

TCRPC

Planning Toolkit Fact Sheet

Stormwater Management



INTRODUCTION

Stormwater management has long been a topic of concern in Pennsylvania. Stormwater runoff—the runoff from rain, snowmelt or another source—has typically been handled in two ways: by a separate sewer or by a combined sewer. Combined sewers transport both stormwater runoff and sewer waste to a wastewater treatment facility. Separate sewers funnel the stormwater runoff and the sewer waste in to two separate pipes; sewer waste is taken to the treatment facility, while stormwater runoff is released untreated into the waterways. Combined systems used to be the more popular option, but issues with capacity, overflows and new development have led to the separation of these systems.

The popularity of separate sewers as a solution to capacity issues has had unforeseen consequences. The stormwater released by the separate sewer is often so polluted that it has begun to effect the water quality and function of the receiving stream. The national Municipal Separate Storm System (MS4) program was established with the goal of protecting and improving water quality of receiving waters through the use of best management practices (BMPs).

BENEFITS

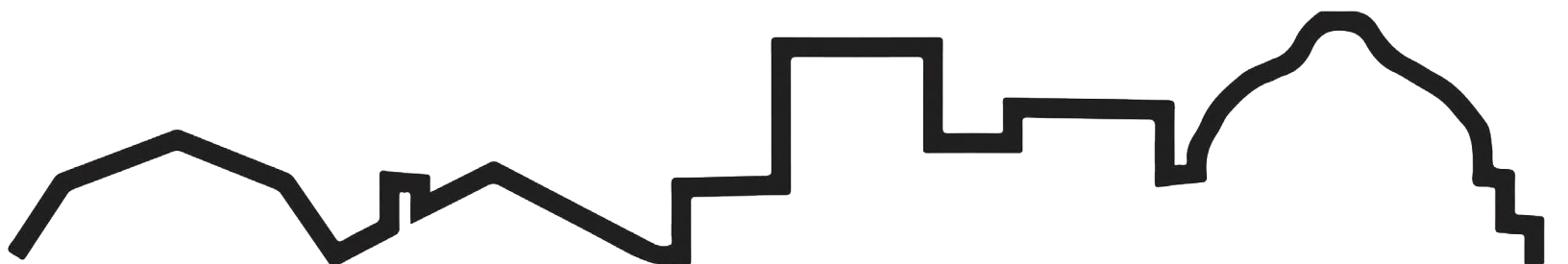
- Effective stormwater management practices result in improved surface and drinking water quality
- Benefits and/or cost reductions to existing MS4 programs
- Options for low impact BMPs may prevent the need for more expensive infrastructure
- Environmental/habitat co-benefits
- Opportunities for multi-municipal or regional cooperation

In Pennsylvania, PA DEP is the authoritative body behind the MS4 program. Since its inception in the 1990s, many municipalities have struggled with the costs involved with implementing the program, as well as the intricacies of properly planning for water quality within the confines of a single local government. The value of watershed and county-level planning is starting to gain traction in the stormwater world, with PA DEP actively encouraging big picture collaboration through their Countywide Action Plan (CAP) toolkits.

Whether regulated by the MS4 program are not, Pennsylvania municipalities should be forward thinking when it comes to managing stormwater and protecting the quality of their surface and drinking water sources. Communities are constantly looking for green infrastructure techniques, practices and funding mechanisms to help solve their communities' stormwater issues—but also issues related to flooding, water quality/pollution, recreation opportunities, etc. As water systems traverse municipal boundaries, a cooperative and inclusive approach is necessary. Looking ahead, multi-municipal cooperation and collaboration might be one of the most important tools to utilize.

DRAWBACKS

- Implementing programs and BMPs can be expensive and require space
- Developers and citizens may push back on more popular management options that require expense, like stormwater fees
- Municipalities not currently falling within MS4 regulations may not feel the need to stormwater planning efforts
- Lack of cooperation among municipalities may make effective stormwater management difficult



PRACTICAL TIPS

- Consider big picture MS4 concerns when reviewing subdivision and land development plans or rezoning requests
- Keep an inventory of streams designated “impaired”, their impairment sources, and any active total maximum daily load (TMDL) plans
- Use municipal/county owned land as pilot projects for the implementation of BMPs
- Take advantage of existing strategy plans and tools provided by DEP, including the County toolboxes

RESOURCES

Best Practices and Guides

- **Pennsylvania Stormwater BMP Manual**
- **Homeowners Guide to Stormwater BMP Maintenance**
- **Stormwater Management Practices at EPA Facilities**
- **Stormwater Management Model**
- **PA DEP – Stormwater Management Page**
- **StormwaterPA**
- **PennState Extension: Why Should I Care About Stormwater?**

Examples

- **Lancaster County “Blueprints” – Integrated Water Resource Planning**
- **York County Stormwater Program**
- **Clean Water Cumberland**
- **Greening Philly**
- **Technical Resources**
- **Model My Watershed**
- **Chesapeake Assessment Scenario Tool (CAST)**
- **PA DEP – List of Watershed Implementation Plans (WIPs)**
- **Pennsylvania Countywide Actions Plans (CAPs)**
- **StormwaterOne Training**

RELATED TOOL KIT FACT SHEETS

- **Agricultural and Natural Resource Protection**
- **Wellhead Protection**
- **Brownfield Redevelopment**

Figure 3.1. CAP Development Staged Approach

