






# Pennsylvania's MS4 Program and its Impact on Development

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## Description

Stormwater flowing through separate storm sewer systems is untreated prior to being discharged to surface waters, which means that pollutants like sediment, chemicals, oils, and pet waste that interact with stormwater are carried right to our waterways. Consequently, Pennsylvania's Municipal Separate Storm Sewer (MS4) program requires municipalities within urbanized areas having separate storm sewer systems to obtain a permit to discharge stormwater into local streams and rivers with the goal of improving water quality. This webinar will discuss stormwater issues in Pennsylvania and MS4 permit requirements with a focus on portions of the Stormwater Management Programs that are likely to affect development.



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## Learning Objectives

1. Define stormwater and understand how stormwater impacts water quality.
2. Define MS4 and understand what causes an entity to be regulated under Pennsylvania's MS4 program.
3. Understand permit requirements for municipalities under the MS4 program, particularly the components of the Stormwater Management Program.
4. Understand the importance of construction site erosion control and post construction stormwater management for reducing both short and long term impacts of development on water quality.



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### Pennsylvania's MS4 Program and its Impact on Development



**PennState Extension**

Danielle Rhea, Water Resources Educator

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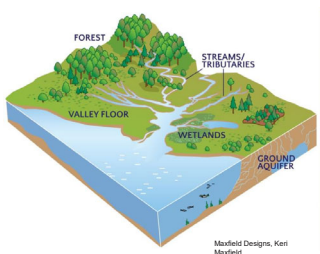
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### What is a Watershed?

The land area that contributes runoff to a particular point along a waterway.



Mapfield Designs, Keri Mapfield

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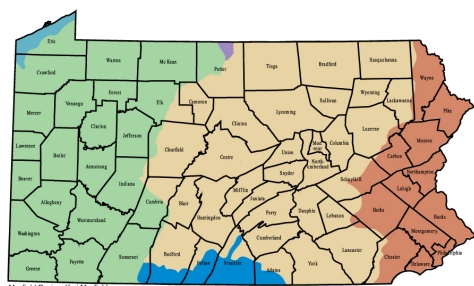
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### We all live in a watershed



Mapfield Designs, Keri Mapfield

**ERIE OHIO GENESEE POTOMAC SUSQUEHANNA DELAWARE**

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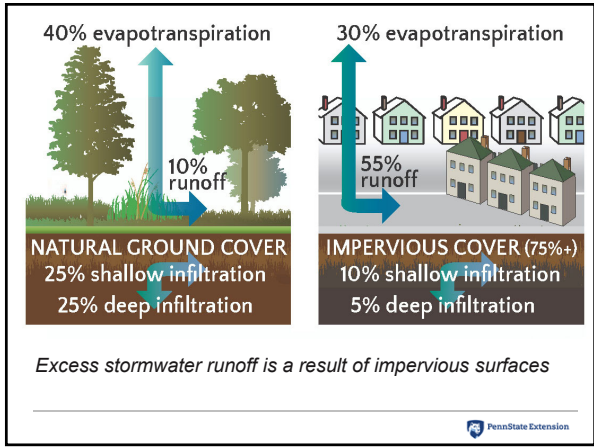
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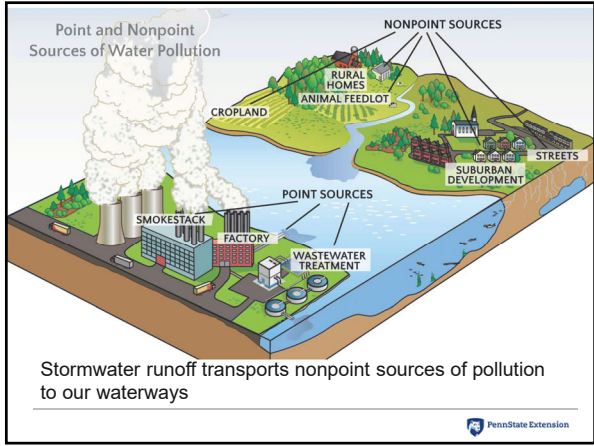
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*Stormwater is the primary pathway of pollutants entering our local waterways.*



