Clean Water Act Basics

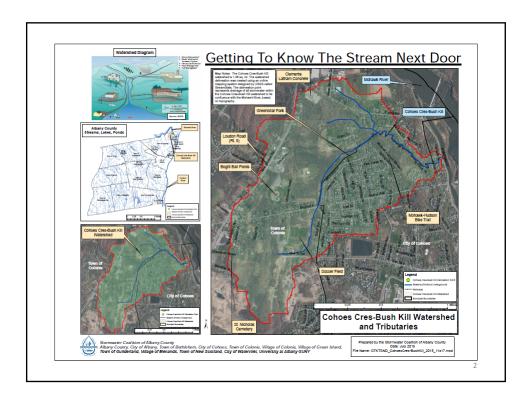
City of Cohoes February 9, 2016 Common Council Workshop

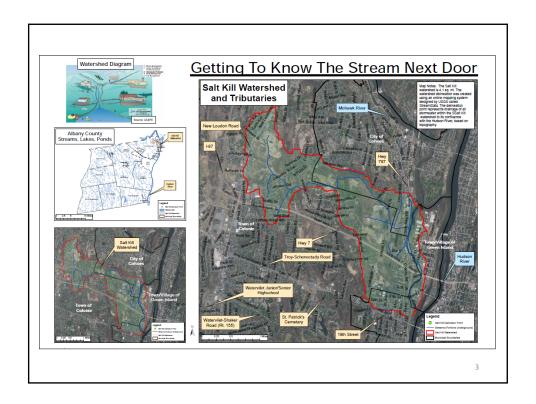


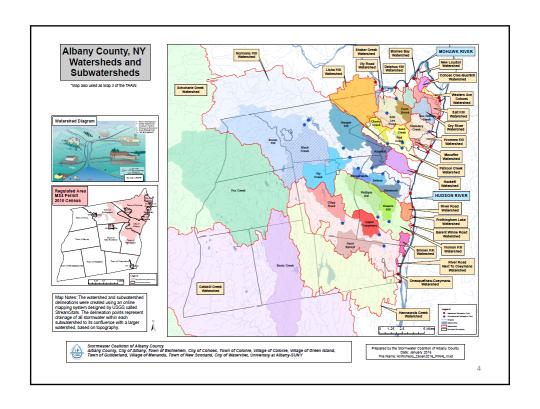
Nancy Heinzen Coordinator-Director 112 State Street, Room 720 518-447-5645

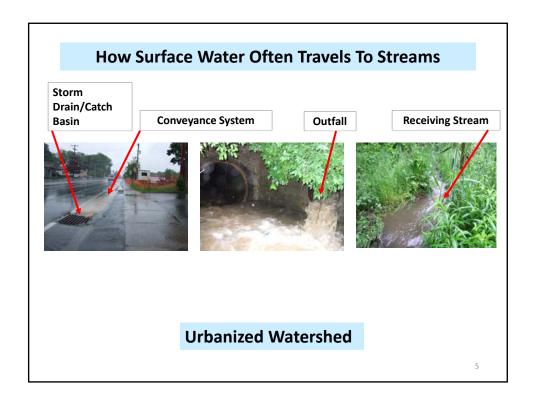
Stormwater Coalition of Albany County Education, Participation, Compliance

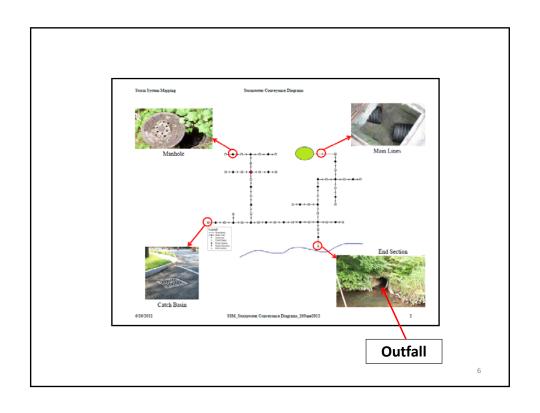
Albany County; City of Albany; Town of Bethlehem; City of Cohoes; Town of Colonie; Village of Colonie; Village of Green Island; Town of Guilderland; Village of Menands; Town of New Scotland; City of Watervliet; University at Albany -SUNY











Pollutants and land use....

...a close look at a watershed.

