

# MS4 and Municipal Emergency Management



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WHY YOU NEED TO THINK ABOUT MS4

MAY 31, 2017

# Objectives

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- **BRIEF** overview of Stormwater & the MS4 Program
- Understand what municipalities are required to do for their Stormwater Management Program
- Your responsibility in helping the municipalities fulfill their stormwater permit requirements

# What is Stormwater?



Stormwater occurs when precipitation from rain or snowmelt flows over the ground

# Why is stormwater a problem?

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○ Erosion and Sedimentation

○ Flooding

○ Pollution carried to all waterways

○ Inhibits habitats of aquatic wildlife

○ Make water resources unsafe for recreation and drinking



# MS4 is a type of Permit

Municipal Separate Storm Sewer System.

“A state, city, town, borough, county, parish, district, association, or other public body”

Any drainage system which conveys **only** storm water. (curbs, gutters, basins, storm pipes, ditches, swales, municipal streets etc..)

**Note: what washes down the stormwater system is not treated or cleaned before it reaches the creek, river.**



# Goals of MS4

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**QUALITY**

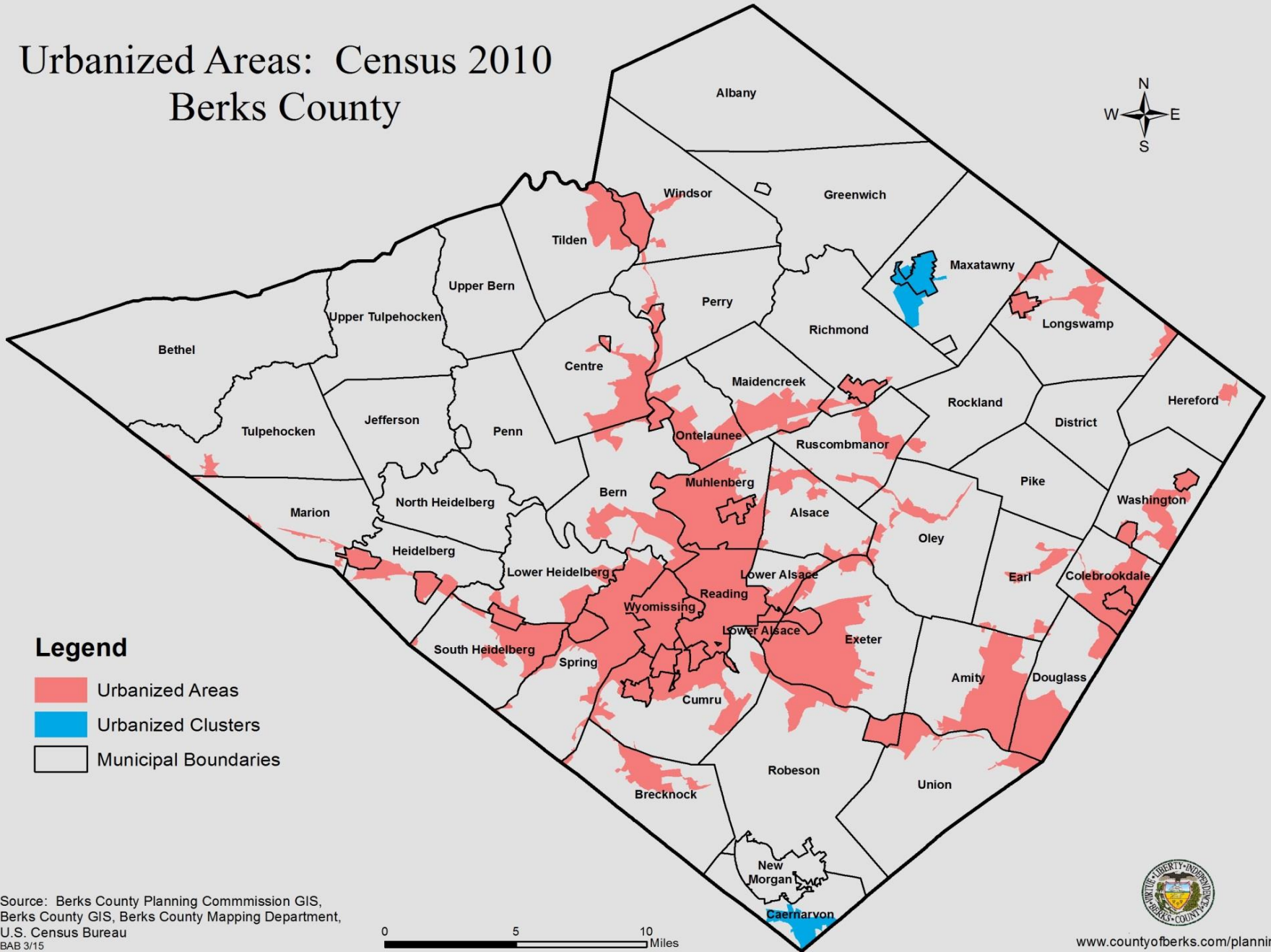
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**QUANTITY**

