

BOROUGH OF WEST CHESTER

Overview of MS4 Permit Requirements

Goose Creek Watershed Pollution Reduction Plan (PRP) & Total Maximum Daily Load (TMDL) Plan

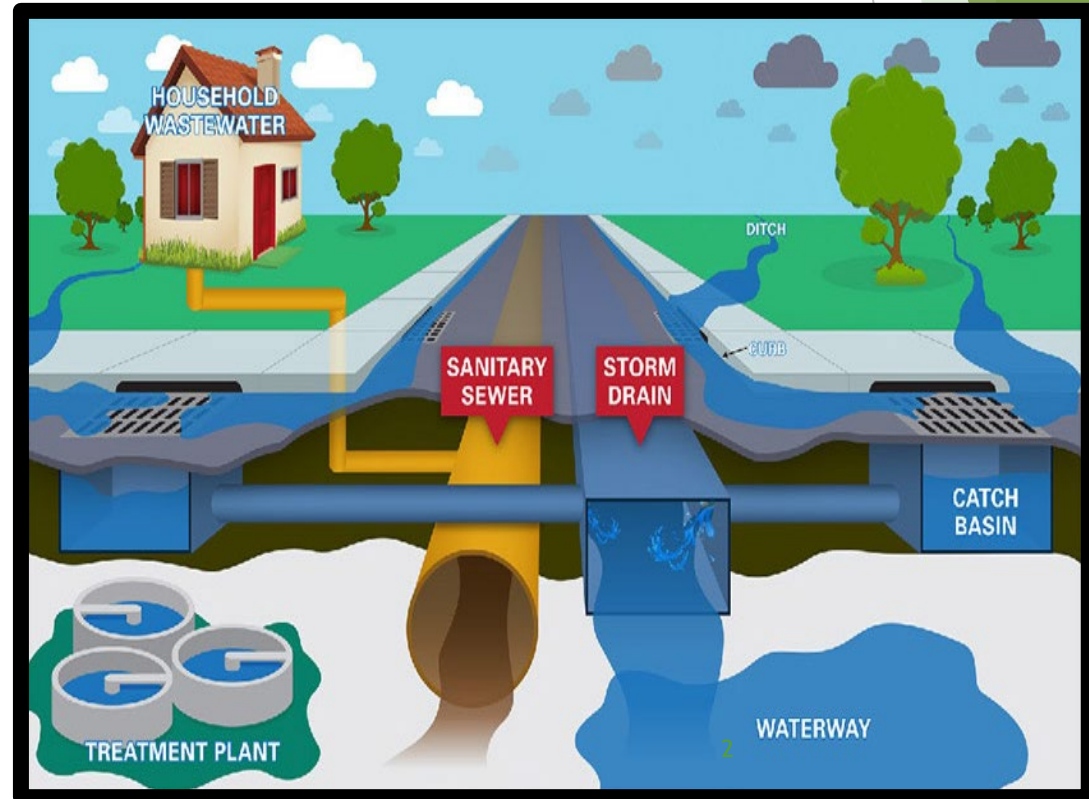
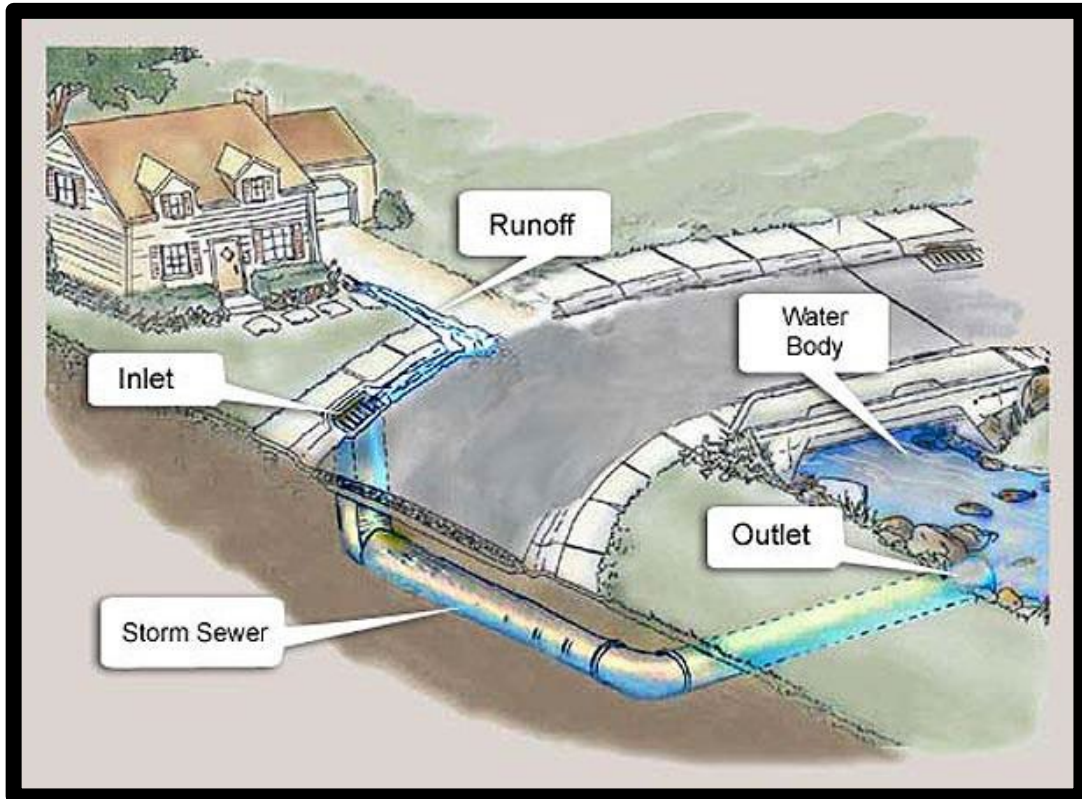


