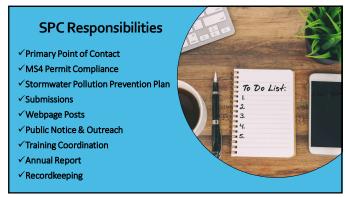


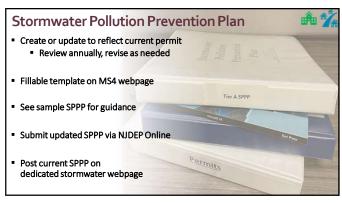
SPC Responsibilities & Resources
 Permit Conditions
 Agenda • Mapping & NJDEP Online Tips
 Funding Resources
 Q & A

2

# Presentation Symbols Tier A Public Complex Highway Agency







# Fillable Templates & Sample SPPPs

Visit our MS4 Webpage to access our SPPP fillable templates and samples:





Stormwater
Pollution
Prevention
Plan
Som Tomake

Creek County NJG0123456 Annual Review Date: 27 Ma Stormwater Program Coordinator:

7



8



# Dedicated Stormwater Webpage

### Tier A:



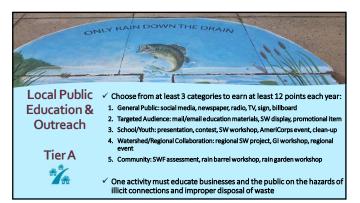
# Public Complex:



- ✓ Stormwater Pollution Prevention Plan
- ✓ Municipal Stormwater Management Plan
- ✓ Ordinances
- ✓ MS4 Infrastructure Map
- ✓ Watershed Improvement Plan meeting information and documents

- ✓ Stormwater Pollution Prevention Plan
- ✓ Regulatory Mechanisms
- ✓ MS4 Infrastructure Map
- ✓ Watershed Improvement Plan meeting information and documents

10



11







14

# Post Construction Stormwater Management in New Development and Redevelopment

- Municipal Stormwater Management Plan (MSWMP): Re-examine with Municipal Master Plan at least every 10 years
  - Submit to the County Planning Board for approval upon each adoption or amendment, including re-examinations with or without changes
  - Submit approved MSWMP via NJDEP Online
- Stormwater Control Ordinance (SCO):
  - Know how your town defines major development
  - Submit to the County Planning Board for approval upon each adoption or amendment
  - Submit approved SCO via NJDEP Online
  - Follow Pinelands Commission model SCO in Pinelands-designated areas

# Post Construction Stormwater Management in New Development and Redevelopment

- Optional Mitigation Plans to allow variances shall:
  - Satisfy N.J.A.C. 7:8-4.2(c)11 and 4.6
  - Identify measures necessary to offset the deficit created by granting the variance
  - Submit approved variances to NJDEP within 30 days via NJDEP Online

Tier A - Include in MSWMP and SCO, and submit to County Planning Board

Public Complex - Mitigation projects may be in different drainage areas within the same HUC14

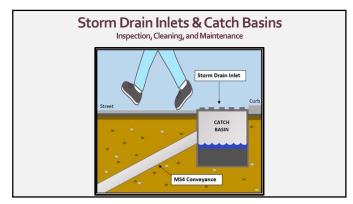
16



17

Ordinances & Regulatory Mechanisms		Tier A 🐾	Public Complex 📤
•	Pet Waste	<b>/</b>	<b>\</b>
<b>®</b>	Wildlife Feeding	~	<b>~</b>
	Litter Control	<b>~</b>	<b>~</b>
	Improper Disposal of Waste	<b>/</b>	<b>/</b>
	Yard Waste	<b>/</b>	<b>~</b>
	Private SDI Retrofitting	<b>/</b>	
	Illicit Connections	<b>/</b>	
	Privately-Owned Salt Storage	~	
( <b>i</b> )	Tree Removal/Replacement	<b>/</b>	









# **Storm Drain Inlets & Catch Basins**

Inspection, Cleaning, and Maintenance

### Tier A:

- Storm Drain Inlets
  - Inspect ALL every year
  - Define cleaning and maintenance conditions to ensure proper operation
- Catch Basins
  - Inspect 20% of the total every year on rotation
  - Define cleaning and maintenance conditions to ensure proper operation

### **Public Complex:**



- Inspect ALL every year
- Define cleaning and maintenance conditions to ensure proper operation

