



Municipal Separate Storm Sewer System (MS4) Training

Dr. Chris Obropta, P.E. and Dr. Stephen J. Souza



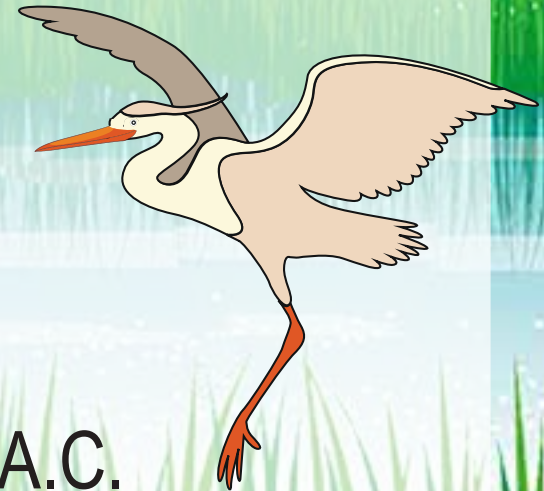
MS4 Permit (Expires 12/31/22)

- Municipal Separate Storm Sewer System (MS4)
- All NJ municipalities have MS4 permits
- General Permit for Tier A, Tier B, Public Complexes, and Highway Agencies
- EPA Requirement enforced by NJDEP



A primary objective of the MS4 stormwater program...

... shall be to implement best management practices and other measures that are designed to **reduce the discharge of pollutants from the permittee's MS4, municipal maintenance yards and other ancillary operations** to the maximum extent practicable pursuant to N.J.A.C. 7:14A-25.6(a)1 and 40 CFR 122.34(a), to protect water quality, and to satisfy the applicable water quality requirements of the Clean Water Act.



Nonpoint Source Pollution

- Oil and grease from cars
- Fertilizers
- Animal waste
- Grass clippings
- Septic systems
- Sewage leaks
- Household cleaning products
- Litter
- Sediment



Stormwater Pollution Prevention Plan (SPPP)

STORMWATER POLLUTION PREVENTION PLAN

NJDES #NJG0151432

Prepared for the
Township of Berkeley
Ocean County, New Jersey
OCTOBER 2020



9 Allen Street
Toms River, NJ 08753
(732) 286-9220

RVE Project No. 1506-T-097



Signature

10/13/20
Date


Alan Dittenhofer, PE, PP, CME

License # 37672

Who Is Responsible?

SPPP Form 1 – SPPP Team Members

All records must be available upon request by NJDEP.

Stormwater Program Coordinator (SPC)	
Print/Type Name and Title	Alan Dittenhofer, P.E, P.P., C.M.E., Township Engineer
Office Phone # and Mail	732-286-9220 alan.dittenhofer@rve.com
Signature/Date	 10/13/20



What Goes into the SPPP?

1. Statewide Basic Requirements (SBRs)
2. Other Control Measures
3. Additional Measures
4. Optional Measures Sediment




Statewide Basic Requirements (SBRs)

1. Public Involvement and Participation (better website)
2. Local Public Education and Outreach
3. Construction Site Stormwater Runoff
4. Post Construction Stormwater Management
5. Pollution Prevention/Good Housekeeping for Municipal Operators
6. MS4 Outfall Pipe Mapping and Illicit Discharge and Scouring Detention and Control



Municipal Stormwater Webpage

- 
- Develop a dedicated stormwater webpage to include all required postings/links
 - HTML template is available from the Department for municipalities to use
 - Materials required to be posted:
 - Stormwater Pollution Prevention Plan (SPPP)
 - Municipal Stormwater Management Plan (MSWMP)
 - Stormwater Control Ordinance (SCO)
 - Community Wide Ordinances
 - MS4 Outfall Map
 - MS4 Infrastructure Map (new posting)
 - Watershed Improvement Plan (new posting)



Which SBRs Might Involve the DPW?

1. Public Involvement and Participation
2. Local Public Education and Outreach
3. Construction Site Stormwater Runoff
4. Post Construction Stormwater Management
5. Pollution Prevention/Good Housekeeping for Municipal Operators
6. MS4 Outfall Pipe Mapping and Illicit Discharge and Scouring Detention and Control

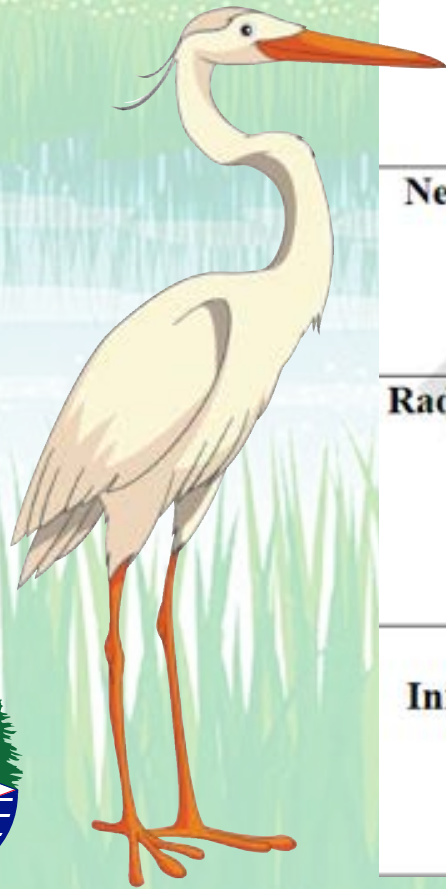


2. Local Public Education and Outreach

(12 Points Needed from three of the 5 categories)



