

Clean Water Act Basics and the Stormwater Regulations

City of Albany
December 5, 2016
Planning Board Workshop
200 Henry Johnson Boulevard, Community Room



Nancy Heinzen, Director
Albany County Health Dept Building
175 Green Street, Room B026
518-447-5645; www.stormwateralbanycounty.org

Stormwater Coalition of Albany County
Education, Participation, Compliance

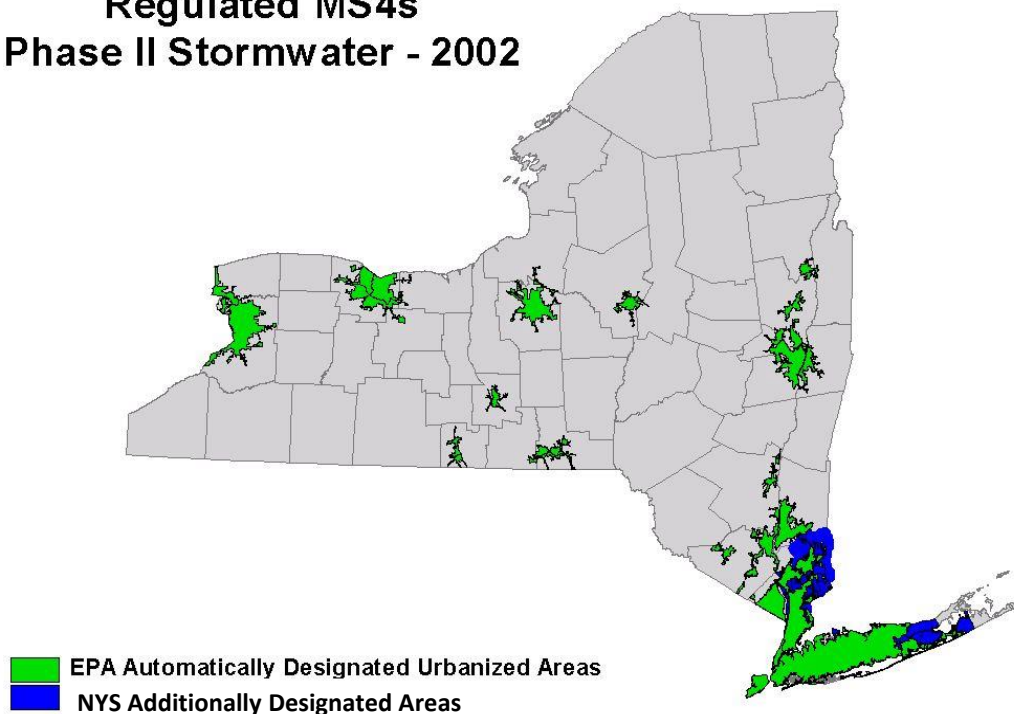
Albany County; City of Albany; Town of Bethlehem; City of Cohoes; Town of Colonie; Village of Colonie; Village of Green Island; Town of Guilderland; Village of Menands; Town of New Scotland; City of Watervliet; University at Albany -SUNY

Stormwater Coalition of Albany County

- **Formed via Intermunicipal Agreement (IMA)**—Start date: October 15, 2008. 2017 IMA renewal
- **Purpose**--same MS4 General SPDES Permit requirements→ members share services; joint reports, mapping, administration, training, apply for, implement, and manage grants
- **2016 Coalition Operating Budget**--\$179,962 (2016 Add'l \$482,720 NYSDEC Grant Map'g, Prog Mgmt)
- **Membership Fee Range** --\$4,710 to \$28,909
- **Albany County**--Host and Member of Coalition
- **Office location**--Albany County Dept of Health Building; 175 Green Street; Basement
- **Organizational structure**
 - Board of Directors:** 1 rep per municipality; appointed by municipal Governing Board; Chair appt; open meetings law; fiscal responsibilities; meets quarterly (T/Colonie)
 - Working Group:** Multiple reps per MS4; conducts "work" of the Coalition; meets monthly (location changes, mtgs in each member community, if possible)
 - Staff:** 1 FT SW Program Coordinator-Director; 1 FT SW Program Technician
- **Membership History**--Annual Decision (Fees!); 2009 SUNY Albany joins; 2012 Town of Guilderland leaves (Jan); returns (Oct); 2013 Village of Voorheesville leaves; 2014 Village of Altamont joins (newly regulated MS4); 2016 Village of Altamont leaves
- **Stormwater Coalition website:** www.stormwateralbanycounty.org

MS4 PERMIT

Regulated MS4s
Phase II Stormwater - 2002



Urbanized area = 1,000 people per square mile or more.

What is an “MS4”?

- Publicly owned entity
- In urbanized area
- Owner-operator of separated storm system infrastructure
- Storm lines NOT combined with sanitary lines

“MS4”- = **m**unicipal **S**eparated **S**tormwater **S**ewer **S**ystem.

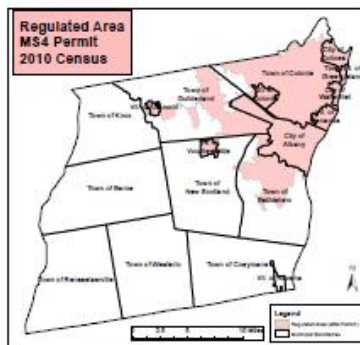
Regulated MS4 Area & "MS4" areas for County and Public University (Coalition Members)

Non-Traditional MS4 (University at Albany) and Traditional MS4-No land use control (Albany County)

*Map also used as Map 4 of the TAAW.

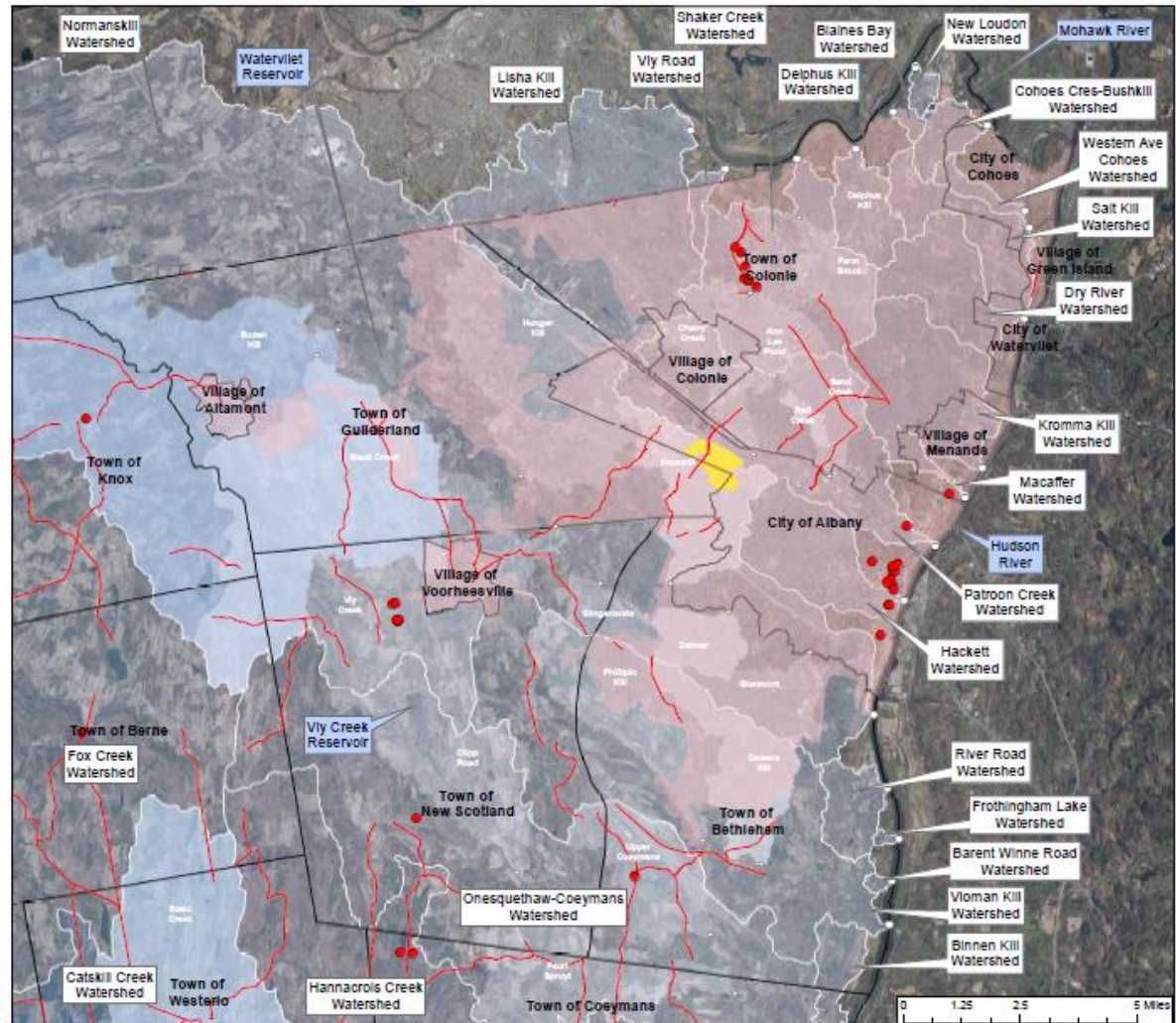
Legend

- Albany County Facilities
- Albany County Roads
- Watershed Delineation Point
- Subwatershed Delineation Point
- Regulated Area (MS4 Permit)
- Municipal Boundaries
- University at Albany Facility-Uptown Campus
- Watersheds

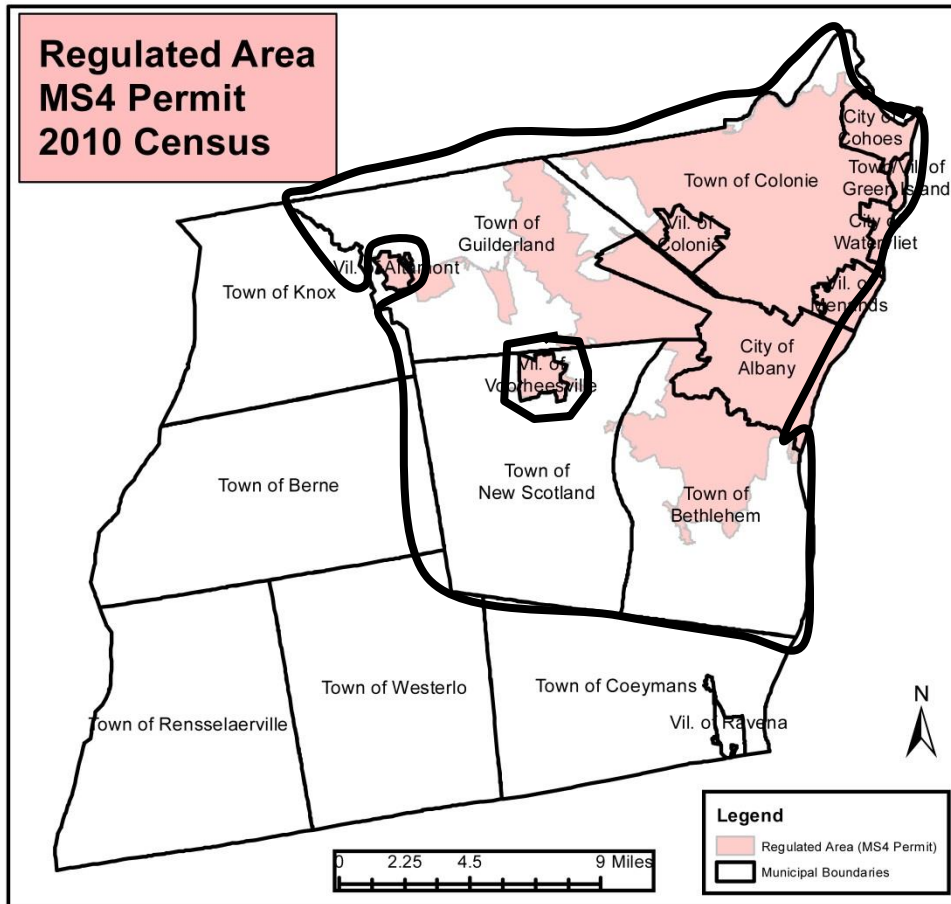


Prepared by the Stormwater Coalition of Albany County
Date: January 2016
File: County&SUNY_28Jan2016_FINAL.mxd

