Clean Water Act Basics

and the

Stormwater Regulations

City of Watervliet March 3, 2016 Common Council



Nancy Heinzen Coordinator-Director 112 State Street, Room 720 518-447-5645

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; 2016 IMA renewal
- Purpose--same MS4 General SPDES Permit requirements

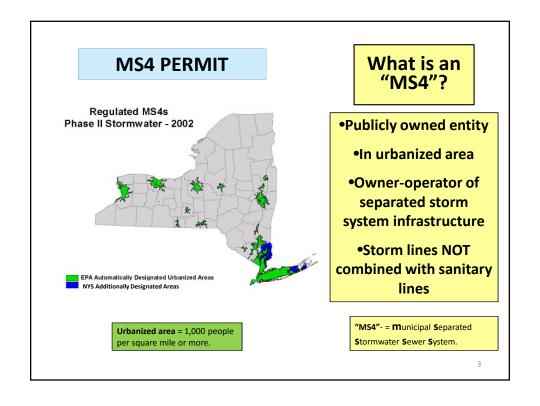
 members share services; joint reports, mapping, administration, training, apply for, implement, and manage grants
- **2016 Coalition Operating Budget--**\$179,962 (2016 Add'l \$482,720 NYSDEC Grant Map'g, Prog Mgmt)
- Membership Fee Range --\$4,710 to \$28,909
- Albany County--Host and Member of Coalition
- Office location--Albany County Building-Downtown; 112 State Street; Rm 720
- Organizational structure

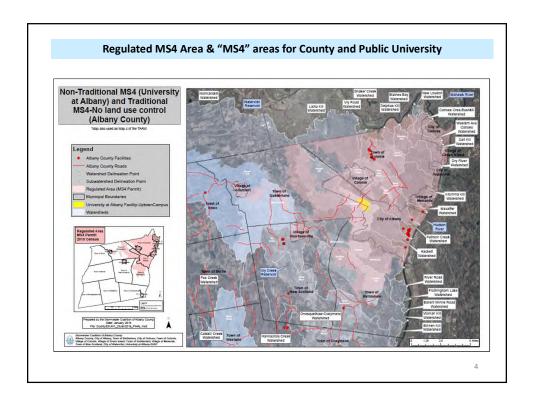
Board of Directors: 1 rep per municipality; appointed by municipal Governing Board; open meetings law; fiscal responsibilities; meets quarterly (V. of Green Is)

Working Group: Multiple reps per MS4; conducts "work" of the Coalition; meets monthly (location changes, mtgs in each member community, if possible)

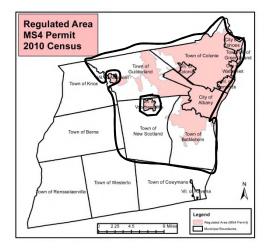
Staff: 1 FT SW Program Coordinator-Director; 1 FT SW Program Technician

- 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





Stormwater Coalition of Albany County



REGULATED MS4s

Traditional

Cities: Cohoes Watervliet Albany Coalition Members (As of 2016)

Towns:

Colonie Guilderland Bethlehem New Scotland

Villages: Colonie

Green Island (CSO) Menands

County: Albany

Non-Traditional

SUNY-Albany Public Schools

NYS DOT Thruway Authority

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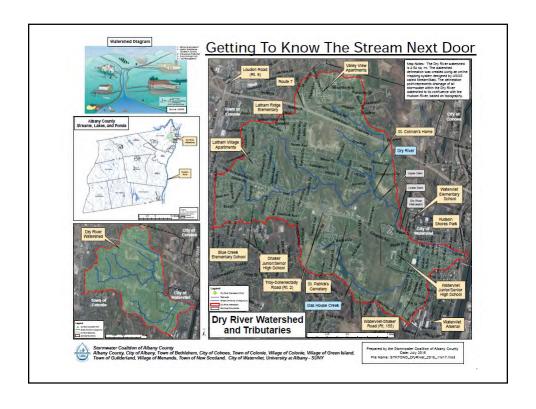
MS4 Permit Requirement (GP-0-15-003) Part VII.A.4.a.x. (pg. 40)