Presented By :
Kelly Goff, PE, CFM, Consulting Engineer
Will Williams, Sustainability Director



MS4 : Municipal Separate Storm Sewer System

Stormwater conveyance system conveys stormwater runoff from impervious surfaces to local waterways



Why regulate MS4?



MINIMIZE FLOOD DAMAGES



MAINTAIN ECOLOGY OF
STREAMS



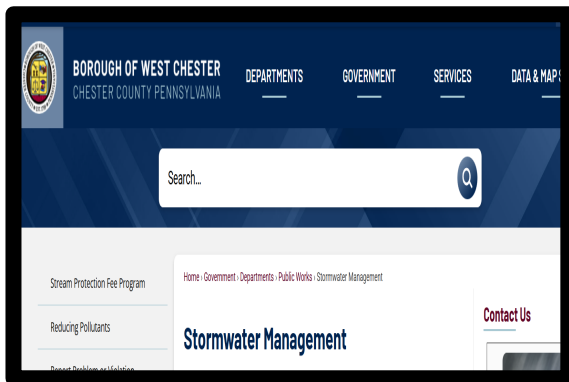
REDUCTION IN SEWER
REHABILITATION & WATER
TREATMENT COSTS

MS4 Permit Program Overview

- ▶ **MANDATED** by the United States Environmental Protection Agency (EPA) under the Clean Water Act (CWA)
- ▶ PADEP administers the program in PA
- ▶ PADEP conducts inspections to ensure compliance
- ▶ Designed to reduce stormwater pollution from municipal storm sewer systems
- ▶ Over 1,000 Permittees in Pennsylvania

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



BOROUGH WEBSITE



OUTFALL INSPECTIONS



E&S CONTROLS



PCSM BMPs

MS4 Permit Requirements: Pollution Reduction Plan (PRP) Total Maximum Daily Load (TMDL) Plan

- ▶ The purpose of a TMDL Plan is to achieve pollutant load reductions based on EPA approved limits. A TMDL Plan is required when a waterbody has an EPA-approved TMDL
 - ▶ TMDL Borough requirements: Goose (Chester) Creek
- ▶ The purpose of a PRP is to reduce sediment pollution in PADEP designated impaired waters.
 - ▶ PRP Borough requirements: Taylor Run, Plum Run, Blackhorse Run, Brandywine Creek, Goose (Chester) Creek

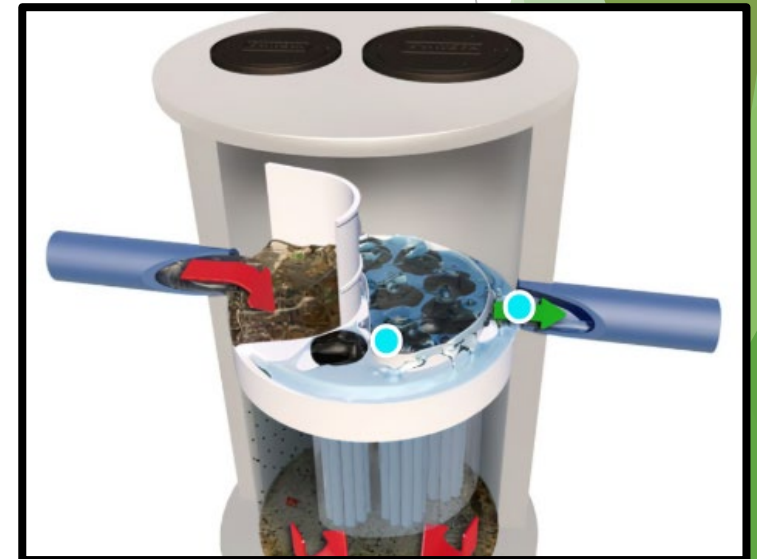
PRP & TMDL Addenda Revisions

BMPs Eliminated

Location	BMP Type
Along Tributary	Streambank Stabilization & Restoration
Near S. Adams Street & E. Niels Street	Jellyfish Filter