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Town of New Scotland, City of Watervliet, University at Albany-SUNY



Stormwater Coalition of Albany County



REGULATED MS4s

Traditional

Cities:

Cohoes (CSO)
Watervliet (CSO)
Albany (CSO)

Towns:

Colonie
Guilderland
Bethlehem
New Scotland

Villages:

Colonie
Green Island (CSO)
Menands

County:

Albany

Non-Traditional

SUNY-Albany

Public Schools
NYS DOT
Thruway Authority

**Coalition
Members (As
of 2016)**

MS4 Permit Requirement (GP-0-15-003)

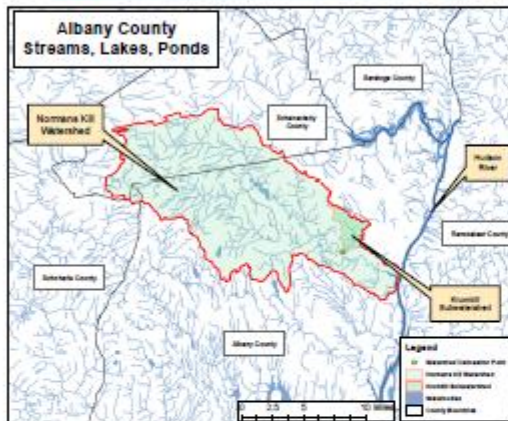
Part VII.A.5.a.v. (pg. 42)

“...utilize available training from sources such as Soil and Water Conservation Districts, Planning Councils, The New York State Department of State, USEPA, and/or the Department to **educate municipal boards and Planning and Zoning Boards** on low impact development principles, better site design approach, and **green infrastructure applications.**”

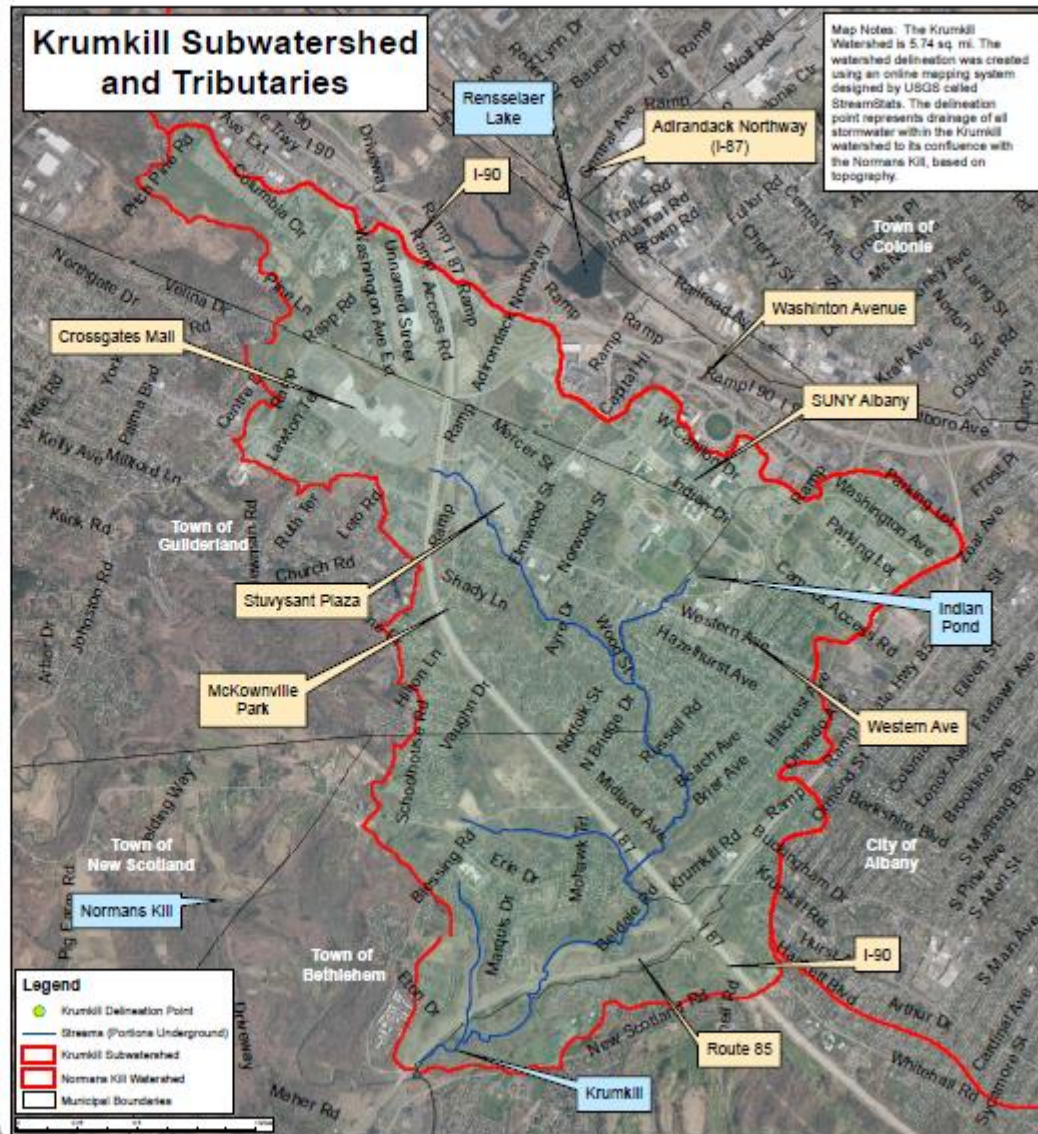
Watershed Diagram



Getting To Know The Stream Next Door



Krumkill Subwatershed and Tributaries



Map Notes: The Krumkill Watershed is 5.74 sq. mi. The watershed delineation was created using an online mapping system designed by USGS called StreamStats. The delineation point represents drainage of all stormwater within the Krumkill watershed to its confluence with the Normans Kill, based on topography.



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Prepared by the Stormwater Coalition of Albany County
Date: August 2015
File Name: GTKTSND_Krumkill_2015_11x17.mxd

How Surface Water Often Travels To Streams

**Storm
Drain/Catch
Basin**

Conveyance System

Outfall

Receiving Stream



Urbanized Watershed

Storm System Mapping

Stormwater Conveyance Diagrams



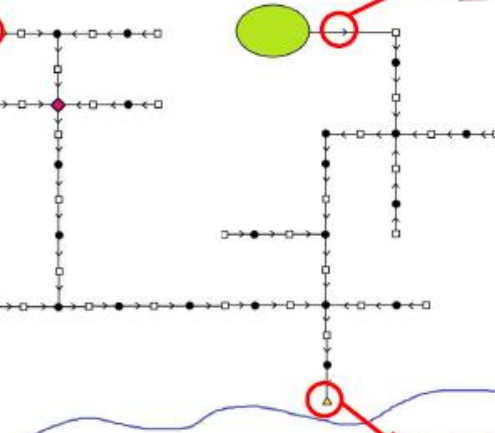
Manhole



Main Lines



Catch Basin



End Section



6/26/2012

SSM_Stormwater Conveyance Diagrams_26June2012

2

Outfall

Pollutants and land use....

...a close look at a watershed.

Where located, why?