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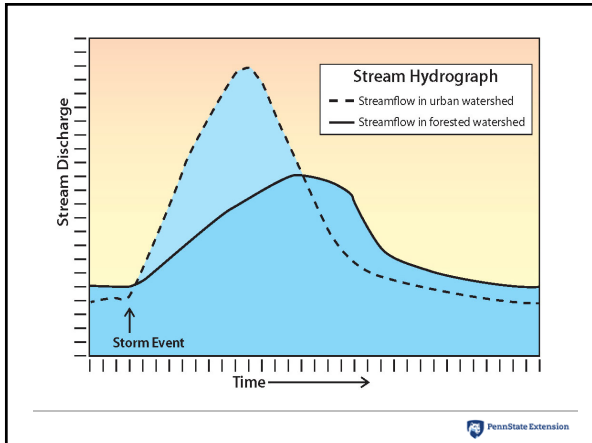
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**Stormwater Impacts**

- Flash Flooding
- Pollution
- Threats to Human Health
- Stream Bank Erosion
- Sedimentation in Stream Beds
- Loss of Groundwater Recharge
- Costly water treatment



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*The Clean Water Act prohibits the discharge of pollutants into waterways without the appropriate permit*



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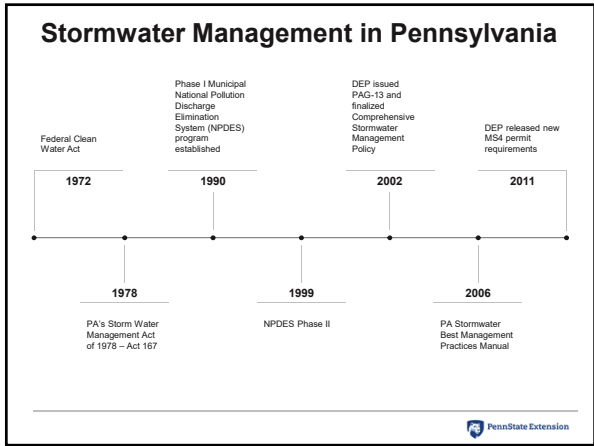
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MS4


Municipal

Separate

Storm

Sewer

System





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COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF CLEAN WATERS

PAG-13  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)  
GENERAL PERMIT FOR STORMWATER DISCHARGES FROM  
SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEMS  
NOTICE OF INTENT (NOI)

Before completing this form, read the step-by-step instructions provided in this NOI package.


Related IDs (if known)		DEP USE ONLY	
Client ID#	APR ID#	Date Received	
Site ID#	Auth ID#		
Facility ID#		PAG#	PDO#

GENERAL INFORMATION

Type of Permit: ☐ New Coverage ☐ Renewal of Coverage Permit No. PA-  
Is a waiver of coverage being requested and is a waiver application attached to this NOI? ☐ Yes ☐ No  
Is PAG-13 General Permit coverage requested for more than one MS4 applicant? ☐ Yes ☐ No  
If Yes, submit this NOI for each co-applicant and complete the information below (see instructions):  
Joint Client Name: Joint Client Phone:  
Joint Client Address: Joint Client Contact:  
Joint Client City, State, Zip:

MS4 CLIENT/OPERATOR INFORMATION

DEP Client ID# Client Type/Code  
Organization Name or Registered Fictitious Name Employer ID# (EIN) Dun & Bradstreet ID#  
Mailing Address Line 1 Mailing Address Line 2  
Address Last Line - City State ZIP+4 Country  
Client Contact Last Name First Name MI Suffix  
Client Contact Title Phone Ext.  
Email Address FAX



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Who must obtain MS4 permit coverage?


Entities in Urban Areas

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Separate Storm Sewer System

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Must apply for PAG-13 or individual NPDES permit coverage



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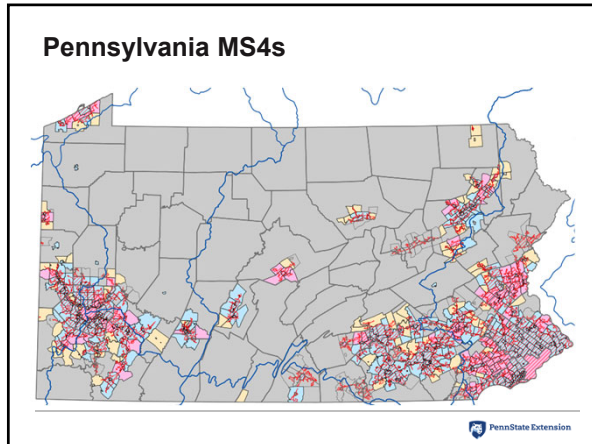
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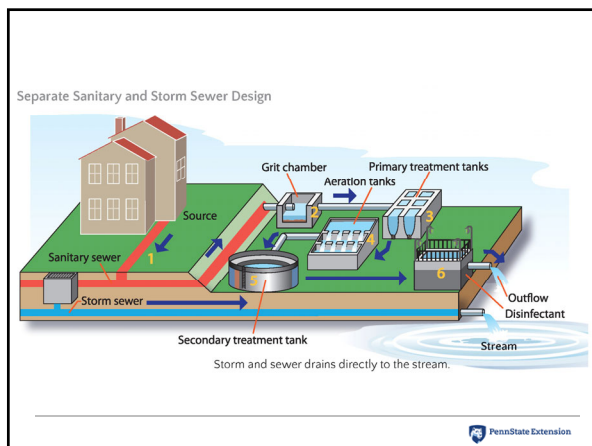
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**Minimum Control Measures**