7

Where located?

Bacteria & viruses

Broken sanitary lines, failing septics

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

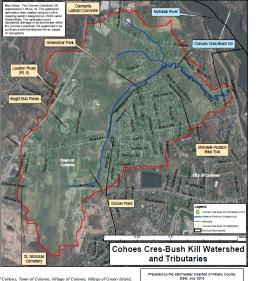
Metals

Lead, cadmium, zinc, nickel

Pesticides & herbicides

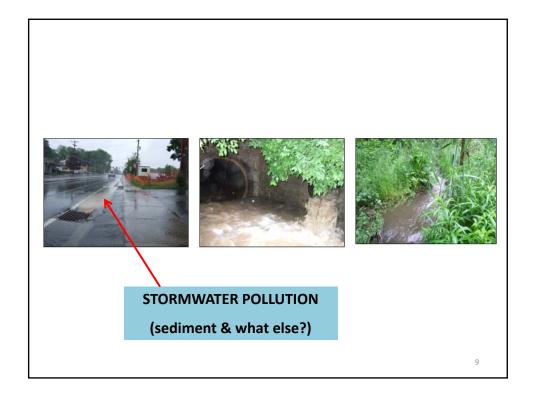
Oil and grease

Getting To Know The Stream Next Door



Cohoes, Town of Colonie, Village of Colonie, Village of Green Island, tland, City of Watervillet, University at Albany-SUNY

Date: July 2015
File Name: GTKTSND_CohoesCres-BushKill_2015_11x17.mxi



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

EPA (Federal) authorized NYSDEC (State) to administer the Clean Water Act permit program

SPDES Permits (NYSDEC)

State Pollutant Discharge Elimination System Permits

Federal and State Clean Water Act laws
Both EPA and NYSDEC can take regulatory action (fines, etc.)

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EPA Audit

Town of Colonie MS4 Permit

(NYS SPDES Permit) September 3, 4, 5, 2013



"Waters of the United States"

Classify Streams
"Best Use"

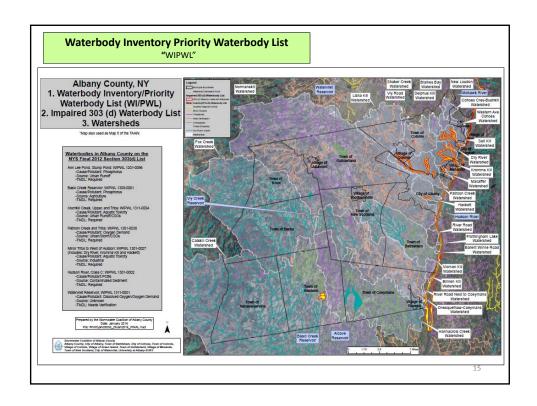
Waterbody Inventory-Priority Waterbody List "WIPWL"

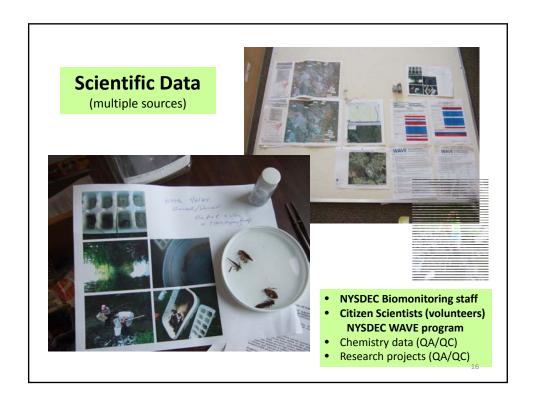
If a priority waterbody, 303d listing possible → TMDL

Scientific data to back up listing

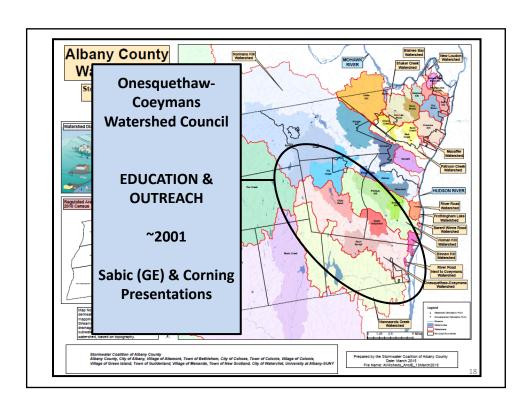
13

Classify Streams "Best Use" Albany County, NY "Best Use" Waterbody Classification (Streams, Reservoirs, Lakes, Ponds, etc...) Vago issue a value if no town Waterbody Classification A Original Bondaires Waterbody Classification A Princing Water ART) Divining WaterTrout Spanning Habitat B Coreal Revision (Swimming) BIT) Counted Revision (Swimming) CT) Non Contact Activities Trout Habitat CT) Non Contact Activities Trout shabita CT) Non Contact Activities Trout shabitat CT) Non Conta