Bacteria & viruses

Broken sanitary lines, failing septs

Gross solids

Trash, cigarette butts, grass clippings

Nutrients

Nitrogen & Phosphorus

Organics

Paint thinner, solvents, cleaners

Sediment

Small particles, suspended in water, transport pollutants

Thermal stress

Water too warm for aquatic life

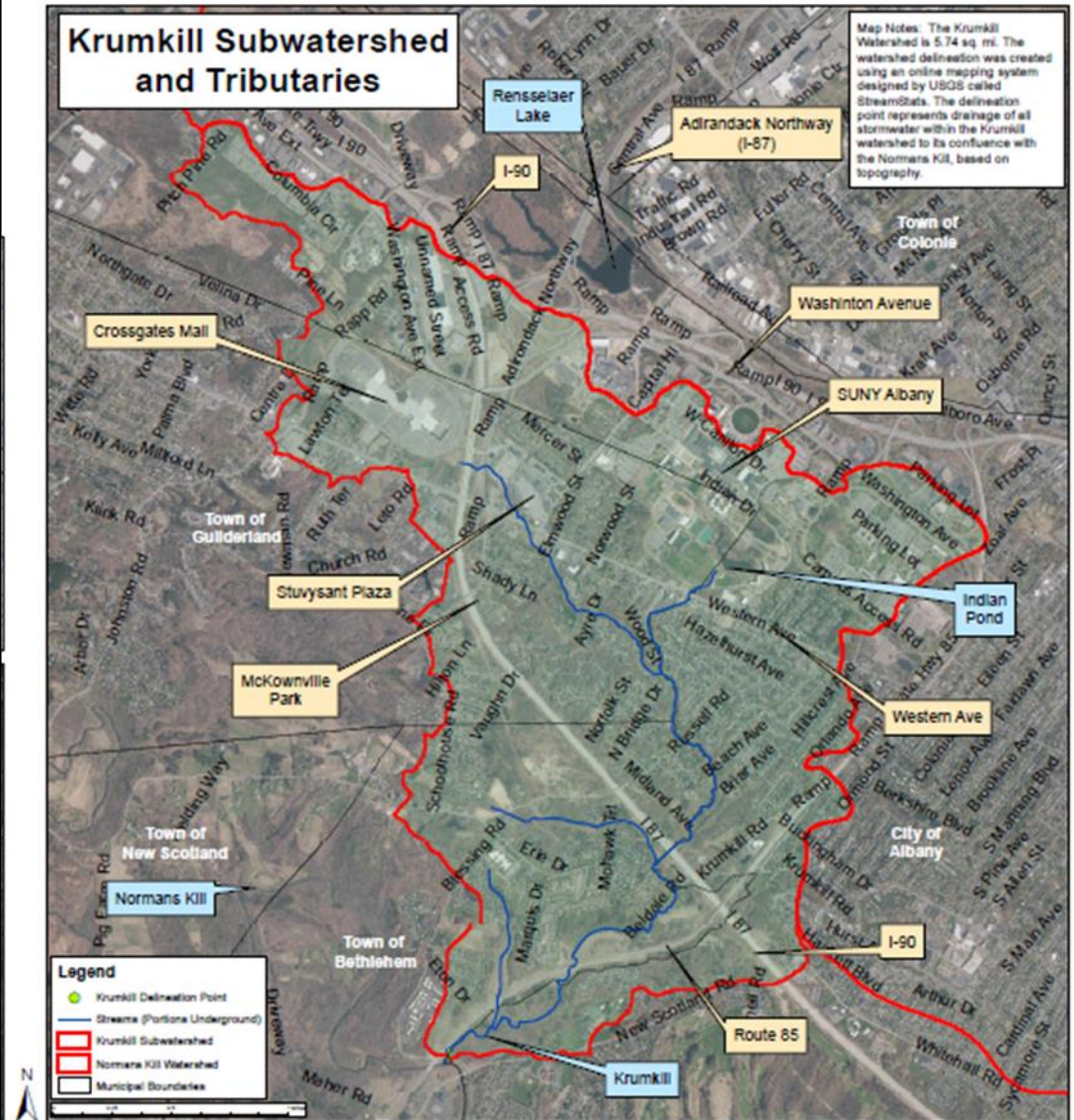
Metals

Lead, cadmium, zinc, nickel

Pesticides & herbicides

Oil and grease

Getting To Know The Stream Next Door



City of Cohoes, Town of Colonie, Village of Colonie, Village of Green Island, New Scotland, City of Watervliet, University at Albany - SUNY

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STORMWATER POLLUTION

Sediment (construction site)

**What else? (busy road/cars:
metals, oil/gas, tire material...)**

discharged here

NURPS (Nationwide Urban Runoff Program)

- EPA funded series of studies and projects
- 1978 to 1983
- What EPA learned...

“...**stormwater contained** many of the same
conventional and **toxic pollutants** regulated
from process outfalls and publicly owned treatment works,
sometimes in very **high quantities**”

CPESC training manual, 2004

Water pollution is regulated...

1972 Federal Clean Water Act

Required the regulation of Point Source discharges of pollutants to the “Waters of the U.S.”

NPDES Permits (EPA)

National Pollutant Discharge Elimination System Permits

1978 to 1983

NURPS Data

**NEED TO REGULATE
STORMWATER
POLLUTION...how?**

1987

**Amendments to the
Federal Clean Water Act**

**“STORMWATER” Discharge Permits
Phased Approach**

1987 Amendments – Phased & Nation-wide

- **Phase I promulgated in 1990**
 - Large municipalities
 - Construction disturbing >5 acres
 - Industrial activities
- **Phase II promulgated in 1999**
 - Smaller municipalities (small cities, towns, villages, counties)
 - Schools, universities
 - Construction disturbing >1acre
 - Industrial activities

1972 Federal Clean Water Act

*Environmental Protection Agency (EPA) authorized
New York State Department of Environmental Conservation
(NYSDEC) to administer the
Clean Water Act permit program*

NPDES Permits

National Pollutant Discharge
Elimination System Permits



SPDES Permits

State Pollutant Discharge
Elimination System Permits

**“Waters of the
United States”**



**“Waters of the
New York State”**

EPA Audit

Town of Colonie

MS4 Permit Compliance

September 3, 4, 5, 2013



**MANY REGULATORY “EYES”
WATCHING FOR COMPLIANCE**

The Clean Water Act legal construct....

- “Waters of New York State” defined/analyzed
- Content of SPDES Permits
 - Control/limit pollution before it discharges to “Waters of New York State”
 - Ongoing tasks/timeline to receive & maintain permit coverage
 - Legal action, penalties, and fines if permit requirements not met

“Waters of New York State”

Classify Streams
“Best Use”

Waterbody Inventory-Priority Waterbody List
Is water quality acceptable given “Best Use”?

Classify Streams

"Best Use"

Albany County, NY "Best Use" Waterbody Classification (Streams, Reservoirs, Lakes, Ponds, etc...)

*Map also used as Map 5 of the TAAW.

Legend

○ Watershed Delineation Point

■ Watersheds

■ Municipal Boundaries

Waterbody Classification

— A Drinking Water

— A(T) Drinking Water/Trout Habitat

— A(TS) Drinking Water/Trout Spawning Habitat

— B Contact Recreation (Swimming)

— B(T) Contact Recreation/Trout Habitat

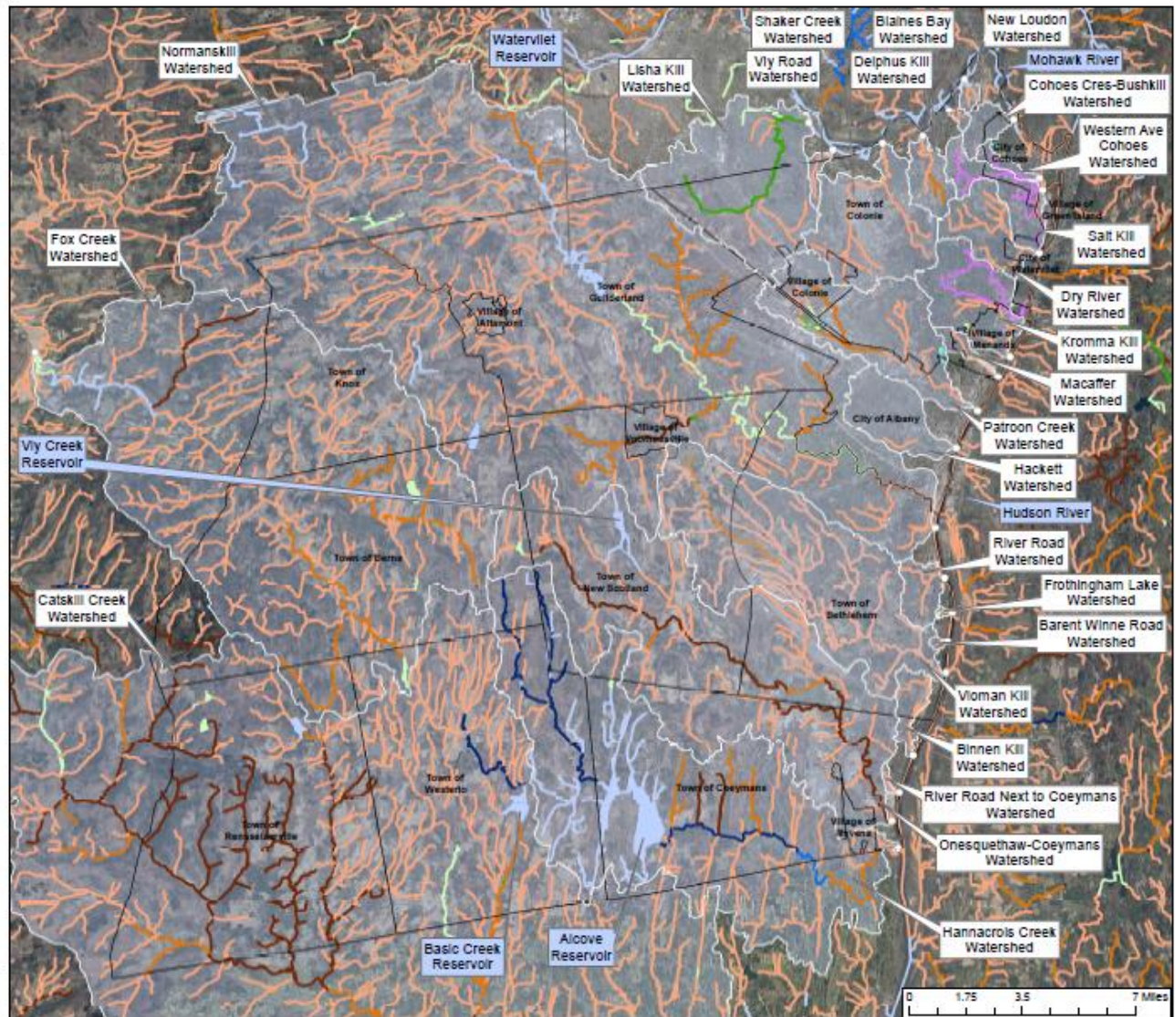
— C Non Contact Activities (Fishing)

— C(T) Non Contact Activities/Trout Habitat

— C(TS) Non Contact Activities/Trout Spawning Habitat

— D Lowest Classification

— Not Classified



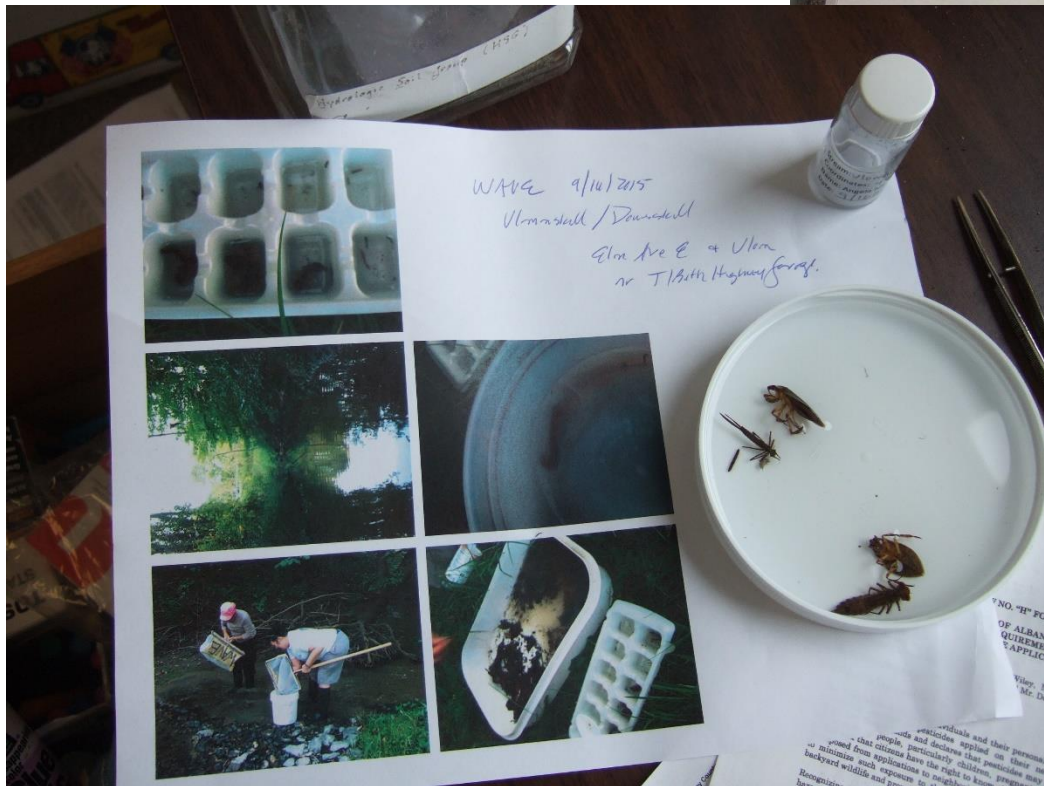
Prepared by the Stormwater Coalition of Albany County
Date: January 2016
File: StreamClass_29Jan2016_FINAL.mxd



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Scientific Data

(multiple sources)



- NYSDEC Biomonitoring staff
- Citizen Scientists (volunteers)
- NYSDEC WAVE program
- Chemistry data (QA/QC)
- Research projects (QA/QC)

Waterbody Inventory Priority Waterbody List “WIPWL”

Does actual water quality support “Best Use”?