- MCM #1: Public Education and Outreach on Stormwater Impacts
- MCM #2: Public Involvement / Participation
- MCM #3: Illicit Discharge Detection and Elimination
- MCM #4: Construction Site Stormwater Runoff Control
- MCM #5: Post-Construction Stormwater Management (PCSM) in New Development and Redevelopment
- MCM #6: Pollution Prevention / Good Housekeeping



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**MCM #1: Public Education and Outreach on Stormwater Impacts**



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**MCM #2: Public Involvement / Participation**



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**MCM #3: Illicit Discharge Detection and Elimination**  
  
*"...any discharge to an MS4 that is not composed entirely of stormwater..."*



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**MCM #4: Construction Site Stormwater Runoff Control**



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TMDL

Total

Maximum

Daily

Load



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Pollution Reduction Plan



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Implications of PRP

- Reduce stormwater flows and pollutant loading
  - Stream/floodplain restoration projects
  - Stormwater retrofits
  - Green infrastructure
  - Post construction stormwater management
  - Focus on new development

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### Potential Impact of PRP on New Development

- Require additional BMPs to assist with meeting PRP goals?
- Promote creative approaches to stormwater management?



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### Stormwater Basics

Find answers to more of your questions about stormwater at [extension.psu.edu](http://extension.psu.edu)

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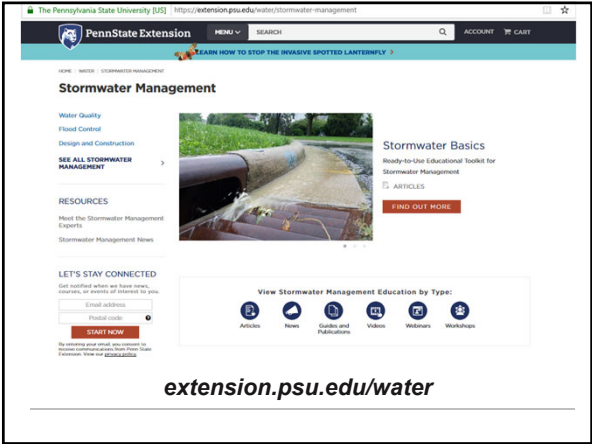
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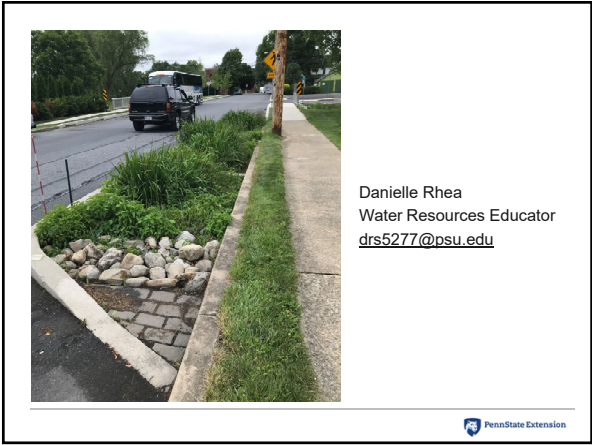
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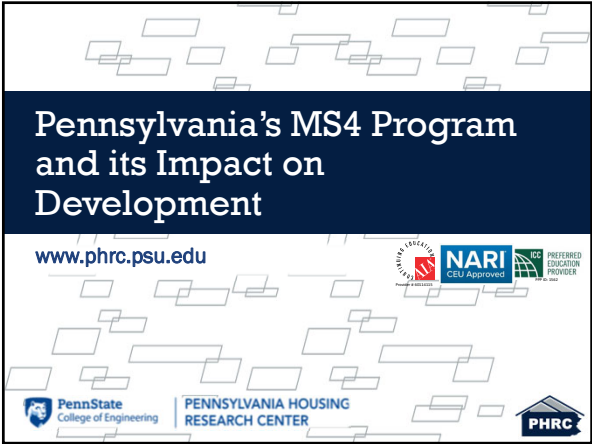
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