- Catch Basins
  - Inspect ALL every year
  - Define cleaning and maintenance conditions to ensure proper operation

23

# **Outfall Inspections**

### Tier A

- Conduct dry weather inspections of all open & piped MS4 outfalls
  - 20% every year on rotation
  - Stream scouring
  - Illicit discharges
- Inspect new and newly identified outfalls within 30 days
- Optional to attach Outfall Inspection Form to Annual Report

### **Public Complex**

- Conduct dry weather inspections of all open & piped MS4 outfalls
  - Inspect ALL each year
  - Stream scouring
- Illicit discharges
- Inspect new and newly identified outfalls within 30 days
- Must attach Outfall Inspection Forms to Annual Report







# Illicit Discharge Detection and Elimination

- ✓ Investigate dry weather flows within 30 days
- ✓ Remediate within 12 months OR request an extension from the Department by month 11
- Attach Illicit Connection Inspection Report Form to Annual Report



26

# Outfall Observations

- Ongoing interest in condition of MS4s from Watershed groups and citizens
- Very few illicit discharges and stream scouring cases have been reported to NJDEP
- Public is now able to report outfall damage, stream scouring, and illicit discharges to NJDEP

	only if an illicit discharge or st. rvation and send to <u>stormwa</u>		
	ECTION 1: Basic Information		
Date of Observation://	Time:	_	
Completed by:		_	
GPS Coordinates (in Decimal Degrees): L	stitude =	Longitude =	
Municipality	Cou	County:	
Receiving Waterbody:	0.00		
Outfell type:		□ Swale □ Other:	
Diameter of outfall			
		9-12 D 12-18 D Greater train 18	
	SECTION 2: Stream Scouring		
is there stream scouring present at or ar	ound the outfall?	□YES* □NO	
"If YES, describe the scouring, including y	where the scouring is occurring	ne relative to the outfall:	
Bank stability around outfall:		Good □ Fair □ Needs Stabilizatio	
	SECTION 3: Illicit Discharge		
Has it rained or snowed in the last 72 ho	urs?	□YES □NO	
is there a flow from the outfall?		DYES* DN	
*If YES, complete the table below:			
Odor	□None	☐ Rancid/Sour	
65,00%	□ Sewage	☐ Sulfur/Rotten Eggs	
	☐ Petroleum/Gas	□ Other:	
Color	□ None	☐ Yellow	
100 m/1000	□ Brown	□ Red	
	□ Grey	☐ Other:	
Turbidity	□ Clear	☐ Opeque	
	Cloudy.		
Floatable Matter (Not including litter)	□ None	☐ Unnatural Oil/Petroleum Sheen	
	Sewage/Sanitary Product	s 🗆 Other:	
	Chrystural Suds/Fram		



# MS4 Conveyance Systems

- Inventory of stormwater conveyance features, e.g., ditches and pipes
- Define inspection frequency, and cleaning and maintenance conditions
- Guidance available at https://dep.nj.gov/stormwater



28



# Other Stormwater Infrastructure Inspections

- For MS4 infrastructure not covered by another permit condition, e.g., SWM basins and MTDs
- ✓ Inspect, clean, and maintain
  - Follow approved maintenance plans
  - If no plan exists, create one following NJDEP online guidance
  - If no plan or Department guidance exists, inspect at least 4x/year and after 1" rain



29

# Private Stormwater Facilities \*\*\*

- ✓ Ensure adequate long-term cleaning, operation, and maintenance of stormwater facilities <u>not</u> owned or operated by the municipality

  - per acteur by the municipality

    Commercial property owners, developers, and HOAs may be assigned O&M responsibilities

    Individual homeowners CANNOT be assigned O&M responsibilities for SWF on their properties if they were designed for stormwater management on multiple properties
- ✓ Inspections must be done at least annually and follow maintenance plans
  - Some towns use certification forms or license/fee programs
- Maintenance includes removal of materials that could impede proper function and cause flooding

  Examples: sediment, trash, leaves, branches, excess growth









# Street Sweeping

Tier A

√ Triannual Sweeping

- Every 4 months, sweep segments of municipal roads with storm drain inlets that drain to surface water
- ✓ Annual Sweeping
  - Every year, sweep segments of municipal roads that do NOT have storm drain inlets but drain to surface water directly or to a stormwater conveyance

34

# Street Sweeping – Public Complex

Monthly – Sweep paved areas with storm drain inlets that drain to surface water
 Include parking lots, driveways, and streets on <u>your property</u> that do not belong to the municipality, county, or state





