

# UNDERSTANDING THE NEW MS4 PERMIT

A PRIMER FOR NEW JERSEY MUNICIPALITIES



IN COLLABORATION WITH







## ACKNOWLEDGEMENTS

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**MAINSTREAMING  
GREEN INFRASTRUCTURE**

*A program of New Jersey Future*



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# I. WHY THIS PRIMER MATTERS

This Primer is intended to serve as a guide for New Jersey municipalities to understand the recent changes to the Municipal Separate Storm Sewer System (MS4) Tier A Permit and to improve their municipal stormwater programs to meet the new requirements. Over 90% of New Jersey's waterways are considered impaired and over 60% can be attributed to pollutants from stormwater runoff.

More frequent severe storms are occurring, which is causing more frequent flooding. Developing a meaningful stormwater management plan can translate into improved water quality and reduced flooding, so we hope this primer will help you understand the regulatory requirements and how those requirements can translate into environmental improvements.

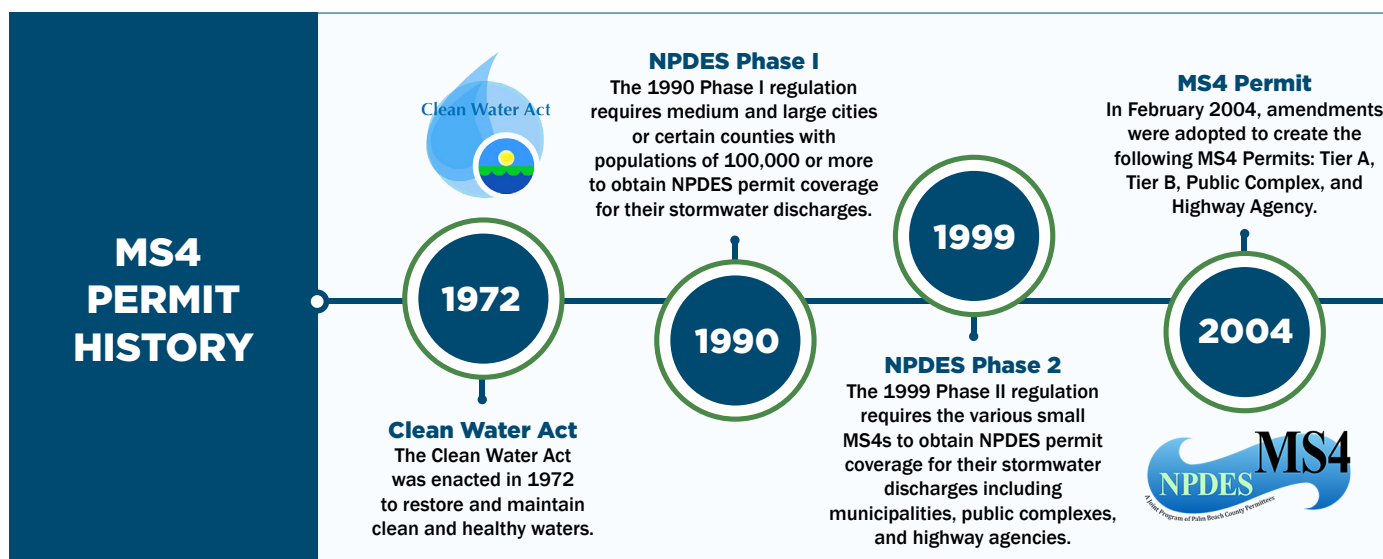
## II. MS4 PERMIT HISTORY AND OVERVIEW

The MS4 permitting program was created in 2004 and is required by both federal and state regulations to address water quality and flooding issues in municipal stormwater systems. The MS4 Tier A Permit was recently updated with the new permit becoming effective on January 1, 2023. A graphical overview of the history of the MS4 permitting program is provided below.

The recent updates to the MS4 Permit by the New Jersey Department of Environmental Protection (NJDEP) were driven by projections of increasing intensity and frequency of storm events worsened by climate change, with the goal to upgrade and better maintain stormwater infrastructure in municipalities. The updated permit includes several new requirements and a shift towards watershed level planning with the inclusion of a mandatory Watershed Improvement Plan (WIP). A WIP must address improvements to waterways that have water quality impairments or Total Maximum Daily Loads (TMDLs) and establish corrective actions to reduce flooding.