STREAMBANK STABILIZATION & RESTORATION



JELLYFISH FILTER

PRP & TMDL Addenda Revisions- BMPs retained

Location	BMP Type
John O. Green Park*	Permeable Pavement
Fugett Park/Borough Hall*	Rain Gardens
Greenview Alley*	Bioswales
Various Locations*	Street Sweeping
Various Locations*	Tree Plantings

*Have been implemented



John O. Green Memorial Park



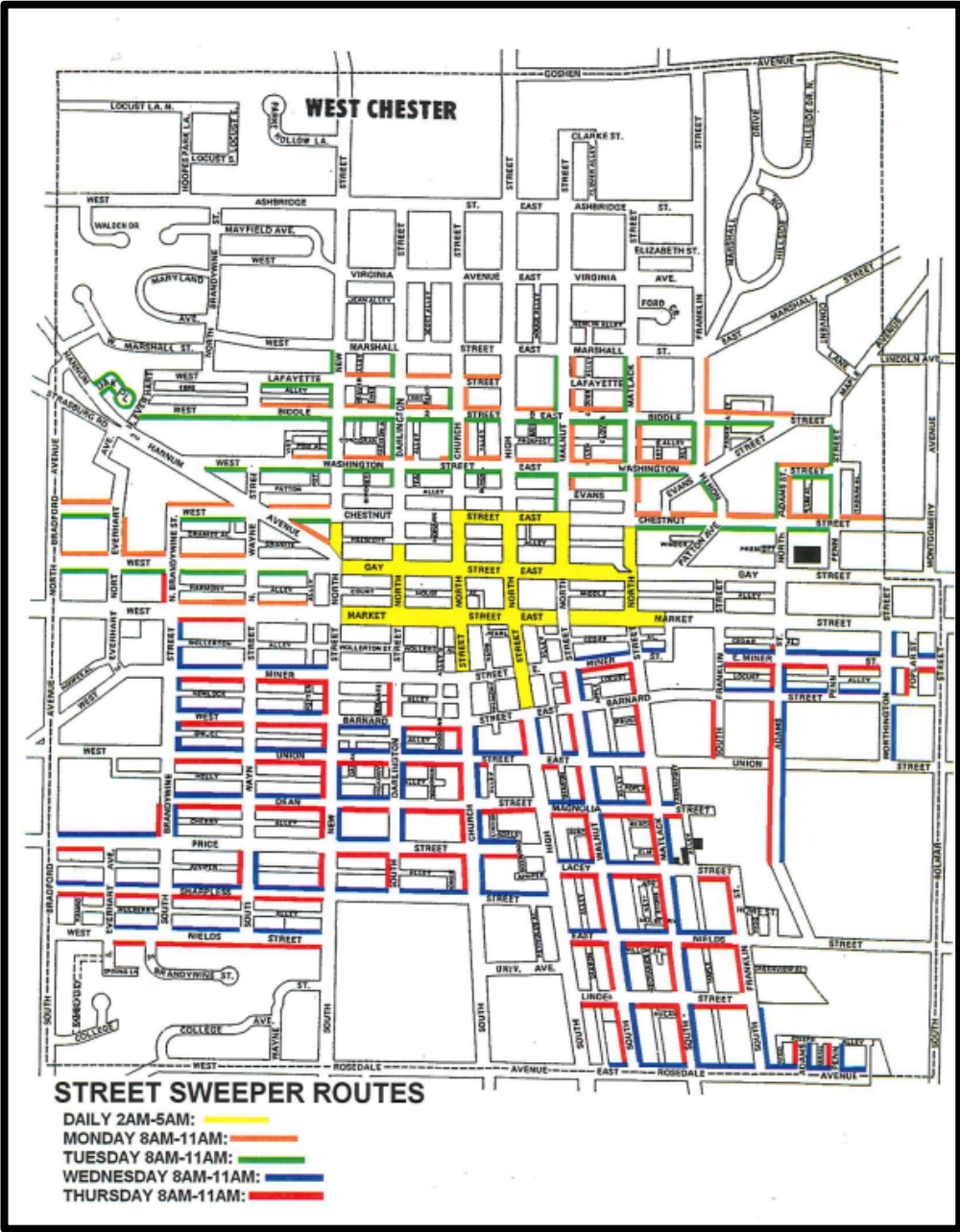
Borough Hall - Chestnut/Penn



Borough Hall - Chestnut/Penn



Greenview Alley



Street Sweeping Schedule



Street Sweeping



Tree Plantings

PRP & TMDL Addenda Revisions - BMPS Added

Location	BMP Type
Public Works Building*	Rain Garden/Bioswale
