

Stormwater Training

Town of Kent
February 23, 2011



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 REVEIW

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?

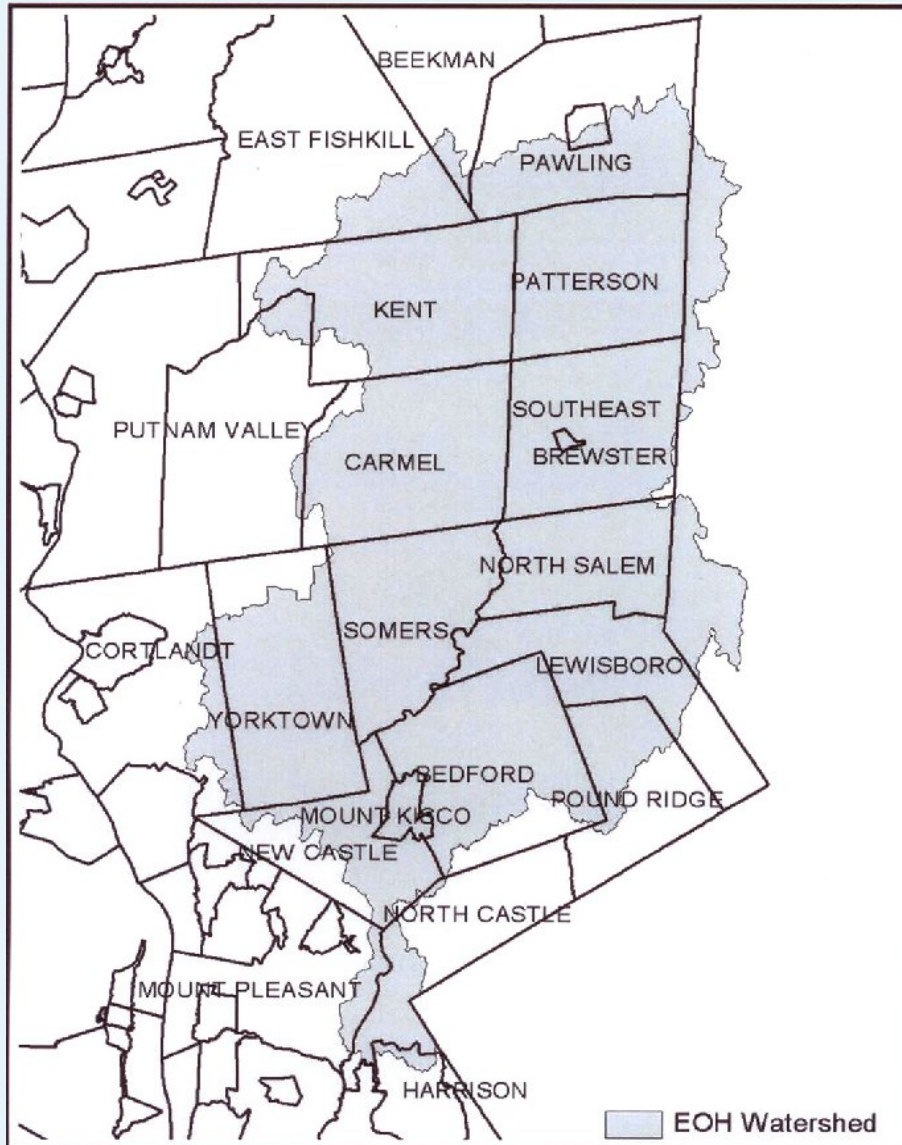
NYSDEC Stormwater Permit Requirements:

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 Kent regulates Stormwater: Steep Slope Protection and Stormwater Management (Chapter 66) and Illicit Discharge to Storm Sewers (Chapter 43)***

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?



Bill Volk

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

Requiring erosion and Sediment control Plan

- Any disturbance involving one or more acres of land
- Any project in NYC watershed disturbing 5,000 sq ft
- Disturbance within 100 feet of a wetland or watercourse
- Excavating or filling which exceeds a total of 100 cubic yards of material
- Disturbance on steep slopes (as defined)

Erosion and Sediment Control Components

- 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 Kent Stormwater Program

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Summary

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

Questions

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