There are 557 municipalities in New Jersey that will fall under the updated MS4 Tier A Permit. The MS4 permitting program in New Jersey requires municipalities to develop stormwater management programs that incorporate the following six Statewide Basic Requirements (SBRs):

1. Public involvement and participation including public notice.
2. Local public education and outreach.
3. Construction site stormwater runoff.
4. Post construction stormwater management in new development and redevelopment.
5. Pollution prevention/good housekeeping.
6. MS4 stormwater system mapping, and illicit discharge and scouring detection and control.



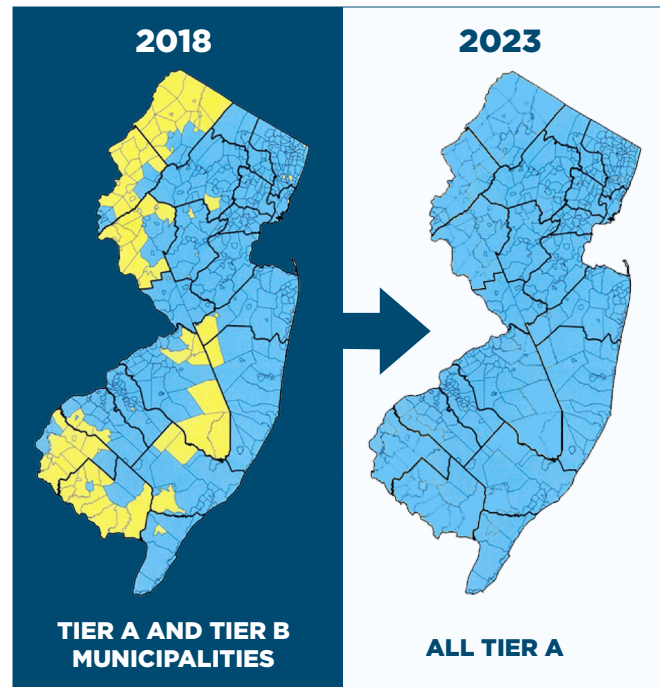


### III. WHAT HAS CHANGED SINCE THE 2018 TIER A MS4 PERMIT?

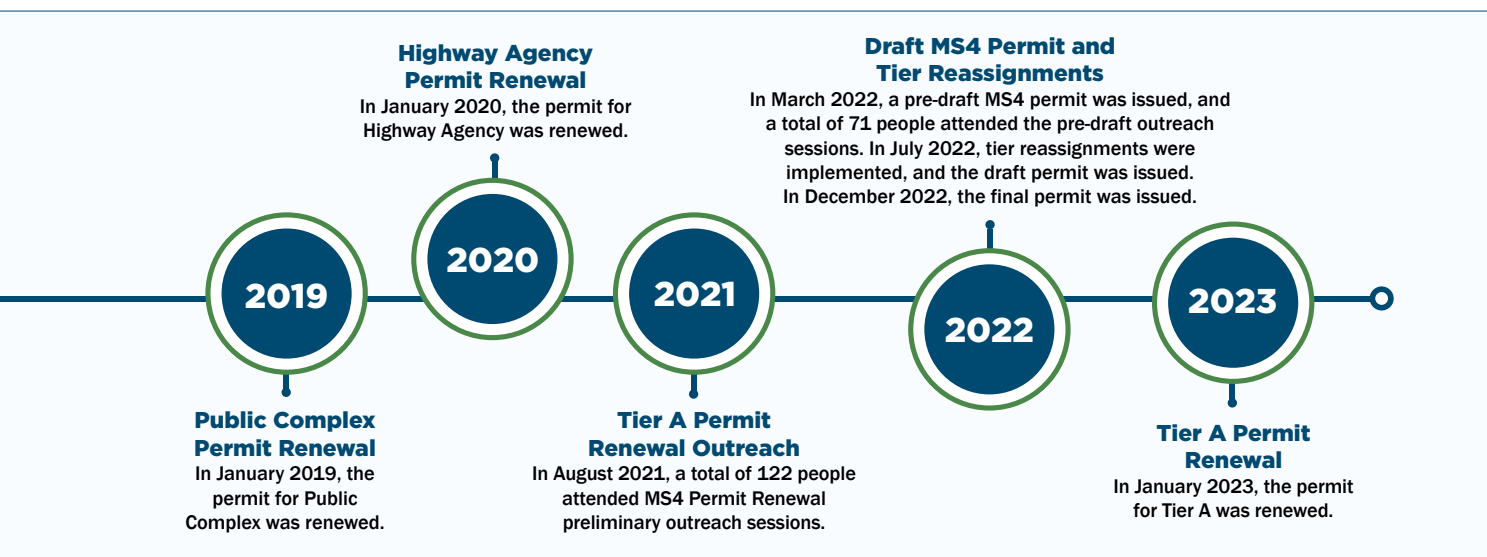
During New Jersey's periodic re-evaluation of the State's MS4 permitting designations, as part of the renewal of the 2018 Tier A permit, NJDEP reassigned all former Tier B municipalities to Tier A to ensure compliance with federal regulations. As a result, all municipalities that fall under the MS4 permitting program are now regulated by the Tier A permit.