Albany County, NY 1. Waterbody Inventory/Priority Waterbody List (WI/PWL) 2. Impaired 303 (d) Waterbody List 3. Watersheds

*Map also used as Map 8 of the TAAW.

Waterbodies in Albany County on the NYS Final 2012 Section 303(d) List

Ann Lee Pond, Stump Pond: WIPWL 1201-0096

-Cause/Pollutant: Phosphorus
-Source: Urban Runoff
-TMDL: Required

Basic Creek Reservoir: WIPWL 1309-0001

-Cause/Pollutant: Phosphorus
-Source: Agriculture
-TMDL: Required

Krumkill Creek, Upper, and Tribs: WIPWL 1311-0004

-Cause/Pollutant: Aquatic Toxicity
-Source: Urban Runoff/CSOs
-TMDL: Required

Patroon Creek and Tribs: WIPWL 1301-0030

-Cause/Pollutant: Oxygen Demand
-Source: Urban/Storm/CSOs
-TMDL: Required

Minor Tribs to West of Hudson: WIPWL 1301-0027
(Includes: Dry River, Kromma Kill and Hackett)

-Cause/Pollutant: Aquatic Toxicity
-Source: Industrial
-TMDL: Required

Hudson River, Class C: WIPWL 1301-0002

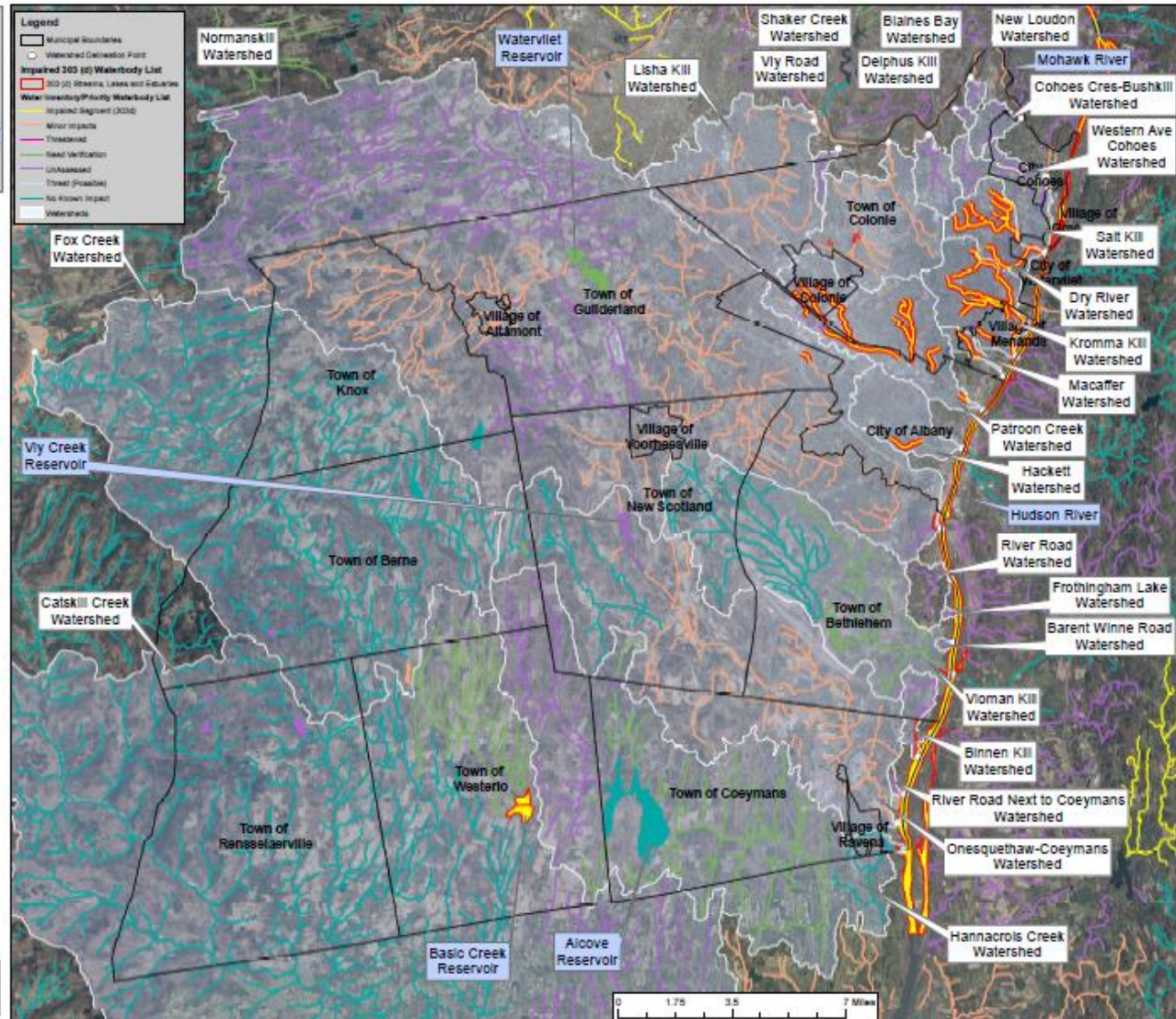
-Cause/Pollutant: PCBs
-Source: Contaminated Sediment
-TMDL: Required

Watervliet Reservoir, WIPWL 1311-0001

-Cause/Pollutant: Dissolved Oxygen/Oxygen Demand
-Source: Unknown
-TMDL: Needs Verification

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“Waters of New York State”

Classify Streams
“Best Use”

Waterbody Inventory-Priority Waterbody List
Is water quality acceptable given “Best Use”?

If a priority waterbody: 303d listing possible (impaired)

If impaired water: may need watershed based analysis of all pollutant loading, assign load reduction goals (TMDL-Total Maximum Daily Loads)

If TMDL load reduction plan: additional stormwater permit requirements

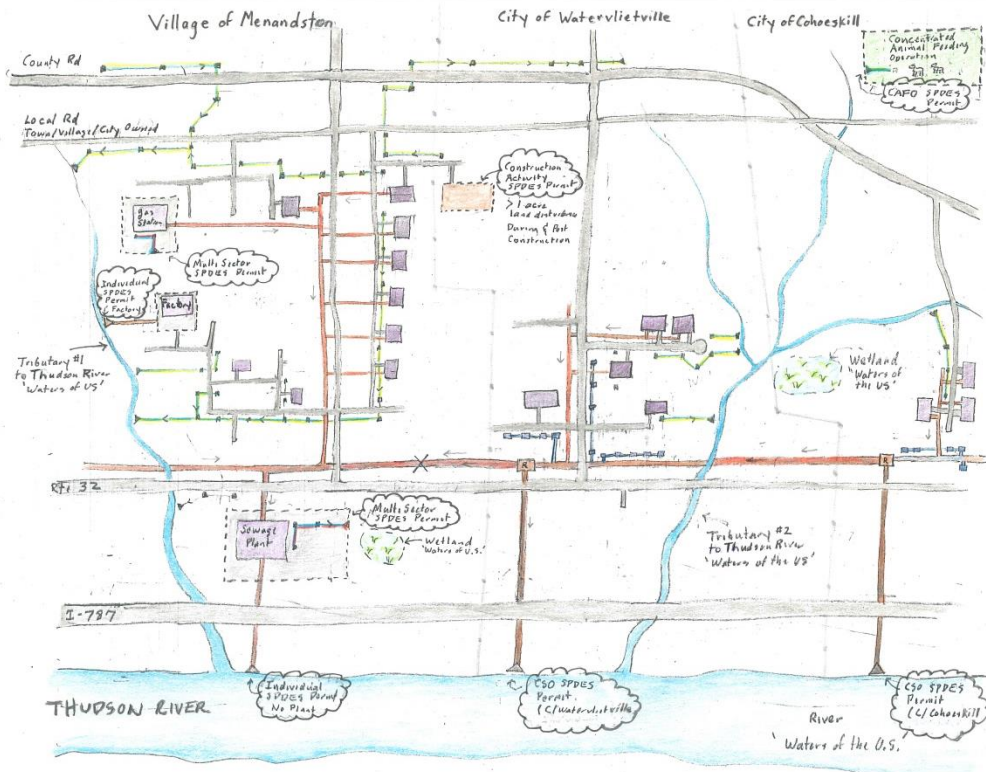
Content of SPDES Permits

Purpose: control what is discharged into “Waters of New York State”

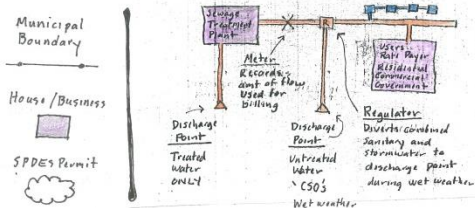
- Permits vary in type, purpose
- When out in the field, discharge points (outfalls) look alike (confusing!).
- Each outfall associated with a particular SPDES permit
- Similar regulatory language across all permits

	ALBANY COUNTY SPDES PERMITS (1980 and 2011)							
Categories	INDIVIDUAL				GENERAL			
Description	Factories; Sewage Treatment Plants		SSO	CSO	CAFO	MS4	Construction Activity	Multi-Sector (Industrial)
			Sanitary Sewer Overflows	Combined Sewer Overflow	Concentrated Animal Feeding Operation (Livestock)	Municipal Separated Storm Sewer System	Land disturbance > 1 acre; During and Post Construction SW Mgmt	Industrial
			Sanitary	Sanitary + Storm	Stormwater	Stormwater		Stormwater
Primary Pollutants of Concern (POCs)	Variable; Depends on Type of Facility		Bacteria	Bacteria and Urban Runoff (Multiple POCs)	Nutrients	Urban Runoff (Multiple POCs), Flow	Sediment; Phosphorus, Nitrogen, Flow	Variable, Depends On Type of Facility or Sector, as defined in Permit
# of SPDES Permits In Albany County	EPA Major (Classes 03, 05) State Significant Minor (Classes 01, 07, 09)	State Non-Significant Minor (Classes 02, 04)						
1980 (Total=25)	21	no data	1	3	0	0	0	0
2011 (Total=477)	53	100	1	4	3	15	252 (active); 251 (terminated)	49 (active); 22 (no exposure); 19 (terminated)
Permit "Owner-Operator"	Factory Owner; Sewage Treatment Plant Owner (Public and Private Sector)	Factory Owner; Sewage Treatment Plant Owner (Private Sector)	Owner of Sanitary System	Municipality Where CSO is Located	Owner of Livestock Operation	Owner of Public Storm System (Municipality; County; Public University; Community College; Authority; State Roads; Mandated Oversight of Construction Activity Permit	Anyone disturbing > 1 acre of land (ex. developer; County/Town/Village/State road project; homeowner additions to house, etc.)	Anyone who owns a facility which qualifies as a regulated sector as described in the Permit
County or Local Municipality Enforcement Action and Fines	NA						MS4 will take enforcement in the areas under MS4 authority.	NA
NYS Environmental Conservation Law Enforcement Action and Fines	The enforcement action take depends on the violation. The procedure for enforcement is described in the NYSDEC TOGS 1.4.2 Compliance and Enforcement of State Pollutant Discharge Elimination System (SPDES) Permits. Standard Permit Conditions: Failure of the covered entity, its contractors, sub-contractors, agents and/or assigns to strictly adhere to any of the SPDES General Permit requirements contained herein shall constitute a permit violation. There are substantial criminal, civil, and administrative penalties associated with violating the provisions of this permit. Fines up to \$37,500 per day for each violation and imprisonment for up to fifteen (15) years may be assessed depending upon the nature and degree of the offense. (All SPDES Permits have this language)							
Federal Clean Water Act-Enforcement Action and Fines	Depends on violation and EPA's enforcement procedures for a given program. Penalties are not calculated until compliance is achieved.							