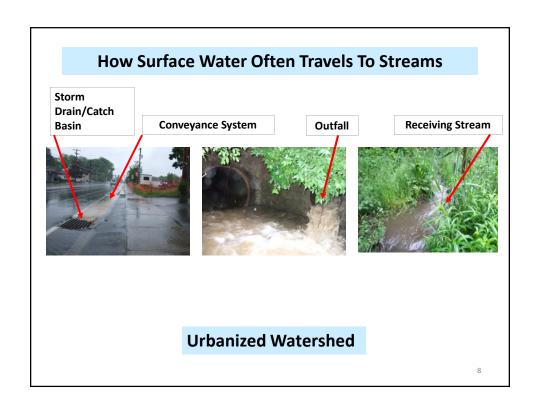
"Develop, implement, enforce a program that...educates construction site owner/operators, design engineers, municipal staff and other individuals to whom these regulations apply about the municipality's construction stormwater requirements...."

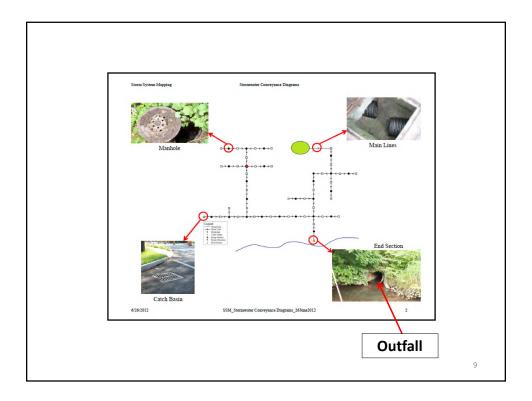
MS4 Permit Requirement (GP-0-15-003) Part VII.A.5.a.v. (pg. 42)

"...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."

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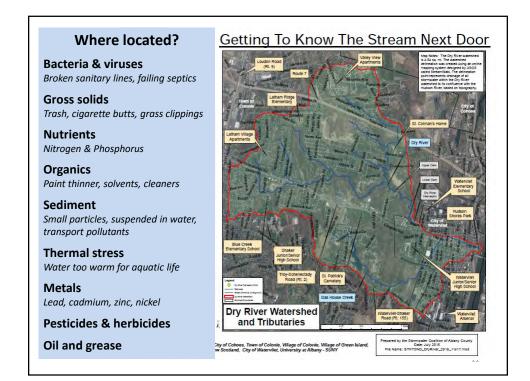


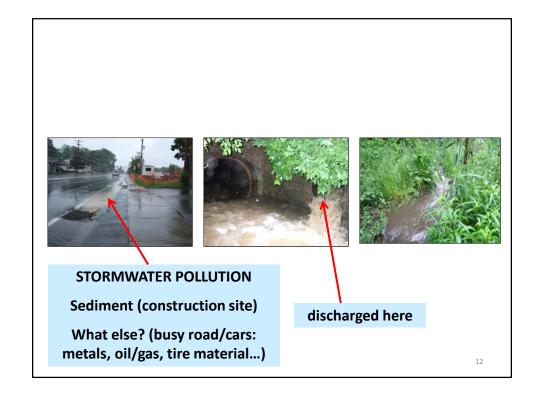




Pollutants and land use....

...a close look at a watershed.





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

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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

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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



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The Clean Water Act legal construct....