In addition to the Tier reassignments, the most significant changes included in the new Tier A MS4 permit include:

- ➔ Mapping of all MS4 stormwater infrastructure (not just stormwater outfalls).
- ➔ Development of Watershed Improvement Plans (WIPs).
- ➔ New community-wide ordinances: privately-owned salt storage and tree-removal/replacement.
- ➔ Modified street sweeping requirements.
- ➔ Excessive de-icing material management.
- ➔ Roadside vegetation waste management and erosion control.
- ➔ New and modified material storage requirements (i.e., cold patch asphalt, inoperable vehicles, dumpsters/refuse containers).
- ➔ Modified cleaning and maintenance requirements for stormwater infrastructure.
- ➔ Updated training requirements.



All new and modified requirements in the MS4 permit and their associated deadlines are described in Attachment 1; Table 1 for the original Tier A municipalities and Table 2 for new Tier A (former Tier B) municipalities. Additionally, Table 2 includes a column to identify whether the permit requirement was included in the previous Tier B permit. Many of the permit requirements for the original Tier A municipalities have different deadlines than the new Tier A municipalities.





## IV. ADMINISTRATIVE REQUIREMENTS

### A. ELIGIBILITY

The MS4 permit applies to all municipalities that own or operate a separate storm sewer system. This permit also authorizes specific dischargers to be eligible based on the requirements described in the “Authorized Discharges” and “Discharges Not Authorized” sections.

Any owner, operator, and/or discharger authorized by this permit may submit an individual permit application, requesting to be excluded from the coverage of the general Tier A MS4 permit. Alternatively, if an eligible permittee is excluded from the general MS4 permit solely because of an existing individual permit, they may request that the individual permit be revoked or modified so that the discharge is authorized by the general MS4 permit.

#### AUTHORIZED DISCHARGES

(Part II.C.2)

##### AUTHORIZED STORMWATER DISCHARGES INCLUDE:

- Small MS4s (as defined at N.J.A.C. 7:14A-1.2) owned or operated by the permittee
- Municipal Maintenance Yards and other ancillary operations

##### AUTHORIZED NON-STORMWATER DISCHARGES INCLUDE:

- Potable water line flushing and discharges from potable water sources, excluding the discharge of filter backwash and first flush water from potable well development/redevelopment activities utilizing chemicals in accordance with N.J.A.C. 7:9D
- Uncontaminated ground water
- Air conditioning condensate
- Irrigation water
- Flows from springs, riparian habitats, wetlands, water reservoir discharges, and diverted stream flows
- Residential car washing water; and dechlorinated swimming pool discharges from single family residential homes
- Sidewalk, driveway, and street wash water
- Flows from firefighting activities including the washing of fire fighting vehicles
- Flows from clean water rinsing of beach maintenance equipment immediately following use and only if the equipment is used for its intended purpose
- Rinsing of equipment is limited to exterior, undercarriage, and exposed parts and does not apply to engines or other enclosed machinery
- Flows from clean water rinsing of equipment and vehicles used in the application of salt and de-icing materials
- Rinsing of equipment is limited to exterior, undercarriage, and exposed parts and does not apply to engines or other enclosed machinery