Category 1: General Public Outreach



Activity	Description	Points
Social Media	<p>Post relevant stormwater materials on a municipal social media site, such as a Facebook, Instagram, or Twitter page. This information may include links to other stormwater related resources, including the municipality's stormwater webpage and the NJDEP stormwater website (www.njstormwater.org).</p> <p>*One point awarded for each social media platform used. A maximum of 3 points is allowed.</p>	3*
Newspaper Ad	<p>Use Department created and approved stormwater education materials available on www.cleanwatermj.org to publish an ad in a newspaper or newsletter that serves the municipality.</p> <p>*A maximum of 1 point is allowed.</p>	1*
Radio/Television	<p>Broadcast a stormwater-related radio or television public service announcement from www.cleanwatermj.org on a local radio or municipal public service channel.</p> <p>*One point awarded for each media outlet used. A maximum of 2 points is allowed.</p>	2*
Green Infrastructure Signage	<p>Post signs at municipally owned green infrastructure sites that describe the function and importance of the infrastructure, contact phone number, municipal identification number, and/or website for more information.</p> <p>*New signs receive 0.5 credits per sign. Existing signs that are maintained or upgraded receive 0.25 credits per sign. A maximum of 5 credits is allowed.</p>	5*



Category 1: General Public Outreach_(cont.)

Activity	Description	Points
Billboard/Sign	Post and maintain (for credit in subsequent years) a stormwater-related billboard or sign which can be displayed on a bus, bus stop shelter, recreation field (outfield sign), or other common public location.	2
Mural	Produce and maintain (for credit in subsequent years) the planning and painting of a stormwater pollution themed mural, storm drain art or other artwork at a local downtown/commercial area or other similar public venue.	2
Stormwater Facility Signage	Post signs at municipally owned stormwater management basins or other structural stormwater related facilities that describe the function and importance of the facility, contact phone number, municipal identification number, and/or website for more information. *New signs receive 0.5 credits per sign. Existing signs that are maintained or upgraded receive 0.25 credits per sign. A maximum of 5 credits is allowed.	5*





RAIN GARDEN

“NEW JERSEY’S LARGEST RAIN GARDEN”

**KIWANIS PARK
RAHWAY, NEW JERSEY**

Green Infrastructure Project

Example Rain Garden Plants



Soft Rush
(*Juncus effusus*)



New England Aster
(*Symphyotrichum novae-angliae*)



Red-twig Dogwood
(*Cornus sericea*)



Black-eyed Susan
(*Rudbeckia hirta*)



Red Columbine
(*Aquilegia canadensis*)



Buttonbush
(*Cephalanthus occidentalis*)



This garden is designed to capture stormwater and reduce flooding. Rain gardens keep rainwater from overflowing the sewers. Rain gardens are beautiful, low maintenance, and inexpensive gardens you can install at home.