- "Waters of New York State" defined
- 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

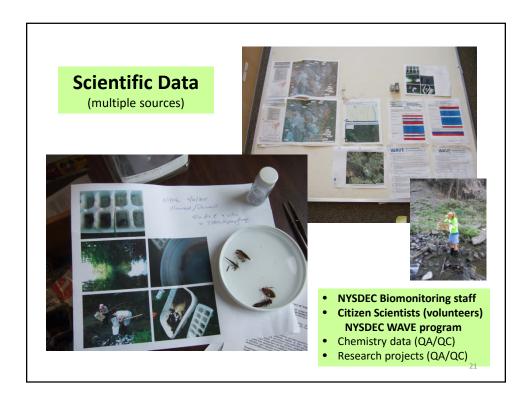
"Best Use"

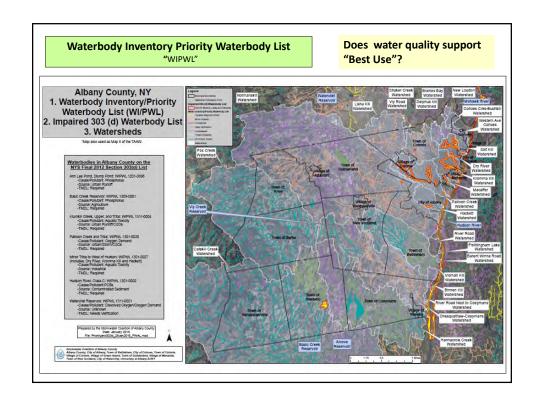
Waterbody Inventory-Priority Waterbody List

Is water quality acceptable given "Best Use"?

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Classify Streams "Best Use" Waterbody Classification (Streams, Reservoirs, Lakes, Ponds, etc...) Waterbody Classification (Waterbody Classification Waterbody Classification A Disting Waterbody Classificati





"Waters of New York State"

Classify Streams

"Best Use"

Waterbody Inventory-Priority Waterbody List

Is water quality acceptable given "Best Use"?

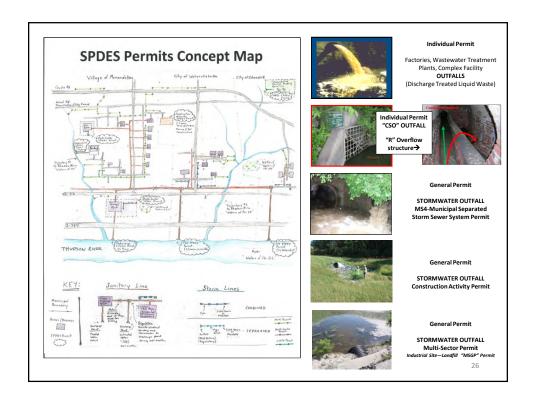
If a priority waterbody: 303d listing possible (impaired)
If impaired water: may need watershed based analysis of all pollutant loading, assign load reduction goals (TMDL-Total Maximum Daily Loads)
If TMDL load reduction plan: additional stormwater permit requirements

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Content of SPDES Permits

- Vary in type, purpose, and infrastructure components
- Share common elements
- Discharge points (outfalls)-look alike
- Processed outfalls-factories & wastewater plants
- Stormwater outfalls-rainwater picks up pollutants within drainage area, transported through conveyance system, often discharged at multiple outfall locations

	ALBANY COUNTY SPDES PERMITS (1980 and 2011)							
Categories	INDIVIDUAL				GENERAL			
			SSO	CSO	CAFO	MS4	Construction Activity	Multi-Sector (Industrial
Description	Factories; Sewage	Treatment Plants	Sanitary Sewer Overflows	Combined Sewer Overflow	Concentrated Animal Feeding Operation (Livestock)	Municipal Separated Storm Sewer Systm	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 Or Type of Facility or Sector, as defined in Permit
# 01 SPDES	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)
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	County; Public University; Community College; Authority; State Roads; Mandated Oversight of	Anyone disurbing > 1 acre of land (ex. developer; County/Town/Village/St ate road project; homeowner additions to house, etc.)	Anyone who owns a facility which qualifies as a regulated sector a described in the Permit
County or Local Municipality Enforcement Action and Fines	MS4 will take enforcement in the enforcement in the areas under MS4 authority.				NA			
Conservation	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. (AI 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.							



