

Stormwater Training

Town of Yorktown
February 24, 2011



Cornerstone
ASSOCIATES

Summary of Today's Training

- Stormwater review
- Turf Management & Fertilizer Use
- Erosion & Sediment Control for Construction Sites
- Video “Stormwater Pollution Prevention for Construction Sites”
- Questions

STORMWATER REVIEW

What is a Municipal Separate Storm Sewer System (MS4)?



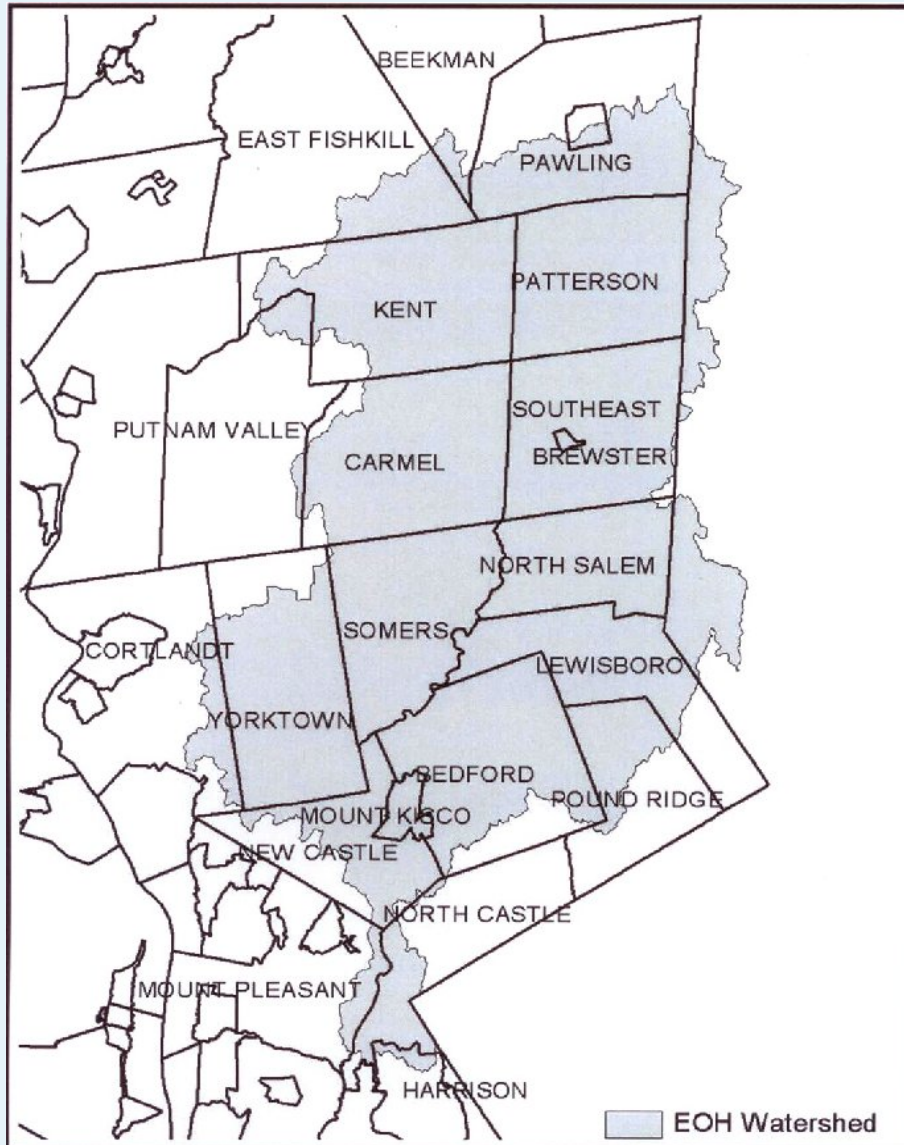
- A conveyance or system of conveyances owned by a state, city, town or other public entity that discharges to waters of the U.S. and is:
 - Designed and used for collecting or conveying stormwater
 - Not a combined sewer
 - Not part of a Publicly Owned Treatment Works (POTW)

Who Regulates Stormwater?

NYSDEC Stormwater Permit Requirements: 6 Minimum Measures

1. Public Education and Outreach
 2. Public Involvement/Participation
 3. Illicit Discharge Detection and Elimination (IDDE)
 4. Construction Site Runoff Control
 5. Post Construction Stormwater Management
 6. Pollution Prevention and Good Housekeeping for Municipal Operations
- *Town of Yorktown also regulates stormwater (chapter 248) and illicit discharges (chapter 247)***

NYC Enhanced Requirements



Pollutant of Concern
– Phosphorus

Phosphorus Impacts

- **Excess Phosphorus causes:**

- algae blooms,
- excessive weed growth,
- decreased water quality,
- Decreased water recreation,
- negative impacts on fish, plant, animal life.



TURF MANAGEMENT

TURF MANAGEMENT PRACTICES

- Procedures for proper fertilizer application on municipally-owned lands.
- Procedures for the proper disposal of grass clippings from municipally-owned lawns where grass clipping collection equipment is used.
- Procedures for proper disposal of leaves from municipally-owned lands where leaves are collected.
- For municipalities with lawn waste collection programs, the development of a curbside lawn waste management policy which ensures that lawn waste does not decay and release phosphorus to the storm sewer system; and
- The planting of wildflowers and other native plant material to lessen the frequency of mowing and the use of chemicals to control vegetation.

FERTILIZER

Which number tells you how much phosphorus is in this bag?