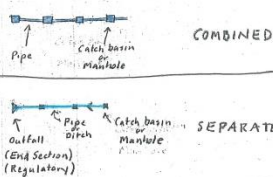
SPDES Permits Concept Map



KEY:



Storm Lines

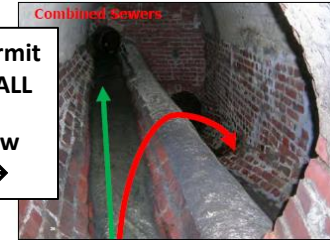


Individual Permit

Factories, Wastewater Treatment
Plants, Complex Facility
OUTFALLS
(Discharge Treated Liquid Waste)



Individual Permit
"CSO" OUTFALL
"R" Overflow
structure→



General Permit

STORMWATER OUTFALL
MS4-Municipal Separated
Storm Sewer System Permit



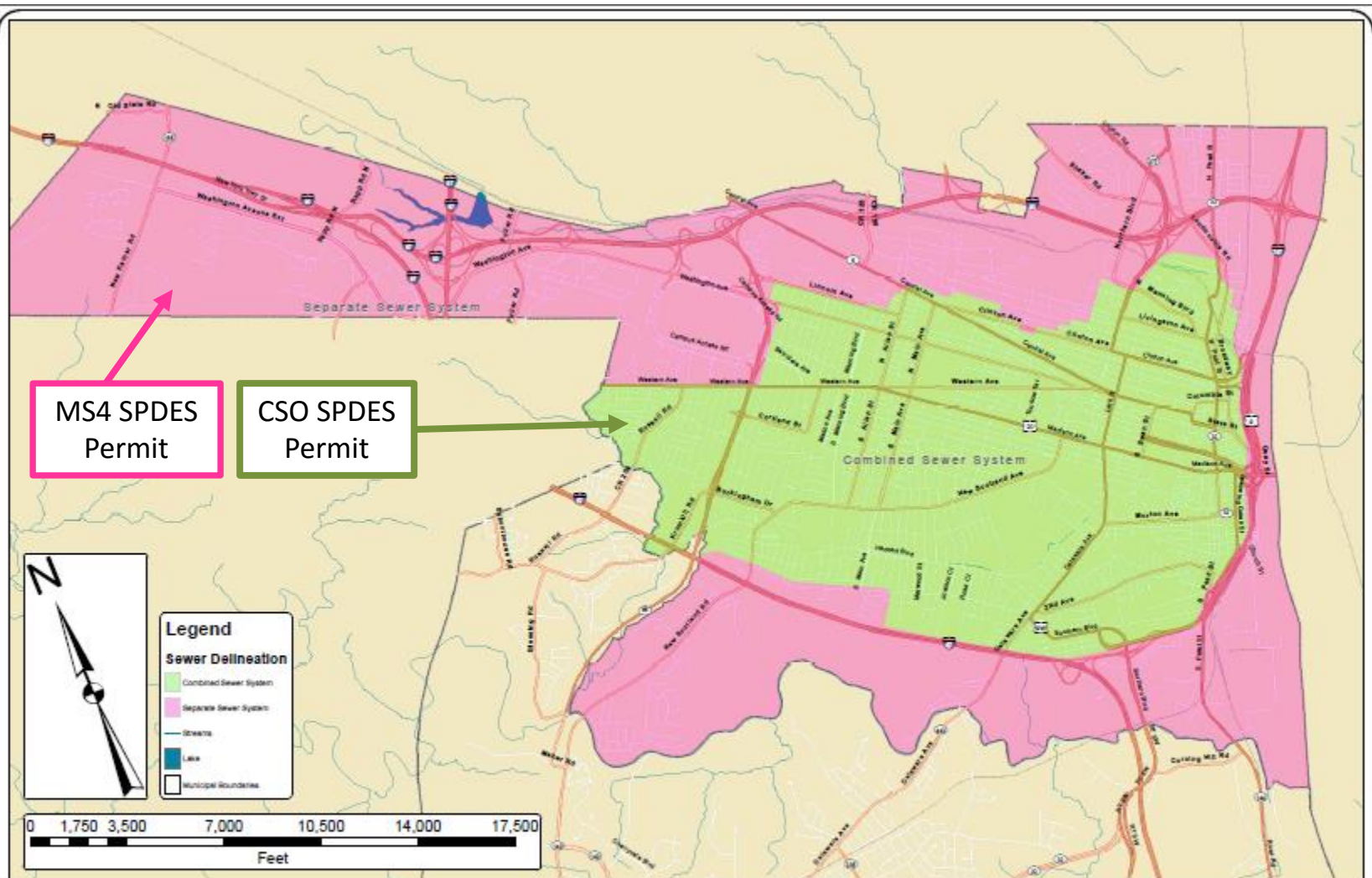
General Permit

STORMWATER OUTFALL
Construction Activity Permit



General Permit

STORMWATER OUTFALL
Multi-Sector Permit
Industrial Site—Landfill "MSGP" Permit



CITY OF ALBANY
DEPARTMENT OF WATER & WATER SUPPLY
 10 N. Enterprise Drive
 Albany, NY 12204

Kathy M. Sheehan
 Mayor

Joseph E. Coffey Jr., P.E.
 Commissioner

REVISIONS	DATE	COMMENTS/REMARKS
	5/7/2014	Original Map



City of Albany Sewer System Delineation

Scale: 1:25,000

Created By: Justin Schievelbein

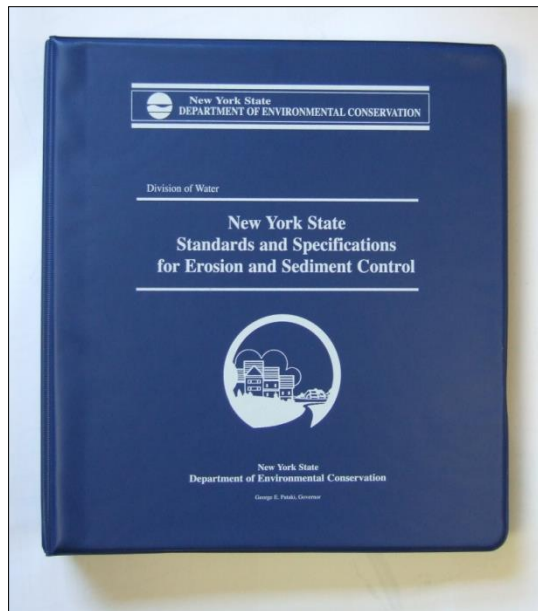
1 of 1

Hands on tour of the New York State Stormwater General Permits...

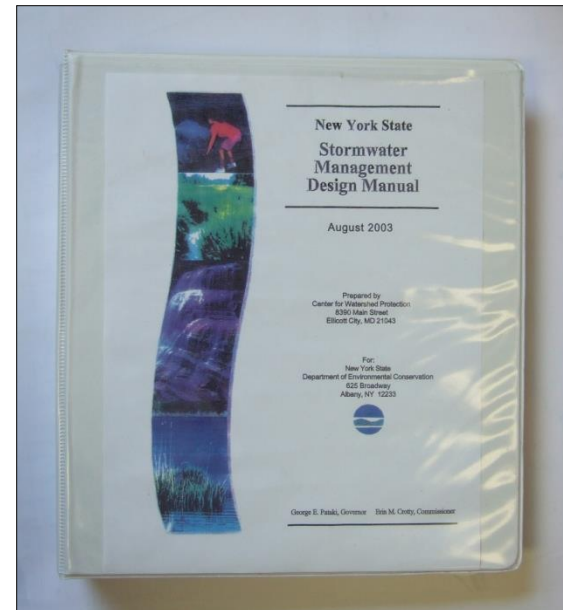
Content	Construction Activity	MS4	Multi-Sector (Industrial)
Common Elements			
Format	Cover Page & Table of Contents	Cover Page & Table of Contents	Cover Page & Table of Contents
Enforcement, Fines	pg. 31 (\$37,500)	pg. 24 (\$37,500)	pg. 59 (\$37,500)
Reporting & Records	pg. 30	pg. 19-22	pg. 37-57
Impaired Waters & TMDLs	Appendix E	pg. 12	pg. 18
Permit Specific			
SWMP		pg. 15-18	
MCMs		pg. 30 Trad MS4s T,V,C; Pg. 51 Non Trad and Trad County	
SWPPP	pg. 18 to 24		pg. 19-33
MS4 Permit Points To Other Permits		pg. 48 (Trad MS4, T/V/C); Pg. 67 (Non Trad MS4, Trad MS4 County)	
		pg. 60	
Green Infrastructure	Design Manual, Blue Book	MS4 Owned Projects-Need Construction Permit SWPPPs	

CONSTRUCTION ACTIVITY PERMIT

Erosion and Sediment Control



Water Quality & Water Quantity Control



DURING CONSTRUCTION

POST CONSTRUCTION

New York State

Table 3.1 Green Infrastructure Planning General Categories and Specific Practices		
Group	Practice	Description
Preservation of Natural Resources	Preservation of Undisturbed Areas	Delineate and place into permanent conservation easement undisturbed forests, native vegetated areas
	Preservation of Buffers	Identify and preserve riparian buffers
	Reduction of Clearing and Grading	Limit clearing and grading to the minimum necessary for development
	Locating Development in Less Sensitive Areas	Locate development in areas with low wetland sensitivity
	Open Space Design	Use open space design to preserve natural resources
	Soil Restoration	Revegetate and restore disturbed areas
Reduction of Impervious Cover	Roadway Reduction	Minimize roadway width and length
	Sidewalk Reduction	Minimize sidewalk width and length
	Driveway Reduction	Minimize driveway width and length
	Cul-de-sac Reduction	Minimize cul-de-sac width and length
	Building Footprint Reduction	Reduce building footprint and height
	Parking Reduction	Reduce parking area and use permeable pavement

