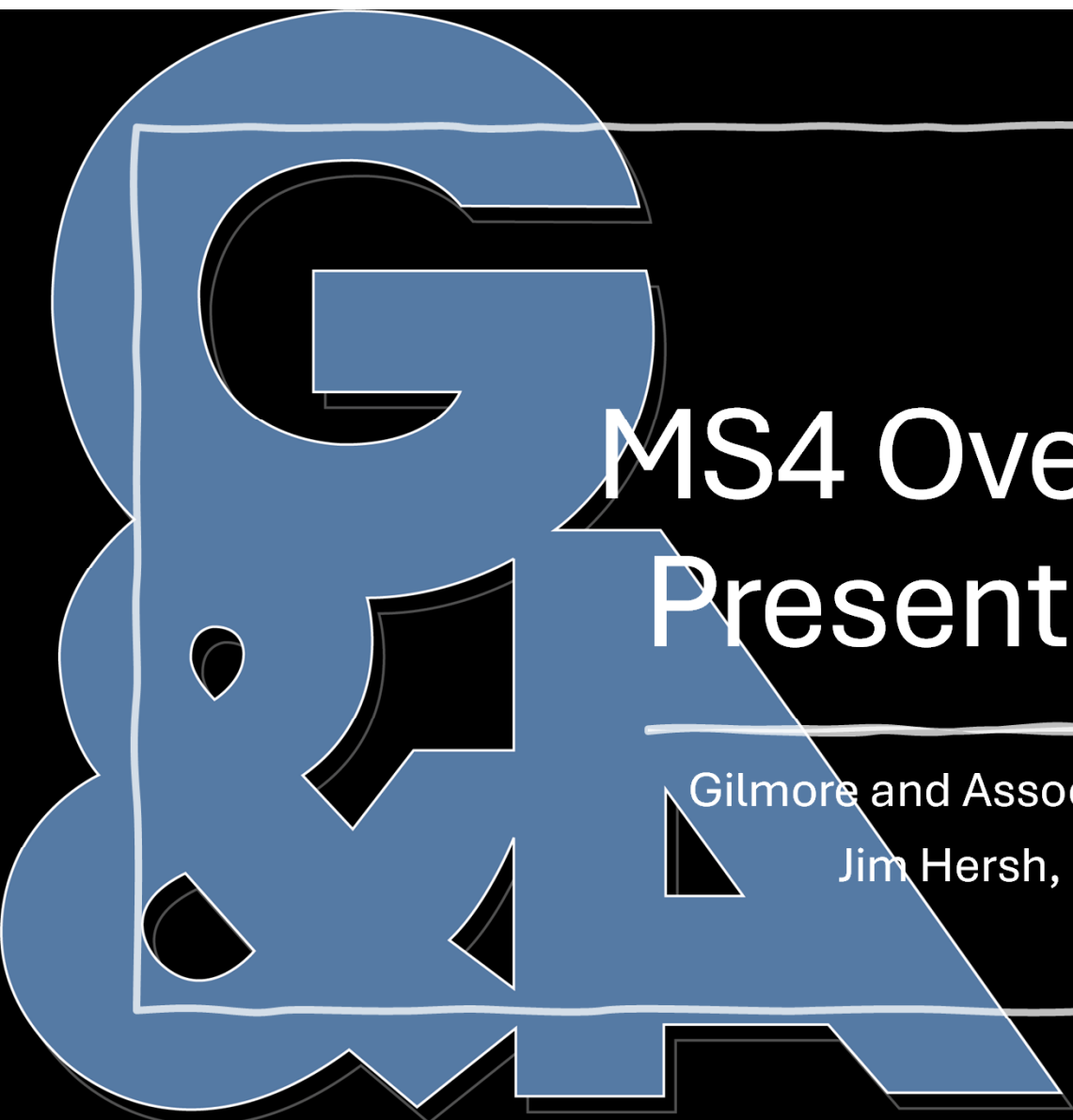




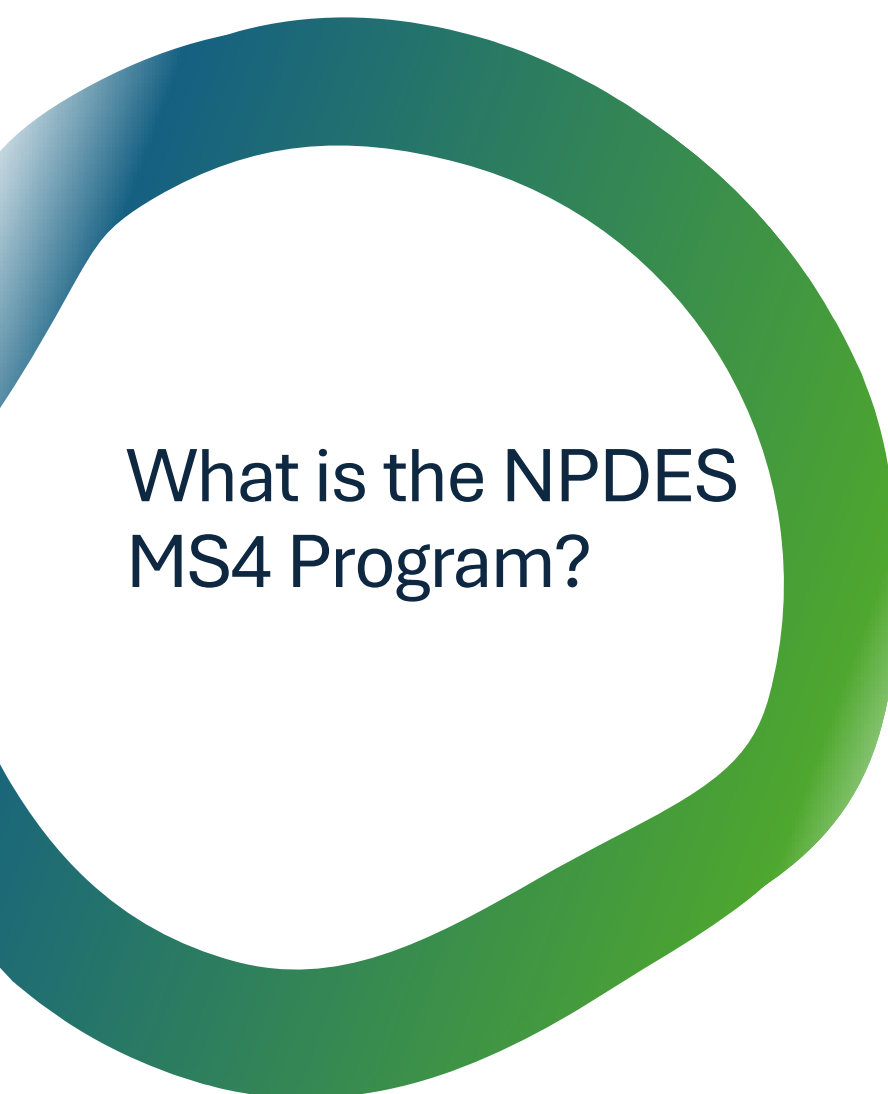
MS4 Overview Presentation

Gilmore and Associates, Inc.

Jim Hersh, P.E.

What is the NPDES MS4 Program?

- National Pollutant Discharge Elimination System
- Municipal Separate Storm Sewer System
- Federally Mandated Permit Program (enforced by EPA)
- DEP administers the Program in Pennsylvania
- Ultimate goal for this Program
 - Recognize and increase awareness of stormwater as a point-source pollutant
 - Manage stormwater as you would any other point-source pollutant (like sewage)