Westchester County Fertilizer Law

- Effective July 3, 2009
 - Fertilizer cannot be applied between December 1 and April 1, when the ground is frozen and more likely to produce runoff.
 - Fertilizer cannot be applied on impervious surfaces such as driveways, parking lots, roadways or sidewalks.
 - Fertilizer cannot be applied to lawn areas that are within 20 feet of any surface water, unless a natural vegetative buffer at least 10 feet wide separates the lawn area and the surface water.

Westchester County Fertilizer Law Continued

- Effective Nov. 1, 2009
 - Must complete approved turf management course and submit proof of completion when applying for or renewing home improvement license. This course is held at the Westchester County Department of Consumer Protection on an ongoing basis. More information is available by calling (914) 995-2211.

Westchester County Fertilizer Law Continued

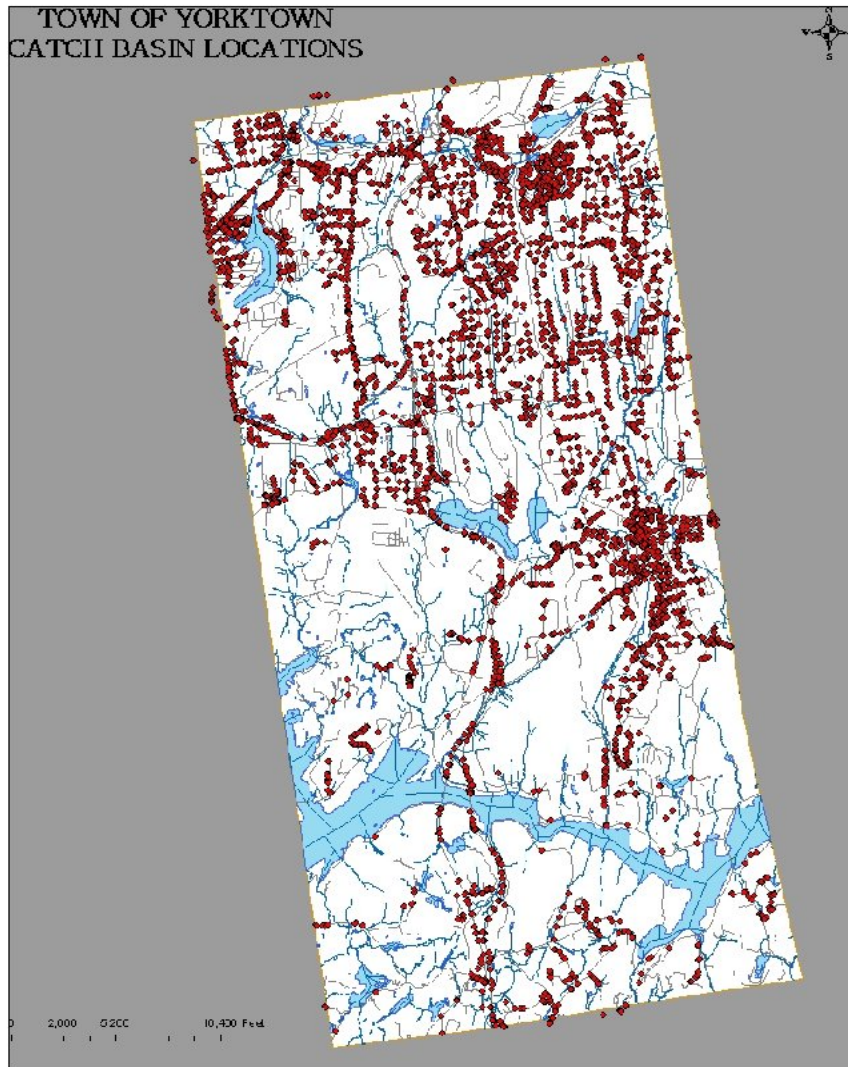
- Effective Jan. 1, 2011
 - Fertilizer containing phosphorous cannot be applied to lawn areas unless soil tests confirm the need for additional phosphorous application.
 - Fertilizer containing phosphorous can be applied to newly established turf or lawn areas during their first growing season, when more nutrients are needed for the grass to take root.
 - Fertilizer can be applied to vegetable and flower gardens, trees and shrubs.

EROSION AND SEDIMENT CONTROL

What is erosion? Why is it important

- The number **one** cause of pollutants entering the stormwater conveyance system
- Sediment transports pollutants including **phosphorus**, other nutrients, pesticides, bacteria, organic matter, and toxic substances
- Clogs streams and storm drains
- Creates nuisance problems on adjacent streets
- Turbidity plumes in downstream water bodies
- Can cover sensitive habitat with sediment

Where does it go?



Lakes



Rivers

Storm Drains



Construction Site Runoff Control

- Any construction project disturbing 5,000 sq ft or more requires an erosion and sediment control plan:
 - Runoff Controls (diversions, Pipe Slope Drain, Check Dams, Lined Channels, Outlet Protection)
 - Soil Stabilization (clearing and Grading Limits, soils types, seed and mulch, rolled erosion control products, facines, live staking, mattresses)
 - Sediment Control (stabilized construction entrance, silt fence, sediment traps and basins, inlet protection)

COMMON EROSION AND SEDIMENT CONTROL PRACTICES

Inlet Protection



Silt Fence

Which *one* of these is properly installed?



Construction Site Entrance/ Anti-Tracking Pad



Sediment Traps



Check Dams



Seed and Mulch



Steep Slope Protection



Video

Town of Yorktown Stormwater Program

- Stormwater Contacts:
 - Susan Siegel – Stormwater Management Officer: 962-5722 x200
 - Joe Hughes – Code Enforcement 962-5722 x233
 - Bruce Barber (Stormwater Consultant): 914-962-7733

Summary

- Stormwater permit requirements
- NYC Watershed enhanced requirements
 - Turf Management
 - Fertilizer Use
- Construction Site Erosion and Sediment Control

Questions

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