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

Content	Construction Activity	MS4	Multi-Sector (Industrial)	
Common Elements				
	Cover Page & Table of		Cover Page & Table of	
Format	Contents	Cover Page & Table of Contents	Contents	
Enforcement, Fines	pg. 31	pg. 24	pg. 59	
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		
		pg. 30 Trad MS4s T,V,C; Pg. 51		
MCMs		Non Trad and Trad County		
SWPPP	pg. 18 to 24		pg. 19-33	
MS4 Permit Points To		pg. 48 (Trad MS4, T/V/C); Pg. 67	→	
Other Permits		(Non Trad MS4, Trad MS4 County)		
	←	pg. 60		
_	Design Manual, Blue	MS4 Owned Projects-Need		
Green Infrastructure	Book	Construction Permit SWPPPs		





MEMORANDUM

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 to made to the conservation of particular facts and circumstances. This guidance demands to the other consideration of particular facts and circumstances. This guidance demands in not a fact of the ander the Start Annihistrative Procedure Acts action 102(10)(i). Furthermore, mushing set forth herein prevents staff from waying from this guidance as statutory and regulatory focusions. This document does not create any enforceable rights for the benefit of any party.

nte: JUN 2 4 2010

TO: Regional Water Engineers, Bureau Directors, Section Chief

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 unperceded 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 Rat
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 druft EPA Wet Weather SNC Policy et seq.)	\$3000/event
Unauthorized discharge	\$1,000/event
Significant permit requirement violations including but not limited to: Lack of or a substantially inadequate SWPPP or SWMP; Substantial failure to implement or maintain IMPPs, 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**	\$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

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Base Penalty Rate

Construction Activity General **Permit**

G. Construction Stormwater General Permit

Failure to obtain coverage under General Permit and is employing appropriate erosion & sediment control practices	< 5 acres (or 5,000 sq ft - 1 acre for east of Hudson in the New York City Watershed (NYCW)) \$1,000/day ≥5 acres (or >1 acre for east of Hudson in the NYCW)
	\$1,500/day
Failure to obtain coverage under General Permit and is employing minimal or no erosion & sediment control practices	< 5 acres (or 5,000 sq ft - 1 acre for east of Hudson in the NYCW) \$1,500/day
	≥5 acres (or >1 acre for east of Hudson in the NYCW) \$3,000/day
Failure to develop and implement a SWPPP	\$3000/event
Has coverage under General Permit, and has significant permit violations including but not limited to: Substantial failure to implement or maintain BMPs	< 5 acres (or 5,000 sq ft - 1 acre for east of Hudson in the NYCW) \$1,000/day
	≥5 acres (or >1 acre for east of Hudson in the NYCW) \$2,500/day

Violation

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 of the violation must be changed to the statutory maximum.
Page 41-

Has coverage under General Permit, and has non-significant permit violations	< 5 acres (or 5,000 sq ft - 1 acre for eas of Hudson in the NYCW) \$500/day ≥ 5 acres (or > 1 acre for east of Hudson in the NYCW) \$1,000/day
Significant unauthorized discharge (refer to draft EPA Wet Weather SNC Policy et seq.)	\$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

⁶ The penalty calculated based on this Base Penalty Rate and the maximum adjustment factors may exceed the stantory limitation (currently \$37,000 per day per violation.) A separate calculation for this violation may be 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. Page 43-

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Multi-Sector General Permit

"Industrial Permit"

"MSGP"

H. Multi-Sector General Permit (MSGP)

Violation	Base Penalty Rat
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 et seq.)	\$3,000/event
Unauthorized discharge	\$1,000/event
Failure to meet significant permit requirements including but not limited to: 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: Duly maximin discharge (each day = 1 violation = 1 event) Duly Average (7 day average = 7 violations * 1 event) Duly Average (30 day average = 30 violations * 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: Daily max/min discharge (each day = 1 violation = 1 event) Daily Average (7 day average = 7 violations** = 1 event) Daily Average (30 day average = 30 violations**) - 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

⁶⁵Exceedence of the 7-day average constitutes seven violations. 7-day average, as defined in 400FERITS.101(a), is "the arithmetic mean of pollutant parameter values of samples collected in a period of 7 consecutive days."