water.rutgers.edu

JUNE 2015

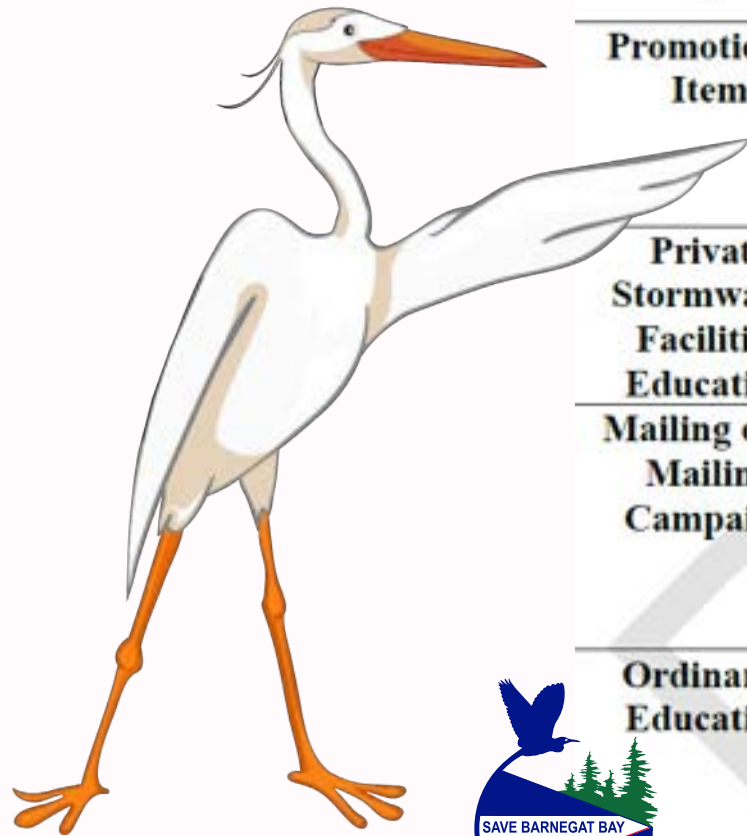


Learn more about the Rahway Rain Garden project at www.tinyurl.com/robinsonsbranch.



Category 3: 40 labels / 3 points

Category 2: Targeted Audiences Outreach



Activity	Description	Points
Stormwater Display	Present a stormwater related display or materials at any municipal event (e.g., Earth Day, town picnic), at the municipal building or other similar public venue.	1
Promotional Item	Distribute an item or items with a stormwater related message (e.g., refrigerator magnets, temporary tattoos, key chains, bookmarks, pet waste bag dispensers, coloring books, and pens or pencils). Municipality must initially have available a minimum number of the items equal to 10% of the municipal population.	2
Private Stormwater Facilities Education	Provide information to all known owners of stormwater facilities not owned or operated by the municipality (i.e., privately owned) highlighting the importance of proper maintenance of stormwater measures. For assistance, see information at www.nj.gov/dep/stormwater/maintenance_guidance.htm .	3
Mailing or e-Mailing Campaign	Distribute any of the Department's educational brochures, tip cards, or a municipally produced equivalent (e.g., community calendar, newsletter, or recycling schedule) via a mailing to every resident and business in the municipality.	2*
*A maximum of 2 points is allowed.		
Ordinance Education	Distribute a letter or e-mail from the mayor or municipal official to every resident and business in the municipality highlighting the requirements and environmental benefits of the Pet Waste, Wildlife Feeding, Litter Control, Improper Disposal of Waste, Containerized Waste/Yard Waste Collection, Private Storm Drain Inlet Retrofitting, Illicit Connection, Tree, and Salt Storage ordinances. Provide a link to the municipal website where subject ordinances are posted.	3



Category 3: School/Youth Education & Activities



Activity	Description	Points
School Presentations	Provide water-related educational presentation(s) and/or activities to local preschool, elementary, middle, and/or high school classes using municipal staff or local partner organizations. Topics could include stormwater, nonpoint source pollution, watersheds, water conservation and water quality. For ideas, see information at www.nj.gov/dep/seeds . *Presentations receive 1 credit per presentation, with a maximum of 5 credits allowed.	5*
Water Education Workshops	Provide water-related professional development workshops for local teachers from a registered NJ Department of Education Professional Development Provider	2
Storm Drain Labeling	Organize a project to label and/or maintain storm drain labels (that are not already precast with a message) with a scout troop, local school district, or faith-based group, or other community youth group for a minimum of 40 labels. This project could also include stenciling over precast labels to improve legibility.	3
Educational Contest for Schools	Organize an educational contest with a local school district or a local community organization serving youth to design a poster, magnet, rain stick, rain barrel or other craft/art object. Contest themes shall have an appropriate stormwater message. Winning entries are to be displayed at publicly accessible locations within the municipality such as at the town hall, library, post office, or school. The winning design should be shown on the municipality's website or social media site, if practical.	3
AmeriCorps Event	Coordinate an event (e.g., volunteer stream monitoring, educational presentations, or stormwater awareness project) through AmeriCorps NJ Watershed Ambassador Program.	4
Clean-up	Sponsor or organize a litter clean up for a scout troop, local school district, faith-based group or other community youth group along a local waterway, public park, stormwater facility, or in an area with storm drains that discharge to a local lake or waterway.	3



2. Local Public Education and Outreach

Labeling Storm Drain Inlets: (Category 3: 40 Labels • 3 Points)



Category 3
School Presentation
(1 point each)