August 2010

Table 3.2 Green Infrastructure Techniques Applicable for Runoff Reduction		
Group	Practice	Description
	Retention of Natural Areas	Retain the pre-development hydrologic and water quality characteristics of undisturbed natural areas, stream and wetland by restoring and/or permanently conserving these areas on a site.
	Retention of Buffers	Retain natural areas such as forested conservation areas and buffers or vegetated filter strips and riparian buffers can be used to treat and control stormwater runoff from some areas of a development project.
	Retention of Drainage Paths	Use natural drainage paths, or properly designed vegetated channels, instead of constructing underground storm sewers or open channels to increase time of concentration, reduce the peak discharge, and provide infiltration.
	Retention of Trees	Conserve trees to reduce stormwater runoff, increase nutrient uptake, and provide bank stabilization. Trees can be used for erosion control, landscaping, stormwater management practice areas, conservation areas and erosion and sediment control.
	Retention of Roof Areas	Reduce stormwater runoff from residential rooftop areas and upland overland runoff to designated pervious areas to reduce runoff volumes and rates.
	Retention of Streambeds	Highlight previously-culverted/piped streams to restore natural streambeds, better attenuate runoff by increasing the storage size, promoting infiltration, and help reduce pollutant loads.
	Retention of Small Volumes	Collect and treat small volumes of stormwater runoff using a vegetated planting soil bed and planting materials to filter runoff stored within a shallow depression.
	Retention of Vegetation	Reduce runoff by a layer of vegetation and soil installed on top of a flat or sloped roof. The rooftop vegetation allows for evapotranspiration processes to reduce volume and recharge rate of runoff entering conveyance system.
	Retention of Stormwater Treatment Devices	Use vegetated stormwater treatment devices that can be designed for filtration or filtering practices. Stormwater planters use soil and biogeochemical processes to decrease stormwater quantity and improve water quality.
	Retention of Stormwater Storage	Use stormwater runoff to be used for irrigation systems or filtered and reused for non-contact activities.

August 2010

3-6

GREEN INFRASTRUCTURE PLANNING and DESIGN: 1) Preservation of Natural Resources; 2) Reduction of Impervious Cover; 3) Run Off Reduction Techniques



MEMORANDUM

*** NOTICE ***

This document has been developed to provide Department of Environmental Conservation staff with guidance on how to ensure compliance with statutory and regulatory requirements, including case law interpretations, and to provide consistent treatment of similar situations. This document may also be used by the public to gain technical guidance and insight regarding how the Department staff may analyze an issue and factors in their consideration of particular facts and circumstances. This guidance document is not a fixed rule under the State Administrative Procedure Act section 102(2)(a)(i). Furthermore, nothing set forth herein prevents staff from varying from this guidance as the specific facts and circumstances may dictate, provided staff's actions comply with applicable statutory and regulatory requirements. This document does not create any enforceable rights for the benefit of any party.

Date: JUN 24 2010
TO: Regional Water Engineers, Bureau Directors, Section Chiefs
SUBJECT: Division of Water Technical and Operational Guidance Series (1.4.2)
COMPLIANCE AND ENFORCEMENT OF SPDES PERMITS
(Originators: Meredith Streeter/Karen Baker)

I. PURPOSE

This document establishes the Division of Water's (DOW) guidance on compliance and enforcement activities related to the State Pollutant Discharge Elimination System (SPDES) program. It provides DOW staff with enforcement options and operating guidelines to implement the compliance component of the program.

The goal of this guidance is to ensure consistent statewide understanding and implementation of the SPDES compliance and enforcement program in order to protect public health and the intended best use of the waters of the state. This guidance supercedes *Division of Water Technical and Operational Guidance Series (1.4.2) Compliance and Enforcement of SPDES Permits*, dated September 30, 1988.

"TOGS"

NYSDEC Division of Water Technical and Operational Guidance Series (1.4.2)

COMPLIANCE AND ENFORCEMENT OF SPDES PERMITS

Date: June 24, 2010

MS4 General Permit

F. Municipal Separate Storm Sewer Systems (MS4s) General Permit

Violation	Base Penalty Rate
Failure to renew or transfer coverage under the General Permit	\$1000/month
Failure to apply for coverage under the MS4 General Permit for traditional MS4	\$5,000/event
Failure to apply for coverage under the MS4 General Permit for non-traditional MS4	\$1,000/event
Failure to develop and implement a Storm Water Management Program (SWMP)	\$3000/event
Failure to submit Annual Compliance Status Report and/or Municipal Compliance Certification Form	\$3000/event
Causing or contributing to a Water Quality Standards violation	\$5000/event
Failure to meet major permit milestone	\$250/day
Failure to meet other (non-major) milestone or other non-significant permit violations	\$100/day
Significant unauthorized discharge (refer to draft EPA Wet Weather SNC Policy <i>et seq.</i>)	\$3000/event
Unauthorized discharge	\$1,000/event
Significant permit requirement violations including but not limited to: <ul style="list-style-type: none"> • Lack of or a substantially inadequate SWPPP or SWMP; • Substantial failure to implement or maintain BMPs, or • Substantial failure to perform required monitoring 	\$3,000/event
Failure to submit required report (including failure to respond to an information request)	\$500/month
Failure to retain records as required	\$500/event
Failure to allow inspection/sampling by the Department	\$5,000/event
Falsifying information on DEC submittal ⁴⁰	\$10,000/report
Failure to comply with other (not specifically noted in this Appendix) applicable requirements set forth in 6 NYCRR Part 750-2, "Operating in Accordance with a SPDES Permit"	\$100/day
ECL Article 17 violations not related to permit	\$250/day

⁴⁰ The penalty calculated based on this Base Penalty Rate and the maximum adjustment factors may exceed the statutory limitation (currently \$37,500 per day per violation.) A separate calculation for this violation using the case specific adjustment factors should be performed first. If the assessed penalty exceeds the statutory limitation, the penalty assessed for this violation must be changed to the statutory maximum.

Construction Activity General Permit

G. Construction Stormwater General Permit

Violation	Base Penalty Rate
Failure to obtain coverage under General Permit and is employing appropriate erosion & sediment control practices	<p>< 5 acres (or 5,000 sq ft - 1 acre for east of Hudson in the New York City Watershed (NYCW)) \$1,000/day</p> <p>≥5 acres (or >1 acre for east of Hudson in the NYCW) \$1,500/day</p>
Failure to obtain coverage under General Permit and is employing minimal or no erosion & sediment control practices	<p>< 5 acres (or 5,000 sq ft - 1 acre for east of Hudson in the NYCW) \$1,500/day</p> <p>≥5 acres (or >1 acre for east of Hudson in the NYCW) \$3,000/day</p>
Failure to develop and implement a SWPPP	\$3000/event
Has coverage under General Permit, and has significant permit violations including but not limited to: <ul style="list-style-type: none"> Substantial failure to implement or maintain BMPs 	<p>< 5 acres (or 5,000 sq ft - 1 acre for east of Hudson in the NYCW) \$1,000/day</p> <p>≥5 acres (or >1 acre for east of Hudson in the NYCW) \$2,500/day</p>

Has coverage under General Permit, and has non-significant permit violations	<p>< 5 acres (or 5,000 sq ft - 1 acre for east of Hudson in the NYCW) \$500/day</p> <p>≥ 5 acres (or >1 acre for east of Hudson in the NYCW) \$1,000/day</p>
Significant unauthorized discharge (refer to draft EPA Wet Weather SNC Policy <i>et seq.</i>)	\$3,000/event
Unauthorized discharge	\$1,000/event
Causing or contributing to a Water Quality Standards violation	\$5,000/event
Failure to meet major milestones required in a permit or administrative or judicial order	\$250/day
Failure to meet other (non-major) milestone or other non-significant permit violations	\$100/day
Failure to submit required report (including failure to respond to an information request)	\$500/month
Failure to retain records as required	\$500/event
Failure to allow inspection/sampling by the Department	\$5,000/event
Falsifying information on DEC submittal ⁴¹	\$10,000/report
Failure to comply with other (not specifically noted in this Appendix) applicable requirements set forth in 6 NYCRR Part 750-2, "Operating in Accordance with a SPDES Permit"	\$100/day
ECL Article 17 violations not related to permit	\$250/day

⁴¹ The penalty calculated based on this Base Penalty Rate and the maximum adjustment factors may exceed the statutory limitation (currently \$37,500 per day per violation.) A separate calculation for this violation using the case specific adjustment factors should be performed first. If the assessed penalty exceeds the statutory limitation, the penalty assessed for this violation must be changed to the statutory maximum.

Multi-Sector General Permit

“Industrial
Permit”

“MSGP”

H. Multi-Sector General Permit (MSGP)

Violation	Base Penalty Rate
Failure to renew or transfer coverage under General Permit	\$1,000/month
Failure to apply for coverage under the General Permit	\$3,000/event
Failure to submit DMR or Annual Certification Report	\$1000/event
Failure to develop and implement a SWPPP or SWMP	\$3000/event
Causing or contributing to a Water Quality Standards violation	\$5000/event
Significant unauthorized discharge (refer to draft EPA Wet Weather SNC Policy <i>et seq.</i>)	\$3,000/event
Unauthorized discharge	\$1,000/event
Failure to meet significant permit requirements including but not limited to: <ul style="list-style-type: none"> Substantially inadequate SWPPPs; Substantial failure to develop or implement the SWPPP; Substantial failure to implement or maintain BMPs; Substantial failure to implement MSGP requirements. 	\$3,000/event
Exceeding interim or final effluent limits for non-toxic parameter under SPDES permit: <ul style="list-style-type: none"> Daily max/min discharge (each day = 1 violation = 1 event) Daily Average (7 day average = 7 violations⁴² = 1 event) Daily Average (30 day average = 30 violations⁴³ = 1 event) or Monthly Average 	\$1,000/event \$1,500/event \$2,000/event
Exceeding interim or final limits for toxic parameter under SPDES permit: <ul style="list-style-type: none"> Daily max/min discharge (each day = 1 violation = 1 event) Daily Average (7 day average = 7 violations⁴² = 1 event) Daily Average (30 day average = 30 violations⁴³ = 1 event) or Monthly Average 	\$2,000/event \$3,000/event \$4,000/event
Failure to meet major milestones required in a permit or administrative order or judicial decree	\$250/day
Failure to meet other (non-major) milestone or other non-significant permit violations	\$100/day

⁴²Exceedence of the 7-day average constitutes seven violations. 7-day average, as defined in 40CFR133.101(a), is “the arithmetic mean of pollutant parameter values of samples collected in a period of 7 consecutive days.”

⁴³Exceedence of the 30-day average constitutes thirty violations. Legal precedence for this has been established by federal court rulings. The 30-day average, as defined, in 40CFR133.101(b), is “the arithmetic mean of pollutant parameter values of samples collected in a period of 30 consecutive days.”