#### DISCHARGES NOT AUTHORIZED

(Part II.C.3)

##### NOT AUTHORIZED STORMWATER DISCHARGE INCLUDE:

- Discharges associated with industrial activity as defined in N.J.A.C. 7:14A-1.2. Types of facilities include but are not limited to:
  - ▶ Landfills
  - ▶ Transportation facilities (including certain local passenger transit and air transportation facilities)
  - ▶ Facilities handling domestic sewage or sewage sludge
  - ▶ Steam electric power generating facilities
  - ▶ Facilities processing and/or composting recyclable materials as defined in N.J.A.C. 7:26A (Recycling Rules) including wood waste recycling and leaf composting facilities
- Discharge associated with construction activity as described in N.J.A.C. 7:14A-24.10(a)
- Any stormwater discharge that is authorized under another NJPDES permit
- Stormwater discharges from projects or activities that conflict with an adopted Areawide Water Quality Management Plan
- Stormwater discharges that are determined to be a significant contributor to pollutants to or from the MS4, which must be addressed as an illicit connection, or as an improper disposal of waste



## B. ADMINISTRATIVE PROCESS

Using the information provided in the municipality's most recently submitted Request for Authorization (RFA), existing permit authorizations will be automatically renewed upon reissuance of the general MS4 permit. If any information in the municipality's most recently submitted RFA is no longer true, accurate, and/or complete, an updated RFA shall be provided by the municipality to NJDEP within 90 days of the effective date of a renewed authorization under this general permit. Additionally, the municipality must notify NJDEP if there are any changes to its Municipal Stormwater Program Coordinator (SPC) information.

The RFA must include a completed Checklist and Request for MS4 Stormwater Permits (see *References for link*) and any other information as required by the Department.

## C. RECORDKEEPING AND REPORTING

The municipality is required to keep copies of all records in relation to the MS4 Permit for a period of at least five years, which must be made available to NJDEP upon request. Additionally, using NJDEP's electronic Municipal Stormwater Regulation Permit (MSRP) Annual Report service tool in the Regulatory Services Portal, an Annual Report and Certification that summarizes the status of compliance with permit conditions for the subject year is required to be submitted on or before May 1 of each year (see *References for links*). A Supplemental Questionnaire, including the Major Development Project List, must be uploaded as an attachment to the Annual Report (see *References for link*). The SPC is required to certify, sign, and date the Annual Report upon submission.