"SPDES Permits, huh?"



SPDES Permits = permission to discharge into surface water, BUT follow the "rules".

"Rules" = permit requirements

Unlawful to discharge, unless permitted.

			,	ALBANY COUNTY	SPDES PERMITS (19	80 and 2011)		
Categories		INDIVII	DUAL		GENERAL			
			SSO	cso	CAFO	MS4	Construction Activity	Multi-Sector (Industrial)
Description	Factories; Sewage 1	Freatment 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	Storm	water	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
# 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;	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 as described in the Permit
ounty or Local lunicipality nforcement ction and Fines	MS4 will take enforcement in the areas under MS4 authority. NA authority.					NA		
conservation aw	The enforcement action take depends on the violation. The procedure for enforcement is described in the NYSDEC TOSS 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 chiministrative 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)							
ederal Clean /ater Act- nforcement ction and Fines	Depends on violation and EPA's enforcement procedures for a given program. Penalties are not calculated until compliance is achieved.							

Regulatory outfalls... (Point of discharge)

- located in the field \rightarrow match to a particular type of SPDES permit
- can be found above ground, edge of water body, under water, discharge point to another municipality
- associated with distinct system infrastructure (wastewater-sanitary, wastewater-industrial, combined sanitary storm, storm only)
- allowable discharges often depends on status of receiving water
- SPDES Permit anxiety! (For MS4 Permittees 2003-) [>3000 outfalls-all MS4s; MS4s yoked w/ Construction Activity Permit compliance; municipal owned facilities-MSGP coverage?; audit threats; constant change]



Individual Permit

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

Individual Permit

COMBINED SEWER OVERFLOW OUTFALL
CSO Permit

General Permit

STORMWATER OUTFALL MS4-Municipal Separated Storm Sewer System Permit

General Permit

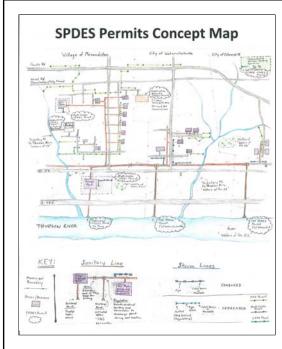
STORMWATER OUTFALL



General Permit

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

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STORMWATER OUTFALL MS4-Municipal Separated Storm Sewer System Permit



General Permit

STORMWATER OUTFALL Construction Activity Permit



General Permit

STORMWATER OUTFALL

Potential Liability

SPDES Permittees face legal action and penalties for failure to implement **Permit requirements**



- Action to recover damages from private property losses;
- Citizen suits under Section 505 of the Federal Clean Water Act.
- Fines: \$37,500 per violation per day

NYSDEC Division of Water Technical and Operational Guidance Series (1.4.2) COMPLIANCE & ENFORCEMENT OF SPDES PERMITS Dated: June 24, 2010

New York State Department of Environmental Conservation Division of Water 023 Broadway, Albany, New York. 12233-3596 Phone: (518) 042177 F.AX; (518) 042-4882



MEMORANDUM

This document has been developed to provide Department of Environmental Conservation stuff with guidance on how no ensure compliance with situatory and regulatory requirements, including case los interpretations, and to provide consistent treatment of similar situations. This document may also be interpretations, and to provide consistent treatment of similar situations. This document may also be analyze on 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 10(2)(2)(4)(4). Particumstance, and of eight herein prevents stiff from wriging from this guidance at the specific facts and circumstances may distant, provided stuff a actions comply with applicable stantary and regulatory requirements. This document does not create any editorsal referred to the stantary and regulatory requirements. This document does not create any editorsals rights for the