Failure to submit required report (including failure to respond to an information request)	\$500/month
Failure to retain records as required	\$500/event
Failure to allow inspection/sampling by the Department	\$5,000/event
Falsifying information on DEC submittal ⁴²	\$10,000/report
Failure to comply with other (not specifically noted in this Appendix) applicable requirements set forth in 6 NYCRR Part 750-2, "Operating in Accordance with a SPDES Permit"	\$100/day
ECL Article 17 violations not related to permit	\$250/day

⁴²The penalty calculated based on this Base Penalty Rate and the maximum adjustment factors may exceed the statutory limitation (currently \$37,500 per day per violation.) A separate calculation for this violation using the case specific adjustment factors should be performed first. If the assessed penalty exceeds the statutory limitation, the penalty assessed for this violation must be changed to the statutory maximum.

Combined Sewer Overflow Requirements

N. Violations of Combined Sewer Overflow (CSO) Requirements

Violations	Circumstance	Department's Minimum Response
Multiple significant unauthorized discharges or multiple significant overflows (refer to draft EPA Wet Weather SNC Policy et seq.)	All (permitted and unpermitted outfalls)	Consult with DEC law enforcement or legal to assess potential criminal prosecution or civil enforcement.
Substantial failure to implement any of the nine minimum controls (NMCs) as required in an administrative or judicial order or in a permit.	i) 30 days overdue ii) More than 60 days overdue	i) NOV ii) Formal Enforcement
Failure to report overflow(s) or discharge(s) at permitted CSOs in Annual BMP Report as required in an administrative or judicial order or in a permit.	All	NOV
Failure to submit an approvable Long Term Control Plan (LTCP), as required in an administrative order, judicial decree, or in a permit.	i) 30 days overdue ii) More than 60 days overdue	i) NOV ii) Formal Enforcement
Failure to meet and implement the major milestones (including LTCP milestones) or reporting requirements (including failure to respond to an information request) required in an administrative order, judicial decree, or in a permit.	i) 30 days overdue ii) More than 60 days overdue	i) NOV ii) Formal Enforcement
Failure to comply with incident reporting requirements pursuant to Part 750-2.6 and Part 750-2.7. This includes failure to report overflow(s) or discharge(s) at unpermitted CSOs.	All	NOV
Reporting false information	All	Consult with DEC law enforcement or legal to assess potential criminal prosecution or civil enforcement.

EPA Audits

Local MS4 Permit Compliance

(Coalition members)

Town of Colonie: Sept 3-5, 2013 (3 days)

City of Albany: June 3-5, 2014 (3 days)

University at Albany-SUNY Uptown: March 19, 2015

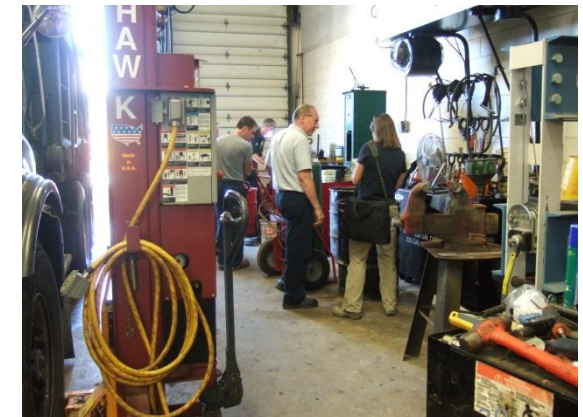
Recent NYSDEC Audits (1 day)

V/Menands (12/6/2012); T/New Scotland (2/11/2014);

C/Cohoes (7/16/2014); V/Colonie (1/21/2015);

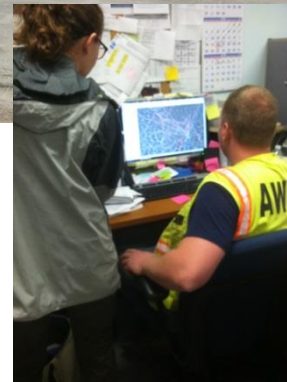
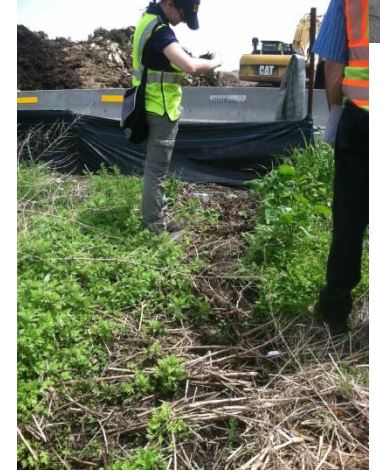
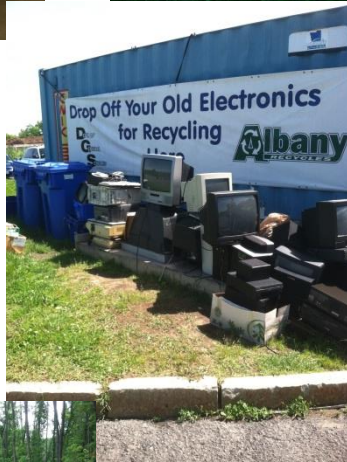
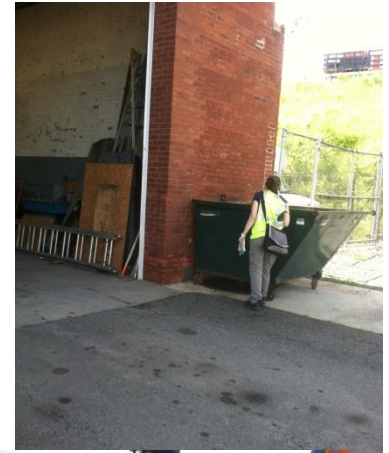
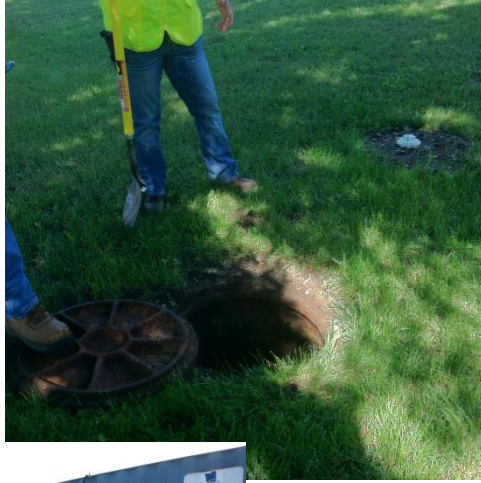
T/Guilderland (2/17/2016); C/Watervliet (5/11/2016)

Town of Colonie (EPA)





City of Albany (EPA)



University at Albany-Uptown (EPA)



City of Albany Initiatives

Clean Water Act “Friendly” and/or Mandated

- Rezone
- CSO Long Term Control Plan projects
(reduce stormwater runoff)
- Woodlawn
- Other

WATER QUALITY DATA – From NYSDEC WAVE/Coalition Volunteers (2015)

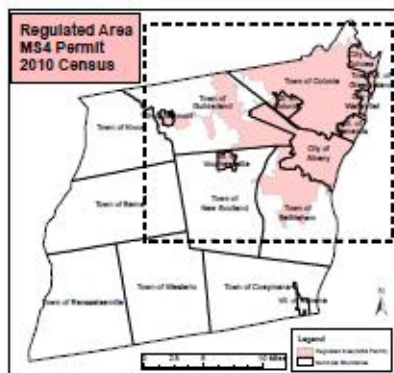
Stormwater Coalition of Albany County MCM2 Public Participation Program

NYS DEC Water Assessments
by Volunteer Evaluators (WAVE)

Local WAVE Monitoring Sites (2015)
with Waterbody Inventory/Priority Waterbody
and 303 (d) Lists*

Legend

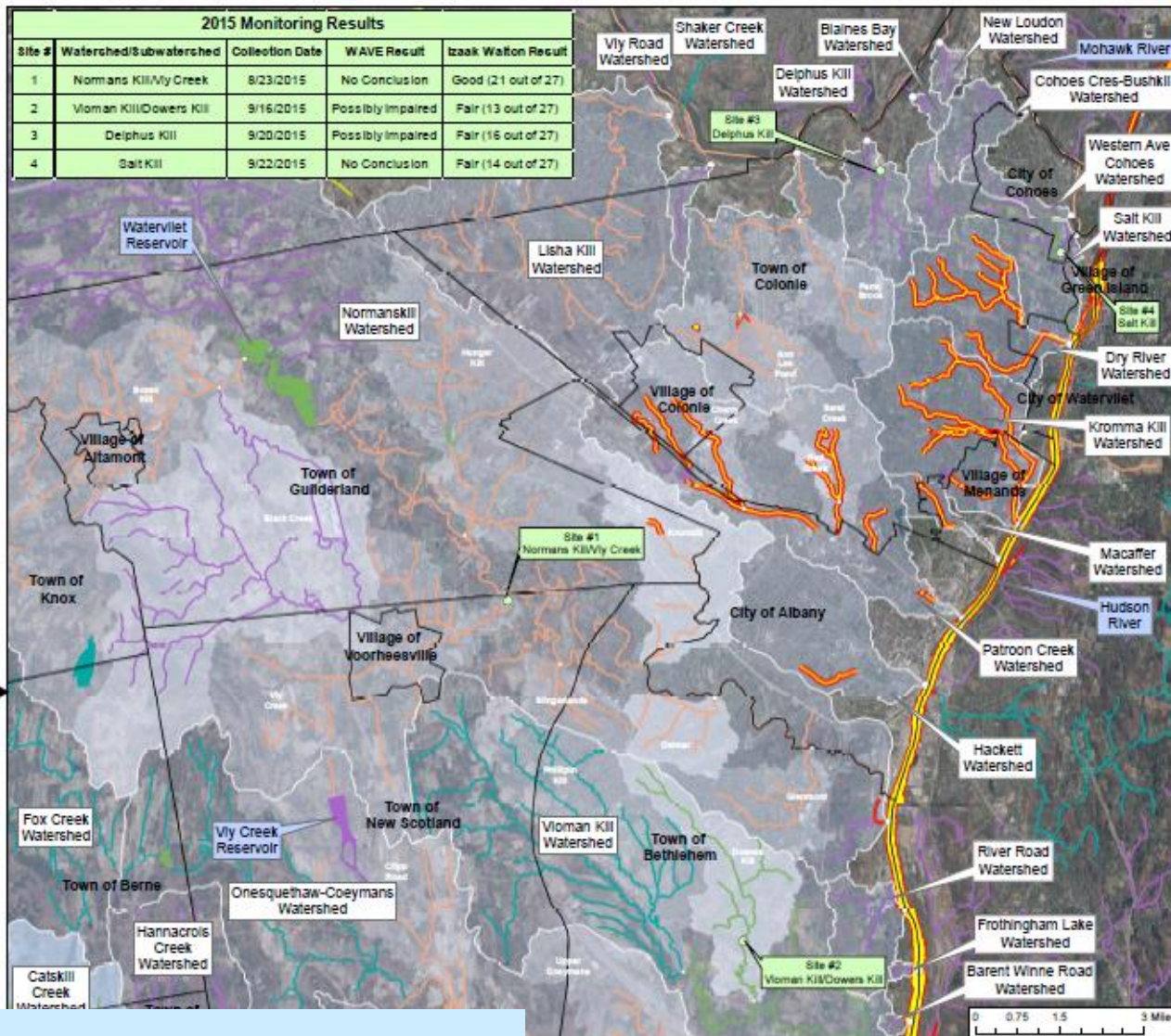
- WAVE Monitoring Site
- Watershed Delineation Point
- Subwatershed Delineation Point
- ▭ Municipal Boundaries
- ▭ Watersheds
- ▭ Water Inventory/Priority Waterbody List
- ▭ Impaired Segment (303d)
- ▭ Minor Impacts
- ▭ Threatened
- ▭ Need Verification
- ▭ UnAssessed
- ▭ Threat (Possible)
- ▭ No Known Impact
- ▭ Impaired 303 (d) Waterbody List
- ▭ 303 (d) Streams, Lakes and Estuaries