35

# Herbicide Application Management

- ✓ Prevent herbicides from entering waterways
  - Spray far from storm drain inlets
- ✓ Prevent erosion from de-vegetation
  - Do not spray on steep slopes
- Only apply along where unsafe or impossible to mow
  - Along curb lines
  - Within a 2' radius around structures





# Excess De-Icing Material Management

- Remove excess piles deposited during spreading operations on roads and parking areas
- Remove within 72 hours after storm events, conditions permitting



37

# Roadside Vegetative Waste Management

- Proper management of materials generated by your staff or contractors (as opposed to residents)
- ✓ Keep materials far away from storm drains and swales
  - Tree trimmings
  - Grass clippings
- Leaves



38



# Roadside Erosion Control

- ✓ Inspect roadways for stability and sedimentation
  - Check shoulders, embankments, swales
  - Include roads with and without curbs
  - Can be done while doing other inspections
- Repair problems within 90 days of discovery or contact MS4 Case Manager if more time is needed

# Illicit Connections Public Complex

- Ensure there are no illicit discharges going into your MS4 system
- ✓ Inspect outfalls and eliminate any observed illicit discharges



40

# Healthy trees removed from the property must be replaced within 1 year Remove 1 street tree 2.5"- 6" DBH, replace with 1 tree at least 1.5" DBH Remove 1 tree 6"-12.99" DBH, replace with 1 tree at least 1.5" DBH Remove 1 tree 13"-22.99" DBH, replace with 2 trees at least 1.5" DBH Remove 1 tree 33" + DBH, replace with 3 trees at least 1.5" DBH Remove 1 tree 33" + DBH, replace with 4 trees at least 1.5" DBH Remove 1 tree 33" + DBH, replace with 4 trees at least 1.5" DBH Remove 1 tree 33" + DBH, replace with 4 trees at least 1.5" DBH Trees tree farms, nurseries, fruit orchards, and garden centers Trees that are part of a DEP or EPA-approved environmental cleanup or habitat enhancement plan Trees involving approved game management practices

41





# Maintenance Yards & Ancillary Operations Site Inspections – Log monthly inspections; note conditions and necessary improvements Inventory List – List materials and machinery exposed to stormwater Container Labels – Keep labels legible, clean and visible Spill Kits – Dry method only; keep near liquid transfer areas, protected from rainfall; properly dispose of used absorbent materials Bulk Liquids – Use secondary containment around aboveground tanks (spill containment dikes are preferable to double-walled tanks)

44

# Maintenance Yards & Ancillary Operations Fueling and Other Bulk Liquid Transfers – Use drip pans, block storm drains, post signage, and repair/replace broken equipment Discharge from Secondary Containment – Properly dispose of contaminated stormwater in collection area Vehicle/Equipment Maintenance and Repair – Work indoors when possible; follow BMPs if work must be done outdoors Wash Wastewater Containment – Check underground tanks and pipes for leaks every 3 years; inspect visible portions before use; empty tank before 95% full; stop use if repairs are needed; report spills to NJDEP Hotline; properly dispose of pump-out water; certify annually by NJ licensed engineer

# Maintenance Yards & Ancillary Operations Salt/Granular De-icing Materials – Store in permanent structure & minimize exposure to rain, snow, and SW run-on; sweep after loading/unloading Aggregate Material, Wood Chips, and Finished Leaf Compost – Store 50' from water bodies, inlets, ditches and conveyance channels; use grading, berms, etc. Cold Patch Asphalt – Store indoors or contained & covered on impervious surface Street Sweepings & Storm Sewer Clean-outs – Store up to 6 months in leak-proof container or properly contained & covered on impervious surface

46

# Maintenance Yards & Ancillary Operations

- Construction and Demolition Waste, Wood Waste, and Yard Trimmings Keep 50' from MS4; use grading, berms, etc. to minimize SW run-on and pollutant run-off; store up to 6 months
- Scrap Tires Must be stored in a covered container or enclosure
- Inoperable Vehicles or Equipment Check tents, covers, and drip pans during monthly site inspections
- Refuse Containers & Dumpsters Must be covered (N/A for bulky items that do not contain putrescible waste, e.g., furniture)

47







# Stormwater Program Coordinator Training

- SPCs must attend NJDEP training on their responsibilities to implement the SW program
- Notify the Department within 30 days of turnover with new SPC name, title, and contact information
- New SPCs may view the recorded sessions posted on the NJDEP MS4 website but must attend the next available live session

