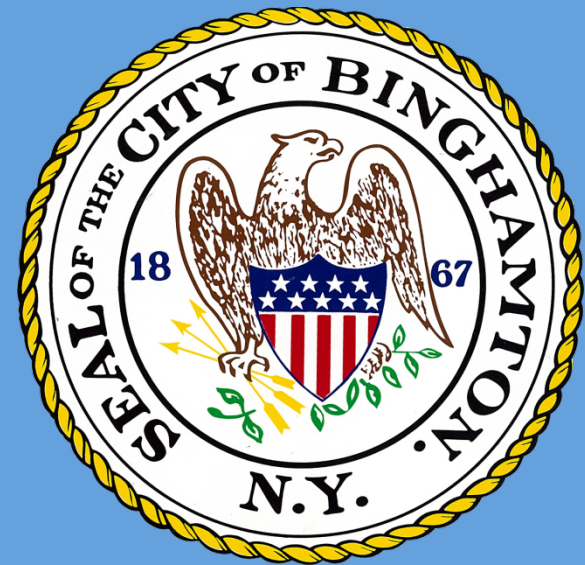


City of Binghamton



Stormwater Ordinances and SWPPPs



John Furlong
Engineering Technician
6/10/14



Overview

- Why is Stormwater Important
- Binghamton's Storm Sewer System
- Where our Stormwater goes
- What is MS4
- City Ordinances
 - SWPPPS
 - URRPs
 - Illicit Discharge
- Green Infrastructure and Stormwater
- Questions