Category 4: Watershed/Regional Collaboration



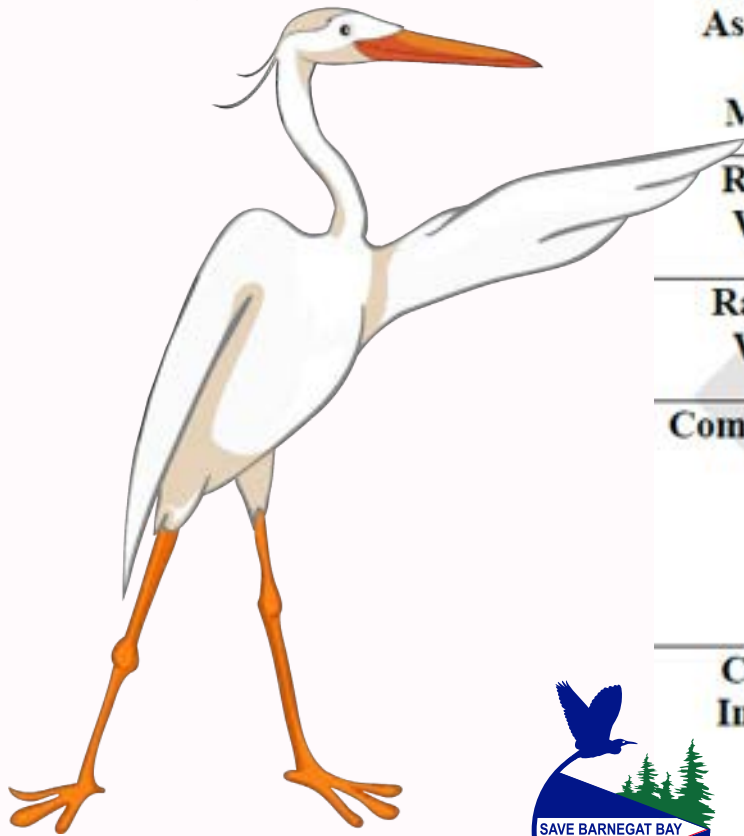
Activity	Description	Points
Regional Stormwater Collaboration	Participate in a regional stormwater, community collaborative or other watershed-based group on a regular basis to discuss impaired waterbodies, TMDLs, regional stormwater related issues, or watershed restoration plans that address those waterbodies. Evaluate, develop, and implement remedies that resolve stormwater-related issues within the affected waterbody or watershed.	3
Green Infrastructure Workshop	Organize or participate in a rain barrel, rain garden or other green infrastructure workshop on a regional or watershed basis. This could be a partnership exercise with a local watershed organization, utility, university, school, youth/faith-based group, and/or other organization.	3
Community Activity	Organize or participate in the organization of a regional or watershed-based event to carry out stormwater activities such as stormwater facility maintenance or litter clean-up. The municipality may identify and enter into a partnership agreement with a local group such as a watershed organization, utility, university, school, youth/faith-based group, and/or other organization to carry out these activities.	3



Category 4: Green Infrastructure Workshop



Category 5: Community Involvement Activities



Activity	Description	Points
Volunteer Stormwater Assessment or Stream Monitoring	Establish a volunteer stormwater facility assessment (inspection, inventory and/or mapping) or stream monitoring program for a waterbody within the municipality to gauge the health of the waterway through chemical, biological or visual monitoring protocols. Contact NJDEP's AmeriCorps NJ Watershed Ambassador Program or review USEPA National Directory of Volunteer Monitoring Programs.	3
Rain Barrel Workshop	Organize or participate in a rain barrel workshop. This could be a partnership exercise with a local watershed organization, university, school, youth/faith-based group, and/or another nonprofit.	3
Rain Garden Workshop	Organize or participate in a rain garden training or installation workshop. This could be a partnership exercise with a local watershed organization, university, school, youth/faith-based group, and/or another nonprofit.	3
Community Event	Organize or participate in the organization of a community event to carry out stormwater activities such as stormwater measure maintenance or a stream buffer restoration. The municipality may identify and enter into a partnership agreement with a local group such as a watershed organization, university, utility, school, youth/faith-based group, and/or other nonprofit to carry out these activities.	3
Community Involvement	Organize a project with a local organization to create and post signs at either green and/or gray stormwater infrastructure sites or facilities that describe the function and importance of the facility, contact phone number, municipal identification number, and/or website for more information.	5*

*Signs receive 0.5 credits per sign. A maximum of 5 credits is allowed.



Category 5: Rain Barrel Workshop



3 Points



4. Post Construction Stormwater Management



Enforcement of the Municipal Stormwater Control Ordinances:

- Operation and maintenance stage
 - Ensure stormwater practices are being inspected
 - Possibly conduct inspections
 - Carry out enforcement actions
 - Inspection and maintenance checklist



5. Pollution Prevention/Good Housekeeping for Municipal Operators

Community Wide Ordinances

Pre-existing: Pet Waste, Wildlife Feeding, Litter Control, Improper Disposal of Waste, Yard Waste, and Private Storm Drain Inlet Retrofitting

New: Private Salt Storage Ordinance and Tree Removal/Replacement Ordinance



PICTURE TAKEN IN AUGUST



Yard Waste Collection Program Ordinance

1.

Adopt and enforce an ordinance that prohibits placing non containerized yard wastes (defined as leaves and/or grass clippings) into the street; or...

2.

Develop and implement a non-containerized yard waste collection and disposal program that includes adoption and enforcement of an ordinance that prohibits placing non-containerized yard waste at the curb or along the street within 10 feet of any storm drain inlet and at any time other than a set yard waste collection schedule.