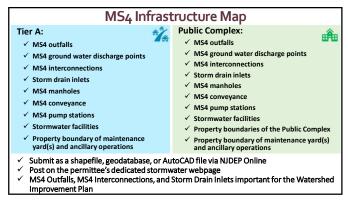
50

### Annual Employee Training Train employees/contractors on the topics that relate to their stormwater-related job duties Provide in-person or virtual group sessions, field training, and/or instructional videos as appropriate **Public Complex:** Stormwater Pollution Prevention Plan ✓ Stormwater Pollution Prevention Plan Construction Site Stormwater Runoff ✓ Construction Site Stormwater Runoff Post-Construction Stormwater Management in New/Redevelopment Post-Construction Stormwater Management in New/Redevelopment Community-wide Ordinances Community-wide Measures SW Facilities Maintenance ✓ Regulatory Mechanisms **Good Housekeeping** Maintenance Yards/Ancillary Operations √ SW Facilities Maintenance MS4 Mapping √ Maintenance Yards/Ancillary Operations Outfall Stream Scouring Illicit Discharge Detection and Elimination Watershed Improvement Plan √ Watershed Improvement Plan

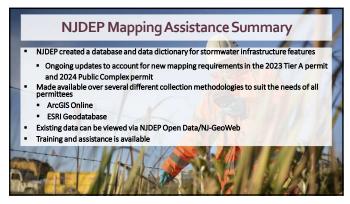
# Stormwater Management Design Reviewer Training Stormwater Management Design Review Course Stormwater Management design reviewers must attend NJDEP training every 5 years for post-construction SWM program requirements Check https://dep.nl.sov/stormwater/stormwater-management-design-review-course/ to make sure your review engineers are up to date with training If not, email stormwatermanagement@dep.nl.gov for registration information about the next available course Stormwater Management Rule Amendment Sessions The Department will notify SPCs and engineers when there is reviewer training for SWM rule amendments

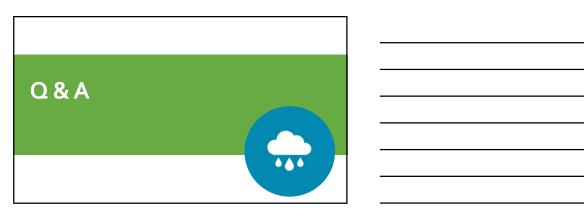
52

# Municipal Board and Governing Body Member Training Members of planning boards, zoning boards, and governing bodies who review/approve major development project applications Within 6 months, new members view the following: Asking the Right Questions video at https://nj.gov/dep/stormwater/asking. the right\_questions.html Each term thereafter, view one of the following videos available at https://dep.nj.gov/stormwater/stormwater-training/#reviewers-training SWM Rules Applicability SWM Rules Planning SWM Rules Design & Performance SWM Rules Safety SWM through the General MS4 Permit

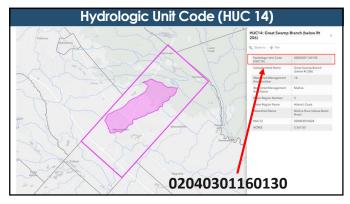


Required Attributes						
Outfalls	Groundwater Discharge Points	Interconnections	Storm Drain Inlets	Manholes		
✓ Type ✓ Receiving surface water name	✓ Type	✓ Type ✓ Into/from entity	✓ Type ✓ Catch basin present ✓ Label present ✓ Retrofitted	✓ NONE		
Conveyance	Pump Stations	Stormwater Facilities	Property Boundaries of Maintenance	Property Boundaries of Public Complex		
✓ Type ✓ Direction of flow	✓ NONE	✓ Type	Yards and Other Ancillary Operations ✓ Type of property	✓ NONE		









59

### Surface Water Quality in New Jersey **Water Quality Impairments** ✓Benzo(a) pyrene (PAHs) ✓PCBs in Fish Tissue √ Cadmium √pH ✓Total Phosphorus √ Chromium ✓Copper ✓Temperature ✓ Dissolved Oxygen (DO) ✓ Total Dissolved Solids (TDS) ✓ Enterococcus ✓Total Suspended Solids ✓E. Coli (TSS) **√**Lead ✓ Turbidity