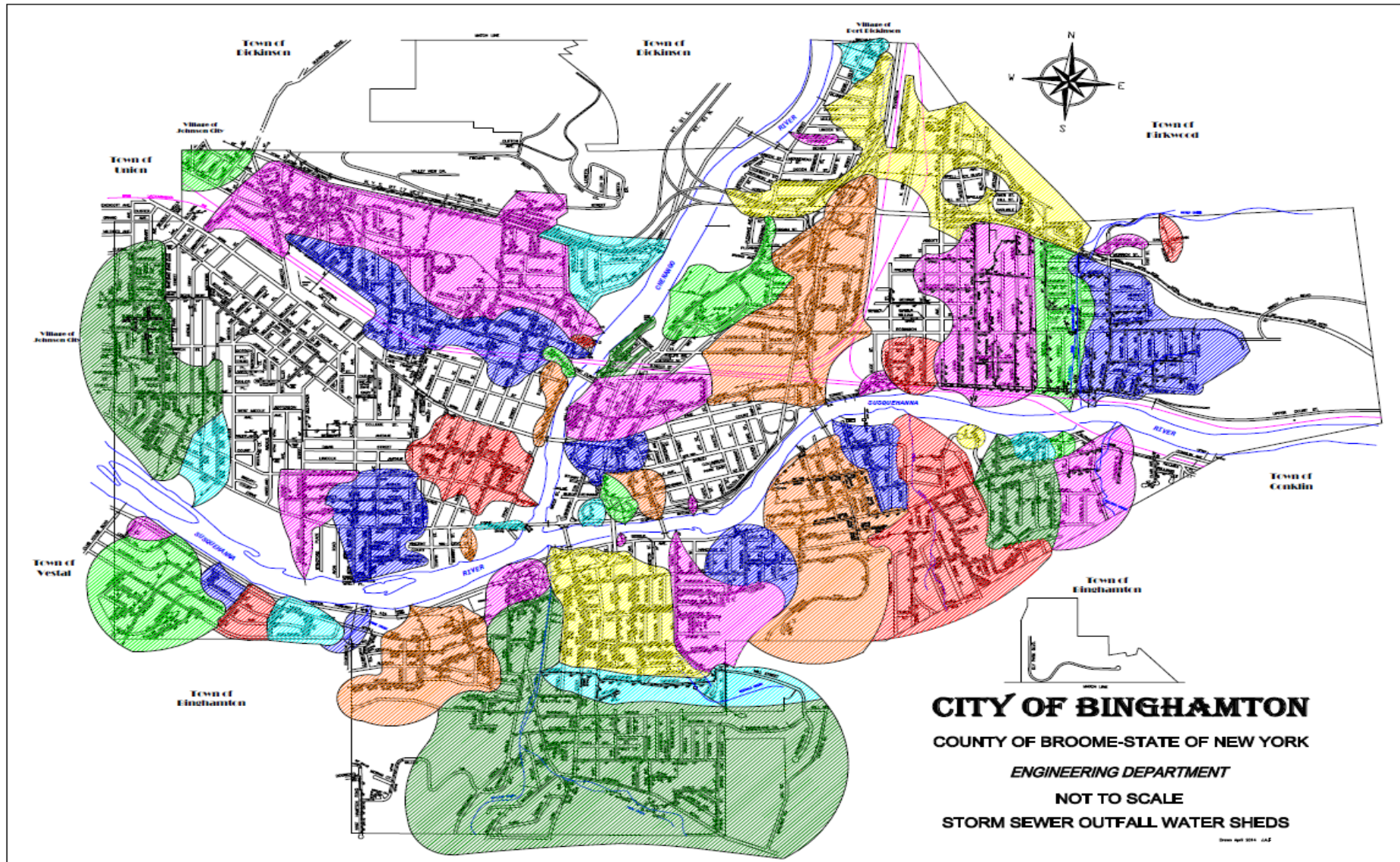
Why is Stormwater Important

- The Cities Storm Sewers discharge directly into the rivers.
- Pollutants that enter the Storm Sewer are released into the Rivers Untreated.
 - Nitrogen, Phosphorus, Pathogens, and Sediments
 - Drinking Water Supplies, Wildlife, Recreation