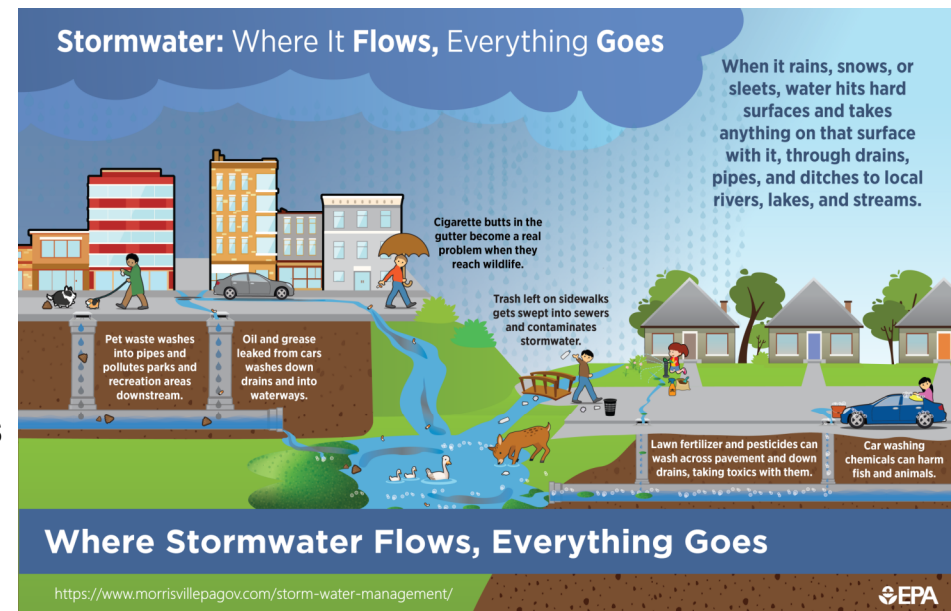


What is the NPDES MS4 Program?

- Implement Best Management Pactices (**BMPs**) under Six (6) Minimum Control Measures (**MCMs**)
 1. Public Education & Outreach
 2. Public Involvement & Participation
 3. Illicit Discharge Detection & Elimination
 4. Construction Site Stormwater Runoff Control
 5. Post Construction Stormwater Management for Development & Redevelopment
 6. Pollution Prevention/ Good Housekeeping

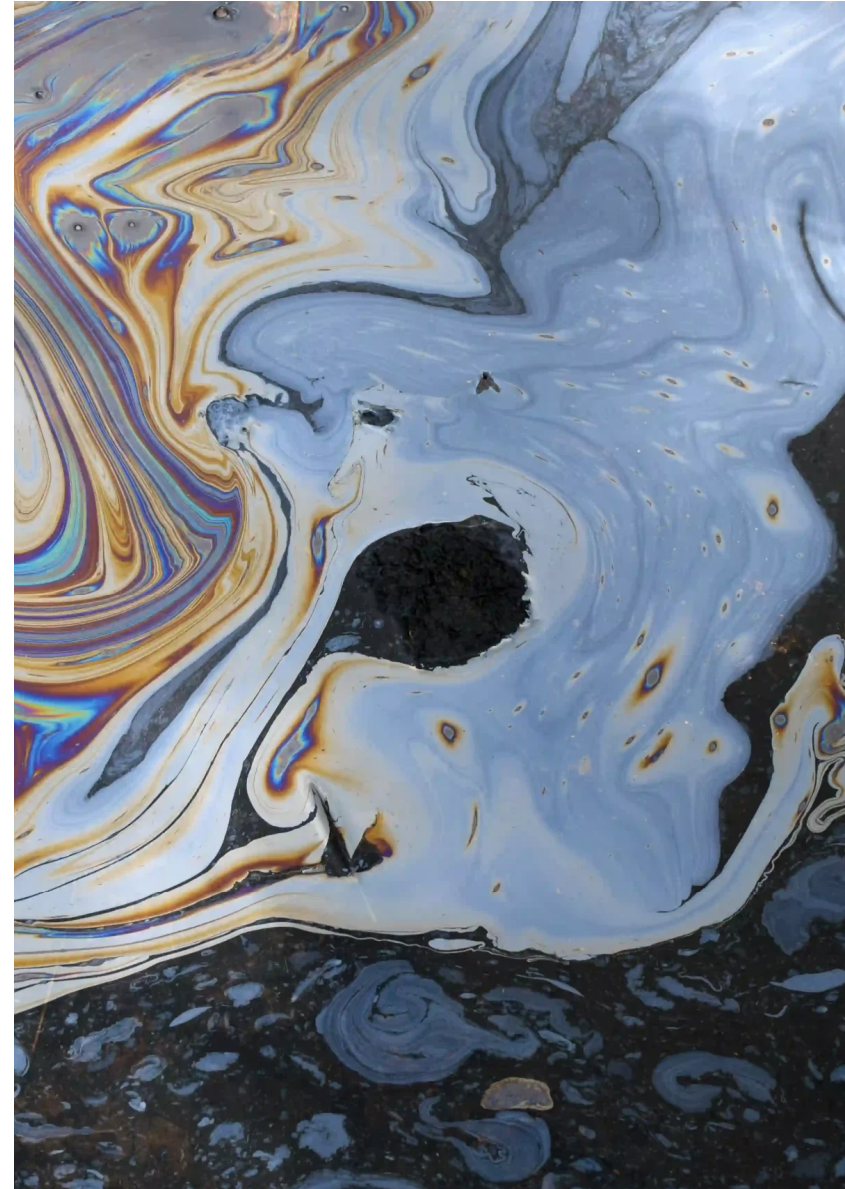
What can residents do to help keep the waterways clean?