5. Pollution Prevention/Good Housekeeping for Municipal Operators

Community Wide Measures:



- Street sweeping
- Catch basin and storm drain inlet inspection and cleaning
- Tier A Municipal Storm Drain Inlet Retrofit



Street Sweeping

(Existing Minimum Standards)

Once per month all streets that:



- ...are owned or operated by the municipality
- ...are curbed and have storm drains
- ...have a posted speed limit of 35 mph or less
- ...are not an entrance or exit ramp
- ...are in a predominantly commercial area



New Street Sweeping Requirements

Effective January, 1 2023



Tri-annual Sweeping – Every 4 Months

Sweep segments of municipal roads that have storm drain inlets that discharge to surface water.

No criteria related to speed limits, commercial areas, entrance/exit ramps, or curbs.

Annual Sweeping – Every Year

Sweep segments of municipal roads that do NOT have storm drain inlets that discharge to surface water



Street Sweeping

Measurable Goal

Schedule is being maintained and records are being kept, including:

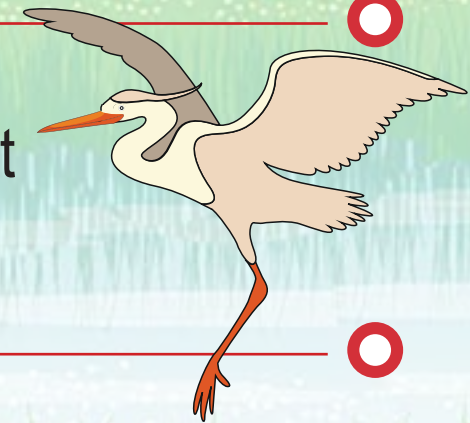
- Data and area swept
- Number of miles of streets swept
- Total amount of materials collected in tons



Catch Basin & Storm Drain Inlet Inspection & Cleaning



Inspect each catch basin and inlet at least once every five years.



Clean any municipally owned or operated catch basin or inlet as frequently as necessary to eliminate recurring problems and maintain proper function.





New Storm Drain Inlets & Catch Basins Requirements

- Storm Drain Inlets
 - Inspect ALL every year
- Catch Basins
 - Up to 1,000 municipal catch basins, inspect ALL every year
 - 1,000+ catch basins, inspect 1,000 or 20% of the total (whichever is more) every year on rotation
- Similar to Public Complex & Highway Agency MS4 permit renewals



Catch Basin & Storm Drain Inlet Inspection & Cleaning

Measurable Goals (annual)

Schedule is being maintained and records are being kept, including:

- _____ ○
Number of municipally owned and operated catch basin and inlets within the town
- _____ ○
Number of catch basins and inlets inspected
- _____ ○
Number of catch basins and inlets cleaned
- _____ ○
Amount of material removed in tons



Catch Basin & Storm Drain Inlet Inspection & Cleaning *Recommendations*

○ _____ ○
Increase frequency in problem areas

○ _____ ○
Perform inspections after major storms

○ _____ ○
Pass ordinance to require private entities to maintain stormwater facilities
or take over private facilities

○ _____ ○
Increase street sweeping

○ _____ ○
Coordinate cleaning with mosquito control agency



Municipal Storm Drain Inlet Retrofit

(Existing Minimum Standards)



Municipality shall retrofit existing inlets that are:

- _____ ○
In direct contact with repaving, repairing (excluding pothole repair), or resurfacing.
- _____ ○
In direct contact with any reconstruction or alterations of facilities.



New Storm Drain Inlet Requirements

(Effective January 1, 2023)



Retrofit ALL municipal storm drain inlets to prevent solids and floatables from entering the MS4

- _____ ○
Apply a bolt-on plate to curb openings or replace old storm drain inlets with DOT bicycle safe grates.
- _____ ○
Installation of new storm drains must include a catch basin or other BMP designed for solids collection.

MS4 Conveyance Inspection & Cleaning



(Effective January 1, 2023)

- _____ ○
Identify all stormwater conveyance features,
e.g., ditches and pipes
- _____ ○
Inspect, clean, and maintain as needed



5. Pollution Prevention/Good Housekeeping for Municipal Operators (cont.)

Municipal Maintenance Yards and Other Ancillary Operations:

1. Fueling operations
2. Discharge of stormwater from secondary containment
3. Vehicle maintenance
4. On-site equipment and vehicle washing and wash wastewater containment



5. Pollution Prevention/Good Housekeeping for Municipal Operators (cont.)

Municipal Maintenance Yards and Other Ancillary Operations: (cont.)

5. Salt and de-icing materials storage & handling

6. Aggregate material & construction debris storage

7. Street sweeping, catch basin clean out, & other material storage

8. Yard trimmings and wood waste management sites

9. Roadside vegetation management



Fueling Operations

Minimum Standards

Establish, maintain, and implement standard operating procedures to address:

- _____ ○
Vehicle fueling
- _____ ○
Receipt of bulk fuel deliveries
- _____ ○
Inspection and maintenance of storage tanks, including the associated piping and fuel pumps
- _____ ○

Woodbridge inspects all fueling areas on a monthly basis.