Magnolia Street & Maple Alley Intersection, Union Street & Worthington Street Intersection	Rain Garden
Good Will Fire Company, Bolmar Street & Miner Street Intersection	Bioswale
Matlack Street Intersections: Magnolia, Union, Linden, Lacey*, E. Nields, E. Miner Street	Rain Garden Curb Curb Bump-outs
Miner Street Intersections: Poplar, S. Adams Street, S. Franklin Street	
Market Street Midblock between Franklin Avenue & S Adams Street	
Linden Street & Maple Alley Intersection	
S. Walnut Street & E. Barnard Street Intersection	

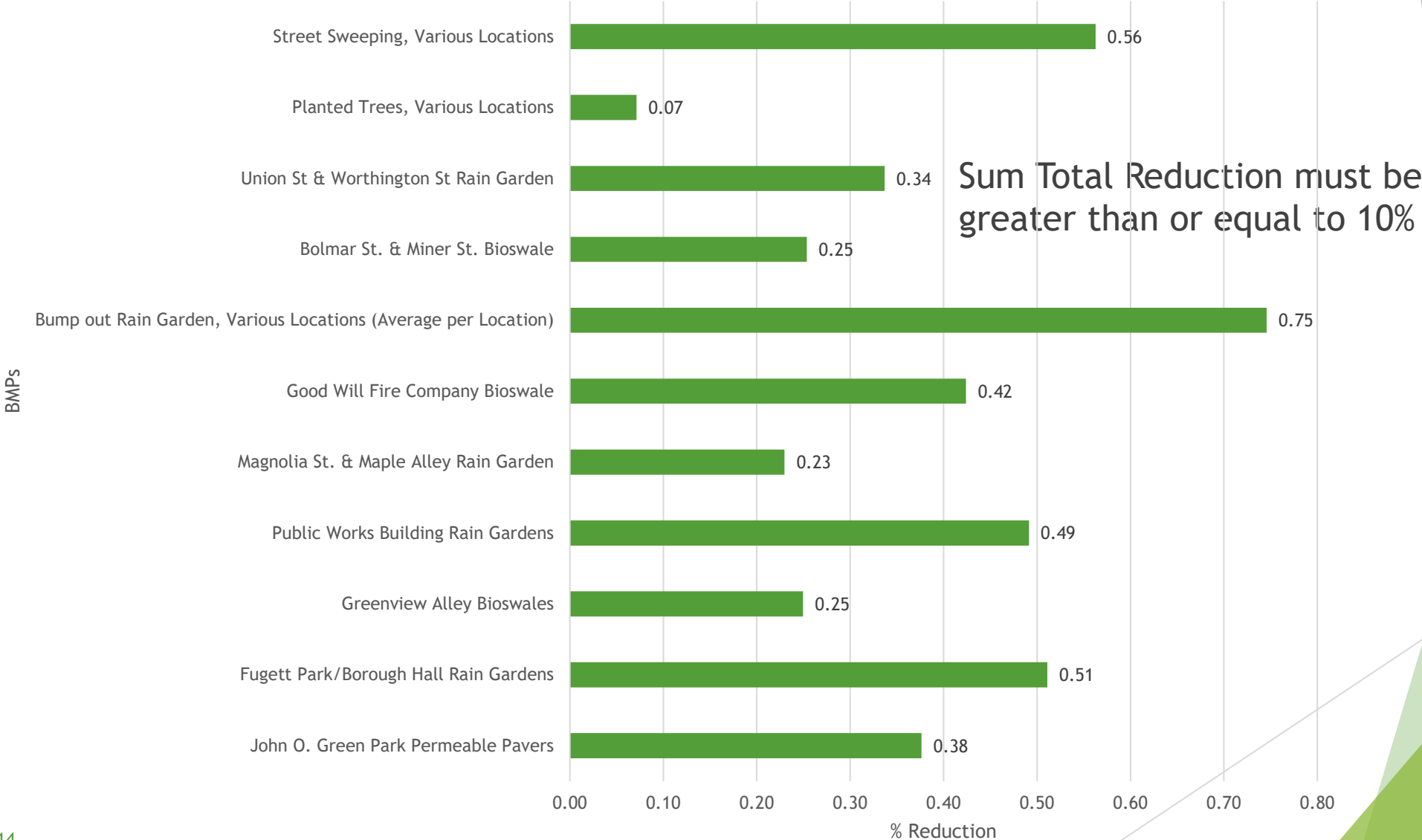




Public Works Building

Sediment Reduction by BMP

West Chester Borough PRP/TMDL BMPs





Survey Link Above

Questions?