JUN 2 4 2010

SUBJECT: Division of Water Technical and Operational Guidance Series (1.4.2)
COMPLIANCE AND ENFORCEMENT OF SPDES PERMITS
(Originators: Meredith Streeter/Karen Baker)

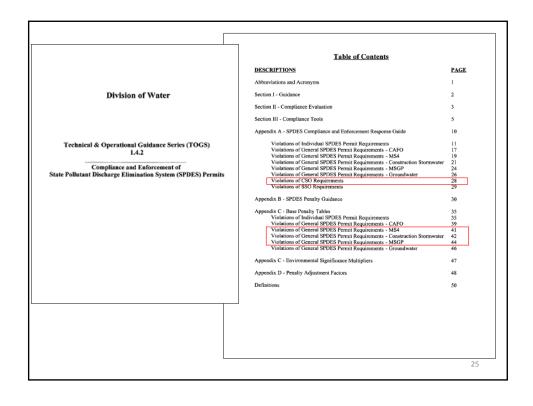
The goal of this guidance is to ensure consistent statewide understanding and implementation of the SPDES compliance and enforcement program in order to protect public health and the intended best use of the waters of the state. This guidance supercedes Devision of Water Technical and Operational Guidance Series (1.4.2) Compliance and Enforcement of SPDES Termin, 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 draft 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 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**	\$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

⁴⁷ 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.
Page 41.

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	< 5 acres (or 5,000 sq ft - 1 acre for eas of Hudson in the New York City Watershed (NYCW)) \$1,000/day >5 acres (or > 1 acr
	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 ear of Hudson in the NYCW) \$1,500/day
	≥5 acres (or >1 acr 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 ear of Hudson in the NYCW) \$1,000/day
	≥5 acres (or >1 acr for east of Hudsor in the NYCW) \$2,500/day

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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 acr 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

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 cease 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.

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 or maintain BMPs;	\$3,000/event
Exceeding interim or final effluent limits for non-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	\$1,000/event \$1,500/event \$2,000/event
Average	32,000 even
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

"Exceedence 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."

⁶Exceedence 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)

5500/month
Failure to retain records as required

55,000/event

⁴⁷The penalty calculated based on this Base Fenalty Rate and the maximum adjustment factors may exceed the statutory limitation (currently \$37,500 per day per violation.) A separate calculation for this exceed production using the case specific adjustment factors should be performed fast. If the assessed penalty exceeds the statutory limitation, the penalty assessed for this violation must be changed to the statutory maximum.

Page 45.

Combined Sewer Overflow Requirements

Multiple significant unauthorized discharges or multiple significant overflows (refer to draft EPA Wet Weather SNC Policy et seq.) Consult with DEC law enforcement or legal to assess potential criminal prosecution or civil enforcement. All (permitted and unpermitted outfalls) Substantial failure to implement any of the nine minimum controls (NMCs) as required in an administrative or judicial order or in a permit. i) NOV ii) More than 60 days overdue 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. NOV Failure to submit an approvable Long Term Control Plan (LTCP), as required in an administrative order, judicial decree, or in a i) 30 days overdue i) NOV ii) More than 60 days overdue 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 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 All Consult with DEC law enforcement or legal to assess potential criminal prosecution or civil enforcement. Reporting false information

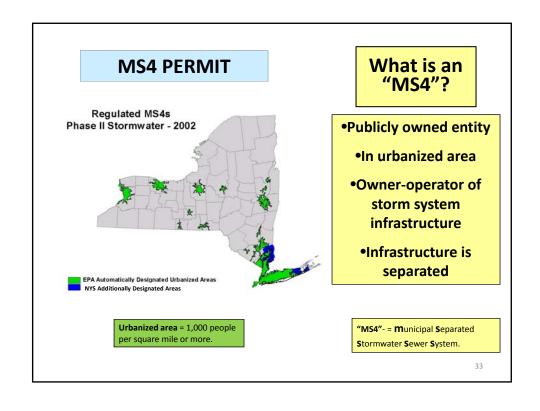
N. Violations of Combined Sewer Overflow (CSO) Requirements

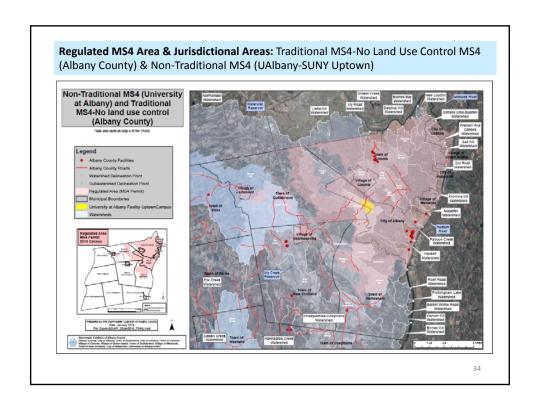
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MS4 Permit detour?