Discharge of Stormwater from Secondary Containment

Minimum Standards

- The discharge pipe or outfall must be equipped with a valve to control the discharge from all containment areas
- Ensure that the valve remains closed at all times, except when discharging
- Perform routine inspections of the tanks, drum, vats, other containers, valves, hoses, and pipes
- Perform regular maintenance of tanks, drums and components



Vehicle Maintenance

Minimum Standards

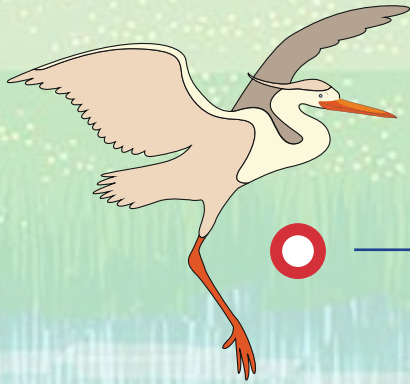


- Maintain inventory of materials & machinery
- Perform maintenance activities indoors
- If maintenance is performed outdoors:
 - Away from catch basins and block drains with booms
 - Drip pans must be used at all times
 - Portable tents or covers if maintenance activity last more than one day



On-site Equipment & Vehicle Washing

Minimum Standards



No unpermitted discharge of wash wastewater to storm sewer inlets or local waterways



If you cannot discharge wash wastewater to sanitary sewer, can temporarily contain wastewater but must ensure containment does not leak





Salt & De-icing Materials Storage & Handling

(Minimum Standards)

- _____ ○
Store salt and de-icing materials in a permanent structure
- _____ ○
Perform regular inspections and maintenance of storage structure and surrounding area
- _____ ○
Minimize tracking of material from loading and unloading operations





Excess De-icing Material Management

(Effective January 1, 2023)

- _____ ○
Remove piles of excess salt and de-icing materials that have been deposited during spreading operations on all municipal roads and parking areas
- _____ ○
Remove within 72 hours after the end of storm events, conditions permitting



More on Salt & De-icing Materials Storage & Handling

Minimum Standards

- During loading and unloading:
 - Conduct during dry weather
 - Prevent and/or minimize spillage
 - Minimize loader travel distance between storage area and spreading vehicle
- Sweep (or clean using other dry cleaning methods)
 - Storage areas on a regular basis
 - Materials tracked away from storage areas
 - Immediately after loading and unloading is complete



Even More on Salt & De-icing Materials Storage & Handling

Minimum Standards

- Reuse or properly discard materials collected during cleanup
- Temporary outdoor storage is permitted only under the following conditions:
 - A permanent structure is under construction or repair
 - Stormwater runoff and de-icing materials runoff is minimized
 - Materials in temporary storage are tarped
 - All of the above requirements are met
 - Temporary storage up to 30-days



Salt & De-icing Materials Storage & Handling

(Recommendations)

- Locate site at least 200 ft from streams, wells, reservoirs, and drinking water sources
- Do not build storage structure in designated well head protection area
- Ensure top elevation of storage pad is higher than 100-year flood elevation
- Control site drainage by diverting stormwater away from storage areas (curbing, berms, etc.)





Salt & De-icing Materials Storage & Handling

Recommendations



- Install wind barriers at strategic locations where shipments of salt are being loaded
- Include paved, impermeable surface as access to storage facility
- Work with neighboring municipalities to construct joint storage facilities



Aggregate Material & Construction Debris Storage

(Minimum Standards)

Store materials such as sand, gravel, stone, top soil, road millings, waste concrete, asphalt, brick, block, and asphalt-based roofing scrap and processed aggregate in such a manner as to minimize stormwater run-on and aggregate run-off via surface grading, dikes and/or berms (which may include sand bags, hay bales, and curbing, among others) or three-sided storage bays.



Aggregate Material & Construction Debris Storage

Minimum Standards

Sand, top soil, road millings, and processed aggregate may only be stored outside and uncovered if in compliance with the bullet above and if a 50-foot setback is maintained from surface water bodies, storm sewer inlets and/or ditches or other stormwater conveyance channels.



Aggregate Material & Construction Debris Storage

Minimum Standards

Road millings must be managed in conformance with the “Recycled Asphalt Pavement and Asphalt Millings (RAP) Reuse Guidance”

Go to: www.nj.gov/dep/dshw/rrtp/asphaltguidance.pdf

or, properly disposed of as solid waste pursuant to
N.J.A.C. 7:26-1 et seq.



Aggregate Material & Construction Debris Storage

(Minimum Standards)

The stockpiling of materials and construction of storage bays on certain land (including but not limited to coastal areas, wetlands, and floodplains) may be subject to regulation by the Division of Land Use Regulation.