[&]quot;Exceedence 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 40CFR[33,10](b), is "the arithmetic mean of pollutant parameter values of samples collected in a period of 30 consecutive days."

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ailure to submit required report (including failure to respond to an information	\$500/month
equest)	\$500/event
Failure to retain records as required	\$5,000/event
Earling to allow inspection/sampling by the Department	\$10,000/report
Falsifying information on DEC submittat ⁴² 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	\$100/day
SPDES Permit* FCL Article 17 violations not related to permit	\$250/day

⁴⁰The 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 exceed the statutory limitation, the penalty assessed for this violation must be changed to the statutory maximum.

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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.	

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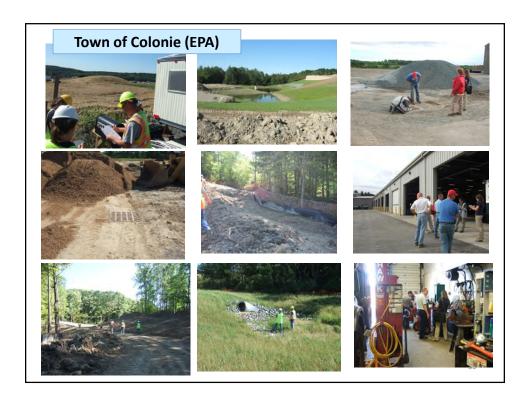
EPA Audits Local MS4 Permit Compliance

(Coalition members)

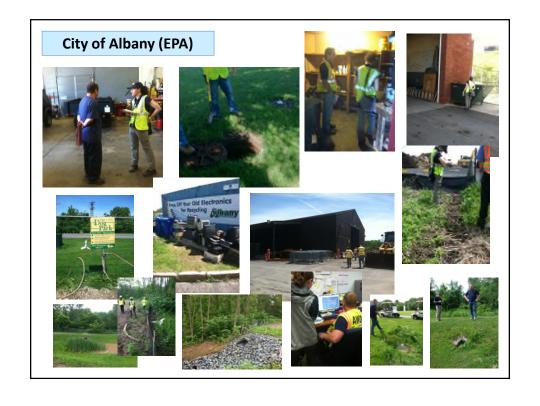
Town of Colonie: June 3-5, 2013 City of Albany: Sept 3-5, 2014 University at Albany-SUNY Uptown: March 19, 2015

Recent NYSDEC Audits (1 day)

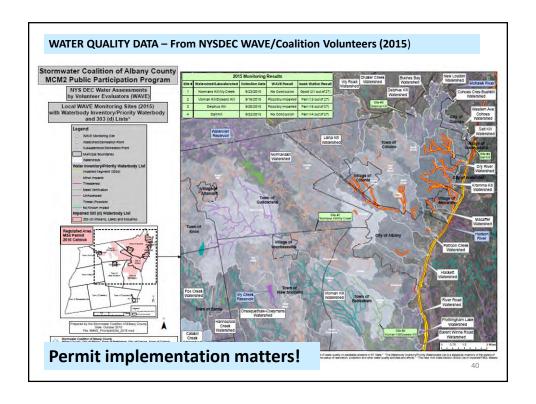
V/Menands (12/6/2012); T/New Scotland (2/11/2014); C/Cohoes (7/16/2014); V/Colonie (1/21/2015)











Earth Water Supply

97% salt
2.4% glaciers/ice caps
~.6% unavailable
~003% potable and drinkable

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Questions?