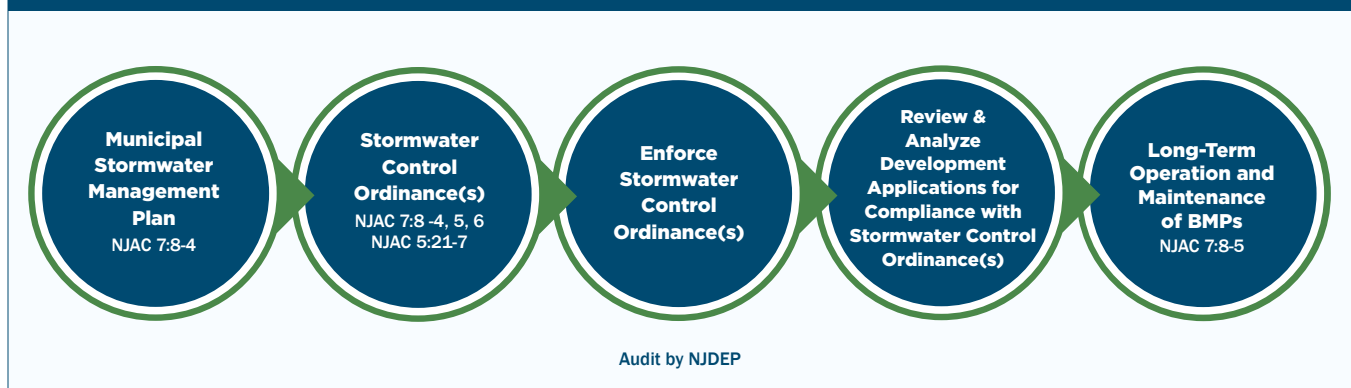
# V. STORMWATER MANAGEMENT PROGRAM FOR NEW DEVELOPMENT AND REDEVELOPMENT

New development and redevelopment can impact the quantity and quality of stormwater runoff conveyed to downstream surface waters. The MS4 permit addresses these issues by requiring each municipality to be responsible for developing and/or adopting, amending, updating, implementing, and enforcing a Stormwater Management Program. This program consists of the Municipal Stormwater Management Plan (MSWMP), Municipal Stormwater Control Ordinance (SCO), and Mitigation Plan.

The municipal Stormwater Management Program requirements and sequencing are shown below. Construction site stormwater runoff activities are not authorized under the Tier A MS4 permit and must be authorized under a separate NJPDES permit (either a Construction Activity NJPDES Stormwater 5G3 General Permit or an individual permit).

## STORMWATER MANAGEMENT PROGRAM REQUIREMENTS

(Ref: Mahon, 2023)





## A. MUNICIPAL STORMWATER MANAGEMENT PLAN (MSWMP)

Each municipality is responsible for adopting, amending, and implementing a written MSWMP that describes the framework of the permittee's strategy, structure, and process for its stormwater management program. The MSWMP must be re-examined as part of the update of its municipal master plan at least every 10 years, approved by the county review agency, electronically submitted to NJDEP, and posted on the municipal website.

## B. MUNICIPAL STORM CONTROL ORDINANCE (SCO)

Each municipality is responsible for developing, adopting, amending, implementing, and enforcing a municipal SCO in accordance with N.J.A.C. 7:8. Model municipal SCOs are available through NJDEP and New Jersey Future's Green Infrastructure Municipal Toolkit. The SCO must:

1. Control aspects of residential development and redevelopment projects that are not pre-empted by the Residential Site Improvement Standards (RSIS);
2. Control stormwater from non-residential development and redevelopment projects, and;
3. Set forth special area standards approved by the Site Improvement Advisory Board for residential development or redevelopment projects.

It is critical that the stormwater management designs for development applications be carefully reviewed by the municipal engineer prior to a local planning or zoning board hearing to ensure compliance with the regulations. This review includes both the initial design and the plan for ongoing operation and maintenance of the stormwater systems. NJDEP audits the reviews annually to confirm compliance.

Local stormwater ordinances may impose stricter requirements, as provided in New Jersey Future's enhanced model stormwater control ordinance, than the new state stormwater rule for certain kinds of projects. For example, municipalities may choose to define "major development" with a smaller area of disturbance, and/or smaller area of regulated impervious cover, or regulated motor vehicle surface; apply stormwater requirements to both major and minor development; and/or require groundwater recharge, when feasible, in urban redevelopment areas. *Note: Residential Site Improvement Standards (RSIS) reference the current stormwater rule, which may restrict more stringent municipal requirements for certain projects.*

## C. MITIGATION PLANS

A mitigation plan can be voluntarily developed by a municipality to identify areas where known stormwater improvement projects are needed. The plan must be approved within the MSWMP and SCO(s). When a Mitigation Plan has been adopted, certain variances from the design and performance standards for stormwater management measures can be granted for development projects and those impacts mitigated elsewhere in accordance with the plan. For example, if a new affordable housing project is proposed where the groundwater recharge requirement cannot be fulfilled onsite, the developer could build a recharge system elsewhere within the watershed to offset the reduction on the developed parcel.



