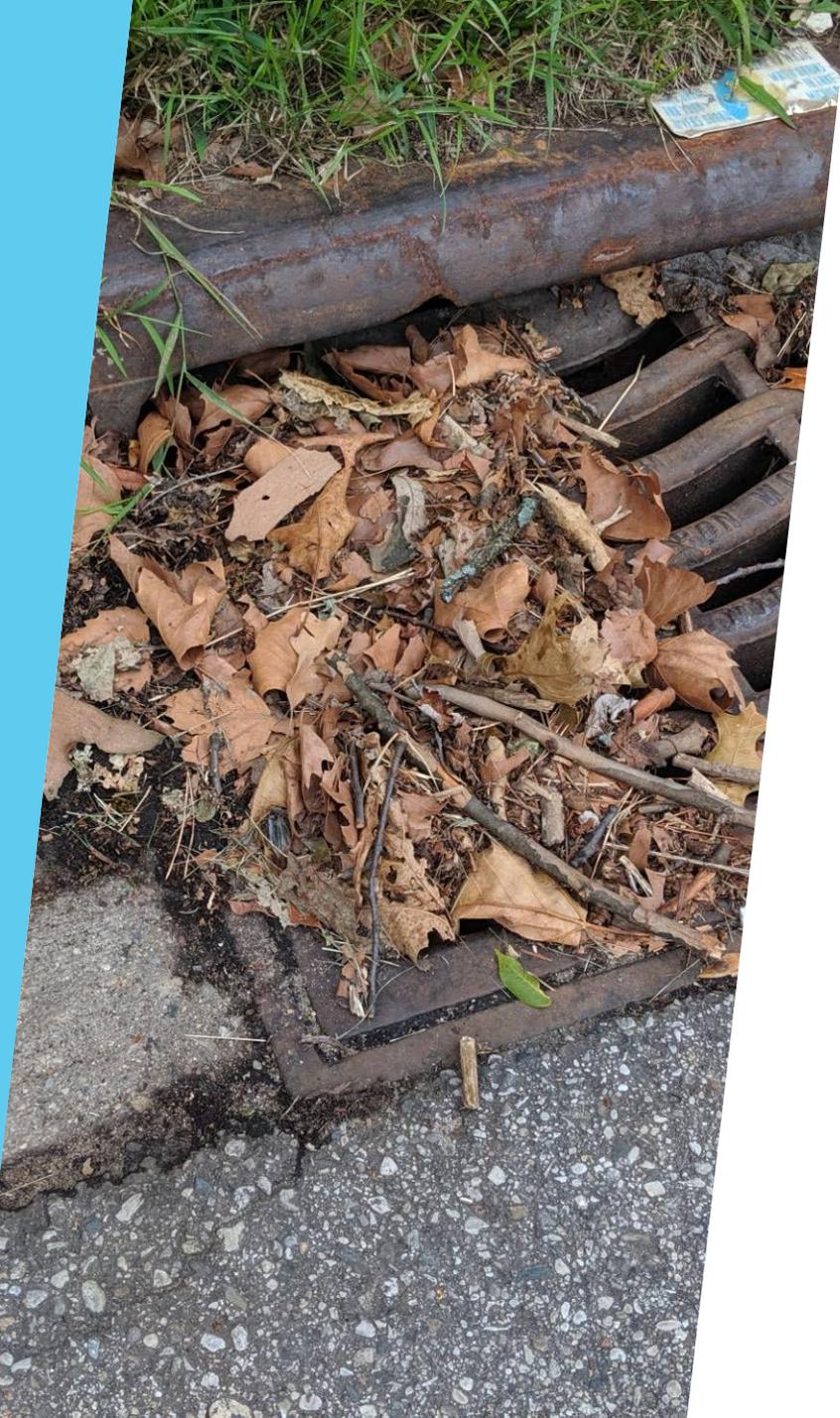
Maintenance of BMPs PA DEP BMP Manual

- ▶ Infiltration Trench - Twice per year
 - ▶ Storm Inlets should be cleared of debris
 - ▶ Vegetation along the trench should be maintained and bare spots revegetated.
 - ▶ Avoid excessive compaction when mowing
 - ▶ Ensure proper dewatering (within 72 hours)



Maintenance of BMPs PA DEP BMP Manual

- ▶ Swales - Annually / After a Major Storm
 - ▶ Fill in gullies and rills where necessary
 - ▶ Inspect for debris and litter
 - ▶ Suppress invasive species and weeds
 - ▶ Only mow around the swale when it's dry to avoid rutting



Maintenance of BMPs PA DEP BMP Manual

- ▶ Storm Inlets - As Necessary
 - ▶ Clear debris, leaves, and litter from the inlets
 - ▶ Take note of cracking and other damage to inlets



Maintenance of BMPs PA DEP BMP Manual

- ▶ Storm Outfalls - As Necessary
 - ▶ Remove excessive sediment build up
 - ▶ Notice discharge during dry weather periods
 - ▶ Inspect for erosion around the structure
 - ▶ Loss of riprap or other erosion protection

In Summary

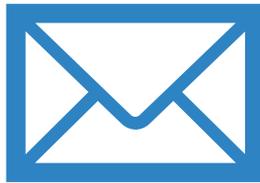
- ▶ BMPs are strategies or practices to control our impacts on waterways.
- ▶ Maintaining BMPs ensures they continue to be effective years after construction.
- ▶ By establishing and maintaining BMPs we can do our part to reduce water pollution in our region



How to Report Violations?

- ▶ Who to Contact?
 - ▶ Dumping or Spills of Petroleum Products:
 - ▶ PADEP: *(484) 250-5900*
 - ▶ Sediment Leaving Construction Sites
 - ▶ Chester County Conservation District: *(610) 925-4920*
 - ▶ Sewage Discharges
 - ▶ Phoenixville Borough (Public Sewer System): *(610) 933-8801*
 - ▶ Chester County Health Department: *(610) 344-6225*
- ▶ Phoenixville's Citizen Request Tracker (phoenixville.org/RequestTracker.aspx)
- ▶ For more Stormwater related information, visit on Phoenixville Stormwater Management website (phoenixville.org/255/Stormwater-Management)

Questions?



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