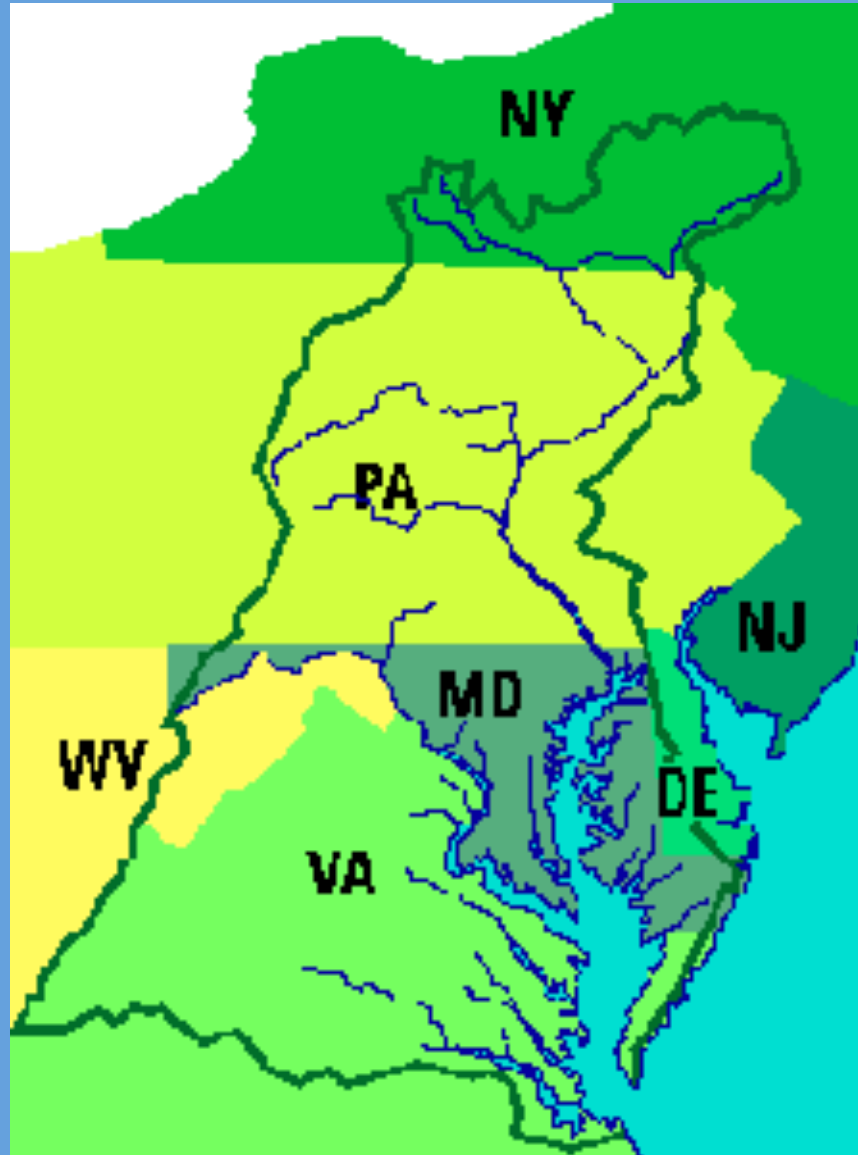


Cuyahoga River in Ohio on fire 1969

Binghamton Storm Sewer System



Where our Stormwater Goes



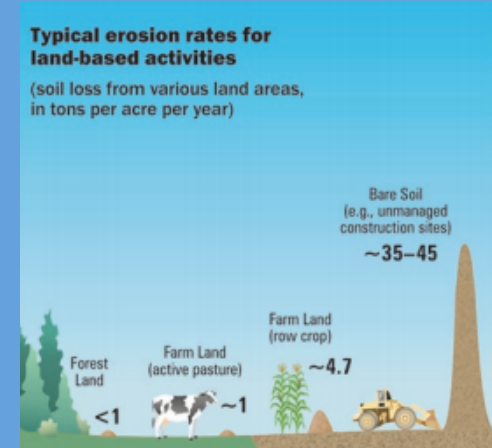
Chesapeake Bay Watershed

What is MS4

- Municipal Separate Storm Sewer System
- It is a publicly owned conveyance system that is designed to collect and discharge surface runoff.
- It is not a combined sewer.
- It prevents non-contaminated water from being treated at a waste water plant.
- Because The City is an MS4 the EPA requires that we implement construction site runoff control.

City Ordinances

- Chapter 227 – Erosion Control and Stormwater Management.
 - The purpose of this Chapter is to establish minimum erosion and stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public.



Seeding



Silt Fence



Check Dams



SWPPP

- StormWater Pollution Prevention Plan
 - Fundamental requirement of stormwater permits.
 - It identifies all potential sources of pollution which may reasonably be expected to affect the quality of storm water discharges from the construction site.
 - Disturbed area larger than 1 acre.
- Goals
 - Keep the clean water clean
 - Keep soil in place
 - Retain sediment

SWPPP Requirements

- Must be prepaid by a Qualified SWPPP Developer (PE)
- Plans and descriptions showing existing and proposed site.
- BMPs to minimize erosion and sediment
- BMPs to minimize non-stormwater discharge
- Site Inspection
- Notice of Intent
- Erosion and Sediment Control measures
- Hydrology
- Water Quality
- Water Quantity
- Runoff Reduction
- Soil Restoration

URRP

- Urban Runoff Reduction Plan
 - Projects smaller than 1 acre but larger than 5000 sf.
 - A description of each proposed post-construction stormwater management measure.
 - A preliminary comparison of post-development stormwater runoff conditions with predevelopment conditions.
 - Dimensions and material specifications for each proposed post-construction stormwater management practice, including size, species and location of all proposed landscaping,
 - Any other information that the Planning Department deems necessary to determine preliminary compliance with this Chapter.

City Ordinances

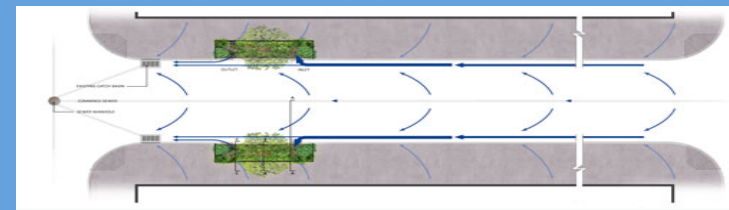
- Chapter 227A – Prohibit Illicit Discharges, Activities and Connections to Separate Storm Sewer System.
 - The purpose of this law is to provide for the health, safety, and general welfare of the citizens of the City of Binghamton through the regulation of non-stormwater discharges to the municipal separate storm sewer system.
 - An illicit discharge is defined as any discharge to the municipal separate storm sewer system that is not composed entirely of storm water



Punishment of
fines and jail time
if caught.

Green Infrastructure and Stormwater

- Stormwater from urban areas delivers many pollutants to our streams, lakes, and beaches.
- By retaining rainfall from small storms, green infrastructure reduces stormwater discharges.
- Green infrastructure can mitigate flood risk by slowing and reducing stormwater discharges.



Thank You For Your Time

- Questions?

Muck! Yuck!



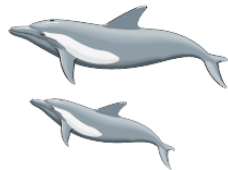
Sad Duck

Oil & Water



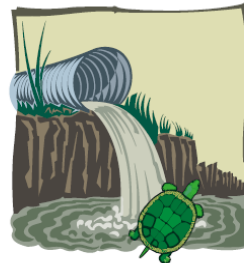
Please Don't Mix!

Please Don't Pour



**That's Our
Front Door**

DIRT IN THE DRAIN



TURTLES COMPLAIN