Go To: www.nj.gov/dep/landuse/ for more information



Street Sweeping & Catch Basin Cleanout Material Storage

(Minimum Standards)

Road cleanup materials must be ultimately disposed of in accordance with N.J.A.C. 7:26-1.1 et seq. See the “Guidance Document for the Management of Street Sweepings and Other Road Cleanup Materials” which may be found online.

Go To: www.nj.gov/dep/dshw/rrtp/sweeping.htm.



Street Sweeping & Catch Basin Cleanout Material Storage

(Minimum Standards)

- Road cleanup materials placed into storage must be, at a minimum:
 - Stored in leak-proof containers or on an impervious surface that is contained (e.g., bermed) to control leachate and litter.
 - Removed for disposal (as above) within six (6) months of placement into storage.





Yard Trimmings & Wood Waste Management Sites

Minimum Standards

- Yard trimmings or wood waste management sites must be operated in a manner that:
 - Diverts stormwater away from yard trimmings and wood waste management operations and...
 - Minimizes or eliminates the exposure of yard trimmings, wood waste, and related materials to stormwater



More on Yard Trimmings & Wood Waste Management Sites

Yard trimmings and wood waste management site specific practices include:

In such a manner that materials contained in the windrows, staging, and storage do not enter waterways of the state.

On ground which is not susceptible to seasonal flooding.

In such a manner that prevents stormwater run-on and leachate run-off.



More on Yard Trimmings & Wood Waste Management Sites

Yard trimmings and wood waste management site specific practices include:

- _____ ○
Maintaining perimeter controls such as curbs, berms, hay bales, silt fences, jersey barriers, or setbacks, to eliminate the discharge of stormwater runoff carrying leachate or litter from the site to storm sewer inlets or to surface waters of the state.
- _____ ○
Preventing on-site storm drain inlets from siltation using controls such as hay bales, silt fences, or filter fabric inlet protection.



More on Yard Trimmings & Wood Waste Management Sites

Yard trimmings and wood waste management site specific practices include:

Preventing dry weather run-off from reaching a municipal stormwater sewer system, which is an illicit discharge; possible sources of dry weather run-off include wetting of piles by the site operator and uncontrolled pile leachate or uncontrolled leachate from other materials stored at the site.

Removing trash from yard trimmings and wood waste upon receipt.



More on Yard Trimmings & Wood Waste Management Sites

Yard trimmings and wood waste management site specific practices include:

- Monitoring the site for trash on a routine basis.
- Storing trash in leak-proof containers or on an impervious surface that is contained (e.g., bermed) to control leachate and litter.
- Disposing of collected trash at a permitted solid waste facility.
- Employing preventative tracking measures, such as gravel, quarry blend, or rumble strips at exits.



Roadside Vegetation Management

(Existing Minimum Standards)

- _____ ○
The municipality shall not apply herbicides on or adjacent to storm drain inlets, on steeply sloping ground, along curb lines, or along unobstructed shoulders
- _____ ○
The municipality may only apply herbicides within a 2-foot radius around structures where overgrowth presents a safety hazard and where it is unsafe to mow



Herbicide Application Management

(Effective: January 1, 2023)

- Restrict application of herbicides to prevent them from being washed into the waters of the State and to prevent erosion caused by de-vegetation.
- Previously called 'Roadside Vegetative Management' in Attachment E.



Roadside Vegetation Management

(Effective: January 1, 2023)

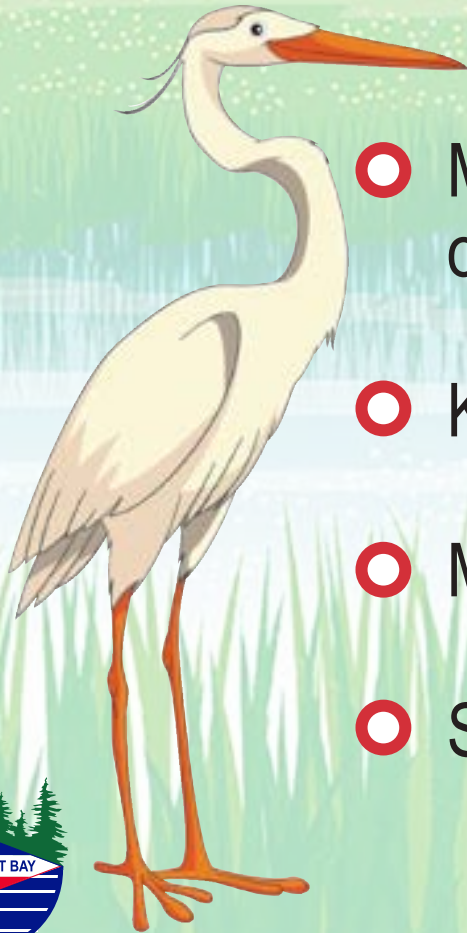


Proper pickup, handling, storage, and disposal of wood waste and yard trimmings generated during municipal work activities.