# Urbanized Areas: Census 2010

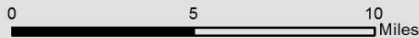
## Berks County



### Legend

- Urbanized Areas
- Urbanized Clusters
- Municipal Boundaries

Source: Berks County Planning Commission GIS,  
 Berks County GIS, Berks County Mapping Department,  
 U.S. Census Bureau  
 BAB 3/15



[www.countyofberks.com/planning](http://www.countyofberks.com/planning)

# Municipal MS4 Permit Requirements

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Municipalities must have a stormwater management program which includes:

- Stormwater Management Ordinance (Act 167 or other)
- Implementation of 6 minimum control measures
- Pollution Reduction Plan (PRP) or Total Daily Maximum Load Plan (TMDL) for impaired streams



# Six Minimum Control Measures

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1. Public Education and Outreach
2. Public Participation and Involvement
3. Illicit Discharge Detection and Elimination (IDD&E)
4. Construction Site Runoff Control
5. Post-Construction Stormwater Management (New and Redevelopment)
6. Pollution Prevention and Good Housekeeping for Municipal Operations and Maintenance



# How your operations impact MS4 requirements

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- Fire stations, Police stations, Ambulance buildings may be included in the municipal operations and management plan
- Police may issue violations
- Hydrant flushing
- Chemicals stored at your facility and how they are used in your individual response
- Training of your employees
- Recordkeeping and Reports

# Items to consider which apply to MS4 requirements

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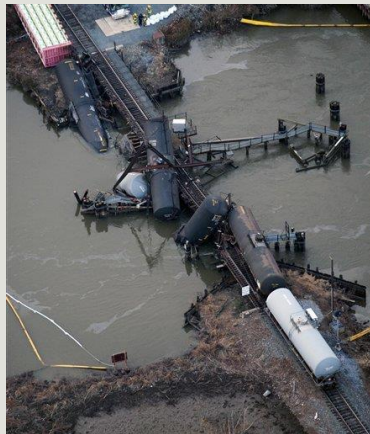
How do you do the things below:

- Spill Response/Spill Prevention (both at your facility and emergency events)
- Proper disposal of spill materials at your facility/after event
- Washing areas (commercial car wash, grass/gravel area, or drained area)
- Employee Protocol/Training
- Vehicle Maintenance

# Emergency Events that Impact MS4

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- Fire Hydrant flushing
- Transportation Accidents (Vehicle, Train)
- Pipeline releases



# Items to include on accident report for MS4 purposes

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Specific location of event (description of area including is there a creek nearby)

Date, time and weather conditions

Description of the pollution (what is it and how much)

Whose at risk (people, property or the environment)

What watershed are you in

Is it a source for drinking water (whose source is it)

What are you using to clean up the spill, leak, accident debris

Description of violator (license plate number, company name)

Pictures

Use PA WARN



**\* Notify DEP no later than 4 hours after event if potential for down stream contamination**

**\* New DEP Emergency Phone Number: 866-825-0208**

# Recordkeeping and Information Sharing

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- If it's not in writing, it didn't happen!
- Provides accounting of activities as they occur
- Proof of compliance with permit
- Sharing of information provides consistency for municipal program



# Antietam Lake Case Study Spill Response



Motor vehicle  
accident with  
spillage of motor  
vehicle fuel and  
liquids

# WHO

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## The Stakeholders:

- Berks County Parks Department
- Lower Alsace Township
- PennDOT

## Response Teams:

- Lower Alsace Fire Company
- Mt. Penn Fire Company
- Elk Environmental



# Actions/Response Taken

- Vehicle removed from site
- Booms placed into lake to contain gasoline spill from vehicle
- Absorbent pad material placed along bank
- Absorbent material applied to roadway to soak up liquids
- Used materials picked up and hauled away by designated environmental hauler



# Thank You! Questions?

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