(Time permitting....)





MS4 Permit - The "Big Picture"

[Minimum Control Measures & TOGS "permit milestones"]

- Where are outfalls located? Related infrastructure? Type of outfall (intermunicipal? direct discharge to stream?) # of outfalls to inventory? Evidence of pollution? (MCM 3, MCM 6)
- 2. If pollution, why? Human behavior? Cross connections? (MCM 1, 2, 3)
- 3. How to change those behaviors? Public education & participation (MCM 1, 2)
- 4. If behaviors don't change, then what? (Local Laws: MCM 3, 4, 5)
- Sediment key pollutant, muddies waters, transports pollutants. Mandated MS4 oversight of Construction Activity Permit (design of sw practices, construction erosion-sediment control, maintenance of post construction practices) (MCM4, 5)
- 6. Municipalities/MS4s lead by example
 - -Oversight of MS4 owned facilities (MCM 6)
 - Oversight of construction activity (MCM 4, 5). SWPPP Review & Acceptance During construction-Erosion & Sediment Control ("NYSDEC Blue Book") Post Construction Practices (NYSDEC Stormwater Mgmt Design Manual)
- 7. Record-keeping, standard operating procedures, inter-departmental communication, staff training...develop and maintain a stormwater program (MCM 1-6)

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MS4 Permit

(Minimum Control Measures-MCMs)

- MCM 1 Public Education and Outreach
- MCM 2 Public Involvement & Participation
- MCM 3 Illicit Discharge Detection and Elimination
- MCM 4 Construction Site Runoff Control
- MCM 5 Post Construction Stormwater Management
- MCM 6 Pollution Prevention & Good Housekeeping for Municipal Operations

EPA Audits Local MS4 Permit Compliance

(Coalition members)

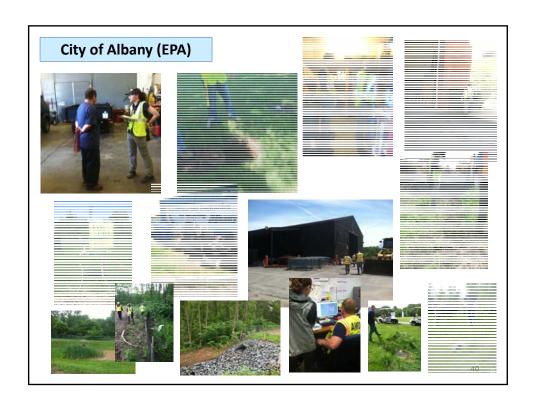
Town of Colonie: June 3-5, 2013 City of Albany: Sept 3-5, 2014 University at Albany-SUNY Uptown: March 19, 2015

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)







University at Albany-Uptown (EPA)













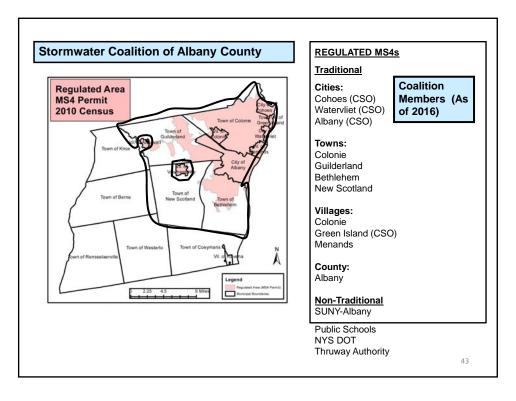






Stormwater Coalition of Albany County detour?

(Time permitting....)



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→ so, share services; clearinghouse; joint reports, mapping, administration, training, apply for, implement, and manage grants
- IMA participants—original co-signatories, same MS4s involved with 2 NYSDEC grants (2005 to 2009, had pre-existing history of working together); open to non-MS4s
- 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; 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

Why care?

Earth Water Supply

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