Stormwater Facilities Maintenance

(Existing Minimum Standards)



- Must ensure long-term cleaning, operation, and maintenance of all municipally owned or operated stormwater facilities.
- Keep a maintenance log.
- Must certify annual that they are function properly.
- Schedule and prioritize repairs.



Stormwater Facilities Maintenance

(Existing Minimum Standards)



- The municipality must develop, update, implement, and enforce a program to ensure adequate long-term cleaning, operation, and maintenance of the following stormwater facilities:
 - not owned or operated by the municipality,
 - not subject to the conditions of another NJPDES stormwater permit, and...
 - constructed after February 7, 1984.

- Ensure they are maintained.



Stormwater Infrastructure Inspection

(Effective: January 1, 2023)

- Identify any MS4 infrastructure that does not already have a specific permit condition, e.g., stormwater management basins.

- Inspect at least 4x annually, clean and maintain as needed.



Stormwater Facilities

Not Owned or Operated by the Municipality

- Ensure adequate long-term cleaning, operation, and maintenance of stormwater facilities not owned or operated by the permittee.
- Added minimum frequency of annual inspections by private owners.
- Described proper maintenance to include removal of solid and floatable materials, e.g., trash, litter, excess leaves, branches, excess growth, etc. that could impede proper function causing flooding, etc.



Additional Measures: Road Erosion Control

- The Township of Woodbridge will utilize the Public Works Department to monitor all their roads and streets for erosion problems during typical day to day operations.

All identified road erosion problems will be reported to the Road Department & Road Supervisor.

- Identified areas of erosion will be discussed and repairs prioritized.





Roadside Erosion Control Program

Effective: January 1, 2023

- Inspect municipal roads for stability.
 - Check for erosion of shoulders, embankments, ditches, and soils along roads which may result in sedimentation of receiving waters.
 - Can be done in tandem with other municipal inspections
- Repair problems within 90 days of discovery.



Employee Training

- Municipal Employees
 - No change to training on most current SPPP, BMPs, ordinances, etc.
 - Frequency changed to cover ALL topics every year (no longer biennial for some)
- Municipal Board and Governing Body Members
 - No change to training videos each term
- Stormwater Management Design Reviewers
 - No change to SWMDR training requirement
 - New requirement for SWM rule amendment training



Register for courses every 5 years via NJDEP
stormwater management webpage



MS4 Mapping

- Create a Map of all MS4 Infrastructure.
- Submit to the Department electronically as a georeferenced shapefile, geodatabase, or AutoCAD file with all other non-applicable data stripped out.



- **GO TO:** https://www.nj.gov/dep/dwq/msrp_map_aid.htm
If DEP Mapping Application is used, data submittal is automatic.
Post on dedicated stormwater webpage. **Due: December 31, 2025**





Stream Scouring

- Inspect all MS4 outfalls at least once every 5 years
 - Up to 100 municipal outfalls, inspect ALL every year.
 - 100+ municipal outfalls, inspect 100 or 20% of the total (whichever is more) every year on rotation.
- Inspect new or newly identified outfalls within 30 days.
- Investigate complaints and reports of scouring within 30 days and remediate within 12 months.
- Similar to Public Complex & Highway Agency MS4 permit renewals.



Illicit Discharge Detection and Elimination

- Conduct dry weather inspection of all MS4 outfalls at least once every 5 years.
 - Up to 100 municipal outfalls, inspect ALL every year.
 - 100+ municipal outfalls, inspect 100 or 20% of the total (whichever is more) every year on rotation.
- Inspect new or newly identified outfalls within 30 days.
- Investigate dry weather flows within 30 days.
- Remediate within 12 months OR request an extension from the Department by month 11.





Watershed Improvement Plan



Designed to improve water quality problems.

Focused on reducing the MS4 contribution of pollutants to waterbodies with listed impairments and TMDLs.

Reducing or eliminating flooding with priority given based on human health and safety, environmental impacts, and frequency of occurrence.

Plan shall be developed with input from residents, businesses, neighboring towns, and other dischargers

Watershed Improvement Plan

○ PHASE 1

Prepare and submit the Watershed Inventory Report; conduct outreach. (December 31, 2025)

Summarize/map required information, some is available from the Department's GIS database.



○ PHASE 2

Prepare and submit the Watershed Assessment Report; conduct outreach. (December 31, 2025)

Assess potential projects with estimates of the reduction in pollutant loading & funding need.

Solicit public comments by posting the Watershed Assessment Report with a 60-day public comment period.

○ PHASE 3

Prepare and submit the Watershed Improvement Plan Report; conduct outreach. (December 31, 2025)

Summarize proposed projects with improvement expected, comments received, costs, coordination with other regulatory programs, and implementation schedule.



Questions, Discussions, Feedback



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Thank You!



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