- Car Care
 - Prevent the water from reaching the stormwater drain
 - Check for leaks frequently
 - Clean up any spills
- Yard Care
 - Clean up after pets
 - Consider planting a rain garden and or more trees
 - If you fertilize – use sparingly and follow directions
- Miscellaneous
 - Properly dispose of hazardous substances
 - Store materials that could pollute stormwater indoors
 - Report polluted discharges from stormwater outfalls



Signs of Pollution

- Discolored water
 - Brown, green, or other unusual colors
- Sheen, film or foam
- Odor
 - Strong, acrid
 - Smells of sewage, chemicals or petroleum
 - Fumes
- Dead fish



What is the NPDES MS4 Program?



Pollutant Reduction Plans (PRPs)

Discharges to Waters Impaired by
Nutrients and/ or Sediment
(Wissahickon & Little Neshaminy
Creeks)



Pollutant Control Measures (PCMs)

Discharges to Waters Impaired by
Metals/ pH, Pathogens, PCBs, etc.

What is a Pollutant Reduction Plan?

Permit Requires:

Projects (i.e. BMPs) that will reduce the sediment and nutrients load by 10% and phosphorous load by 5% to **Wissahickon & Little Neshaminy** over the 5-year permit term. (Initially 2020 to 2025, extended from 2025-2030).

- Rain Gardens (Township Building)
- Basin Retrofits (Spring House Farms)
- Stream Restoration (Willow Run & Potential Project on J&J Campus)
- New Basins
- Riparian Buffer Enhancement, Forestation, and Meadow



Spring House Farms Basin Retrofit



BEFORE



AFTER

Stormwater Benefits of Naturalized Basins

- Improved Water Quality & Reduce Thermal Impact
- Ecosystem Diversity
- Reduce Runoff (Infiltration & Evapotranspiration)

Willow Run Streambank Enhancement



BEFORE



DURING



AFTER

Streambank Enhancement Benefits

- Reduce future erosion & downstream sedimentation
- Remove invasive plants & replace with native
- Grading of streambank increases capacity to carry floodwaters

Questions & Next Steps

- Current permit term ends in 2030. DEP will likely come out with new regulations prior to end of this permit term requiring the installation of additional stormwater BMPs.
- Wissahickon Clean Water Partnership (WQIP) – Coalition of 13 municipalities working with DEP and EPA for 10 years +/- to address stormwater impairments in the Wissahickon Creek. Lower Gwynedd is a member of WQIP. Once WQIP gets their water quality plan approved, member municipalities will be asked to adopt & additional projects will be required.
- Continue to adhere to current permit terms, provide DEP with required reporting, and monitor changes in upcoming permit requirements.