Prepared by the Stormwater Coalition of Albany County
Date: October 2015
File: WAVE_Priority303d_2015.mxd

Stormwater Coalition of Albany County
Albany County, City of Albany, Town of Bethlehem, City of Cohoes, Town of Colonie,

2015 Monitoring Results				
Site #	Watershed/Subwatershed	Collection Date	WAVE Result	Izaak Walton Result
1	Normans Kill/Vly Creek	8/23/2015	No Conclusion	Good (21 out of 27)
2	Vioman Kill/Dowers Kill	9/16/2015	Possibly Impaired	Fair (13 out of 27)
3	Delphus Kill	9/20/2015	Possibly Impaired	Fair (16 out of 27)
4	Salt Kill	9/22/2015	No Conclusion	Fair (14 out of 27)



Permit implementation matters!

of water quality on wadeable streams in NY State. "The Waterbody Inventory/Priority Waterbodies List is a statewide inventory of the waters of the status of restoration, protection and other water quality activities and efforts." "The New York State Section 303(d) List of Impaired TMDL Waters

Earth Water Supply

97% salt

2.4% glaciers/ice caps

~.6% unavailable


~0.03% potable and drinkable

Questions & Take Aways...

Green Infrastructure Practices

Listed in the NYSDEC Stormwater
Management Design Manual
(August, 2010 and August, 2015)

Conserving Natural Areas: Tree Canopy and Woody Areas



The trees in this landscaped median were preserved during development, which reduced the amount of clearing during road construction.



Conserving Natural Areas: Pocket Wetlands



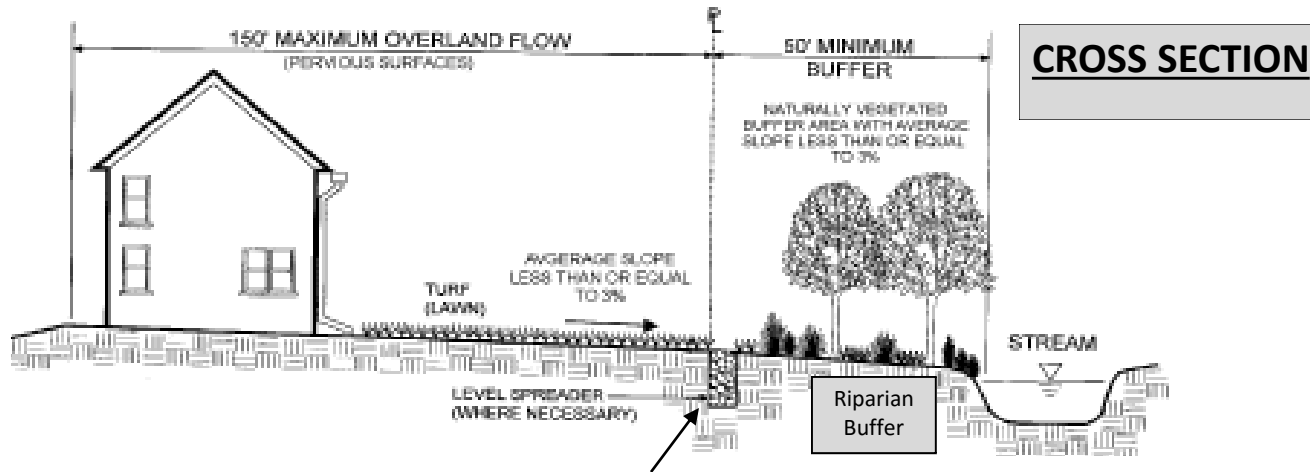
Conserving Natural Areas: Vegetative Buffers



Conserving Natural Areas: Stream Buffers

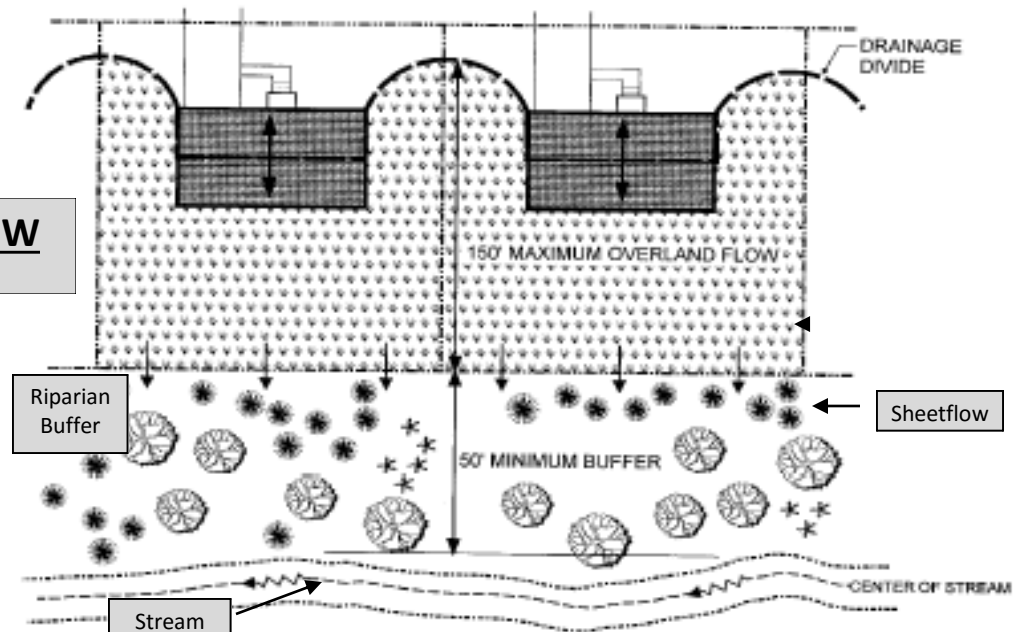


Conserving Natural Areas: Sheetflow to Riparian Buffers



Runoff is spread out to form sheet flow to buffer

PLAN VIEW



Vegetative Open Swales



Tree Plantings/Tree Boxes



Downspout Disconnection



Step 1



Step 2



Step 3

Stream Daylighting



Figure 1: Stream channel daylighting – Before (a) and After (b)

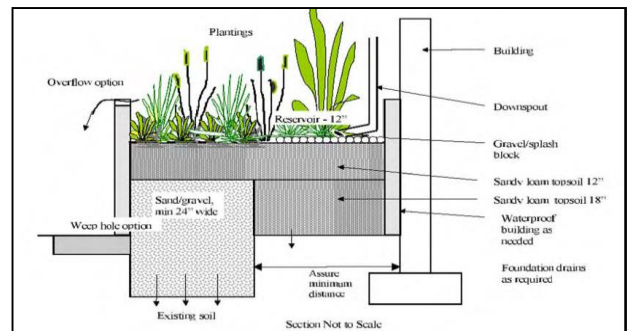
Rain Gardens



Green Roofs



Stormwater Planters



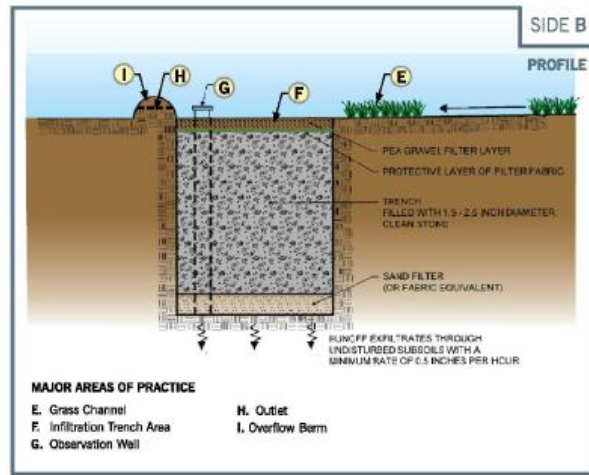
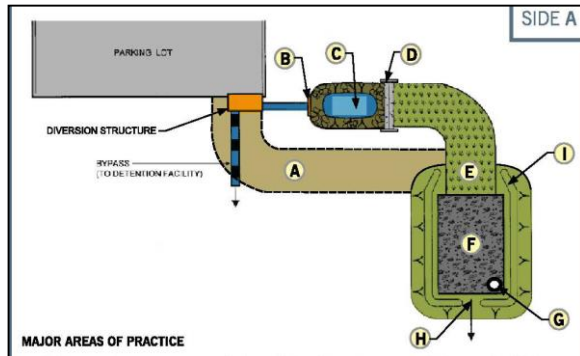
Rain Barrels and Cisterns



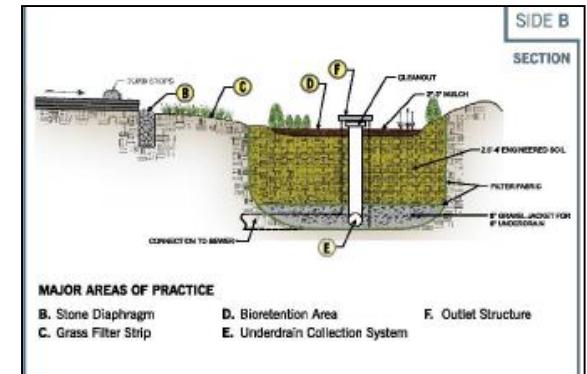
Porous Pavement



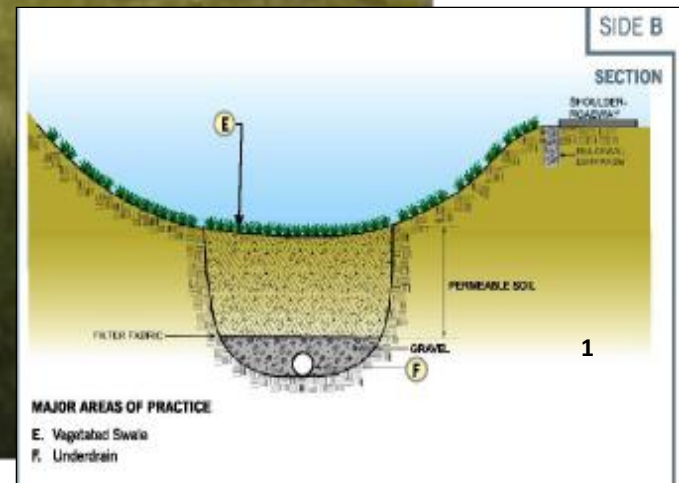
Infiltration (Trenches, Basins and Drywells)



Bioretention



Dry Swales



<http://chesapeakestormwater.net/2012/03/design-specification-no-10-dry-swales/>