# Surface Water Quality in New Jersey

## **Total Maximum Daily Load (TMDLs)**

- ✓ Fecal Coliform
- √Total Phosphorus
- √ Nickel
- ✓ Total Suspended Solids (TSS)
- ✓ Polychlorinated Biphenyls (PCBs)
- ✓ Volatile Organic Compounds (VOCs)
- ✓ Temperature
- √Total Coliform



61

# Pollutant Parameters Related to Stormwater

- ✓ Fecal Coliform, Total Coliform, Enterococcus,
   ✓ Nickel, Cadmium, Chromium, & Benzo(a)

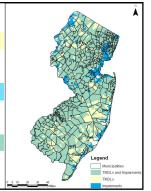
   <u>8 E. coli</u> wildlife/pet waste, sewer leaks
   pyrene (PAHs) vehicle exhaust, asphalt
  - pyrene (PAHs) vehicle exhaust, asphalt
- ✓ <u>Total Phosphorus, Dissolved Oxygen (DO)</u>, <u>✓ Polychlorinated biphenyls (PCBs)</u> vehicles, Nitrate, & pH – fertilizers, leaf litter and other building materials vegetative waste
- Temperature, Total Dissolved Solids (TDS), Total Suspended Solids (TSS), & Turbidity runoff from impervious surfaces, roadside erosion, road salt, leaf litter and other vegetative waste
- √ Volatile Organic Compounds (VOCs) gasoline, paint, solvents
- $\checkmark$  <u>Lead & Copper</u> old deteriorating pipes

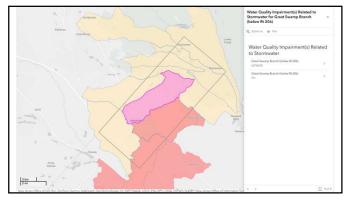
62

**Total Maximum Daily Load (TMDLs)** 

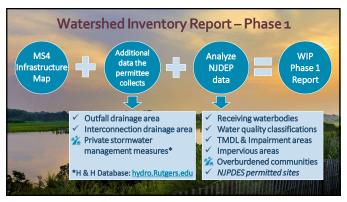
**Water Quality Impairments** 

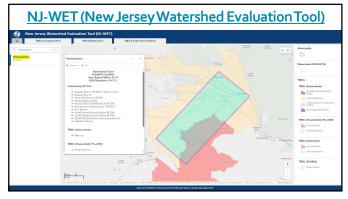
**TMDLs** and Impairments













# Regional Collaboration The Department fully supports municipalities and other MS4 permittees collaborating regionally to prepare their WIPs Some potential partnership ideas: 2 or more MS4s that discharge to the same or adjacent waterbodies or HUC 14s that share a TMDL or impairment Managed by a watershed group or similar organization Managed by an existing regional authority

# Watershed Assessment Report – Phase 2

- Identify potential projects, estimate reduction of pollutants, summarize feedback from public sessions, establish funding needs, and tentative implementation schedule
- Stakeholder by soliciting input from residents, businesses, neighboring towns, and other potential dischargers
- Post on designated website & announce public comment period



70

# Watershed Improvement Plan Report – Phase 3

 Summarize proposed projects, comments received, costs, coordination with other programs, and schedule



71

# Additional & Optional Measures Additional Measures – The Department may assign additional steps the permittee must take to address TMDLs, regional stormwater management plans, or Water Quality Management Plans Optional Measures – Municipalities may adopt and enforce other measures beyond the scope of the MS4 permit



# **Annual Report & Certification**

- Access Annual Report via the NJDEP Online Portal
- Due by May 1<sup>st</sup> each year

🏂 Tier A - Attach the Supplemental Questionnaire https://dep.nj.gov/njpdes-stormwater/municipal-stormwater-regulation-program/tier-a/#annual-report-and-certification-online-links-and-tutorialsTier A - Attach Illicit Connection Inspection Reports (if applicable)

Public Complex – Attach Outfall Inspection Forms, Stream Scouring Forms, and Illicit Connection Forms

74

# NJDEP Online Tips

- Access Annual Report and attach all required forms
  - Create your own NJDEP Online account you cannot finish a report that another user
  - Contact your Case Manager if you are unable to complete the Annual Report report may be "In Progress" under another user's account
  - Write down your username and password, etc. accounts are managed by NJOIT
- Access Facility Submittal Service (FSS) to submit all required permit documents (maps, SPPPs, WIP documents, etc.)