## VI. STORMWATER POLLUTION PREVENTION PLAN (SPPP)

The MS4 Permit requires municipalities to develop, implement, update, and maintain their own stormwater pollution prevention plan (SPPP). The purpose of the SPPP is to minimize stormwater-related pollution within their MS4 system and municipal operations. The preparation of a SPPP helps permittees in identifying potential sources of pollution and in establishing best management practices to minimize and/or eliminate the exposure of these pollutant sources. The SPPP must be posted on the municipality's website and serves as documentation on how and when the municipality has implemented the various MS4 permit conditions and requirements.

The original Tier A municipalities should have already completed an SPPP under the previous 2018 permit and therefore will only need to update their SPPPs based on the new Tier A permit requirements. However, SPPPs were not required for Tier B municipalities under the old permit. Therefore, former Tier B municipalities that have been reassigned to Tier A will need to develop their SPPPs from the ground up.

NJDEP provides standard SPPP forms that serve as a template for completion of the SPPP. The SPPP forms guide the municipality through each of the Tier A MS4 Permit requirements that need to be implemented. NJDEP has posted a model SPPP on their website (*see References for link*).

The SPPP documents the various community-wide ordinances and measures that have been implemented by the municipality. The list below presents the required ordinances and measures, with the new items highlighted in **bold**.

### COMMUNITY-WIDE ORDINANCES

Pet Waste  
Wildlife Feeding  
Litter Control  
Improper Disposal of Waste  
Yard Waste  
Private Storm Drain Inlet Retrofitting  
Illicit Connections  
**Privately-Owned Salt Storage**  
**Tree Removal-Replacement**

### COMMUNITY-WIDE MEASURES

Herbicide Application Management  
**Excess Deicing Material Management**  
**Roadside Erosion Control**

The SPPP keeps the permittee accountable for the inspection and maintenance of both municipally-owned and privately-owned stormwater infrastructure in the community. For municipal-owned infrastructure, the SPPP must identify the required inspections and maintenance of storm drain inlets, catch basins, conveyance systems, stormwater outfalls, and other stormwater infrastructure such as detention/infiltration basins, manufactured treatment devices, and green infrastructure. For stormwater facilities not owned by the municipality, the SPPP must detail the program that is in place for ensuring that annual inspections and maintenance are being conducted on private properties. The program must include how the municipality records the locations and logs operation and maintenance information associated with private stormwater infrastructure.

The stormwater management requirements at municipal facilities such as Department of Public Works (DPW) maintenance yards and other ancillary operations are detailed in the SPPP. The municipality must describe inspections, inventory of material/machinery, fueling operations, vehicle/equipment maintenance and repair, wash wastewater containment, and storage of the following materials commonly found in municipal yards: deicing materials, aggregate, wood chips, leaf compost, cold patch asphalt, street sweeping, storm sewer cleanout materials, construction and demolition waste, wood waste, yard trimmings, scrap tires, and inoperable vehicles/equipment.

Training of the municipal staff responsible for coordinating and implementing all components of the MS4 permit and municipal stormwater program is also detailed in the SPPP. The Stormwater Program Coordinator must attend NJDEP training every five-year permit cycle. The training for municipal employees can be a combination of in-person or virtual group sessions, e-Learning activities, field training, and videos. Individuals responsible for review and approval of stormwater management designs for major developments must attend a mandatory NJDEP Stormwater Management Design Review course at least once every five years, as well as NJDEP trainings on amendments, as applicable. Members of the municipal planning/zoning board and municipal council must watch an NJDEP training video titled "Asking the Right Questions in Stormwater Review" within six months of joining, and then additional NJDEP training videos provided on NJDEP's stormwater training website each term thereafter (*see References for link*).

## VII. MS4 MAPPING, STREAM SCOURING AND ILLICIT DISCHARGE DETENTION AND ELIMINATION

Each municipality must develop, update, and maintain an MS4 Infrastructure Map that delineates the location of the stormwater features that are owned or operated by the permittee, including their associated attributes. While the prior permit required only the location of outfalls, the new permit adds many other types of stormwater infrastructure as illustrated in the graphic below. The MS4 Infrastructure Map must be submitted by January 1, 2026, and then updated at least annually to include any new or newly identified MS4 infrastructure. The permittee's SPPP must also include a website link to the MS4 Infrastructure Map posted on the permittee's stormwater webpage.

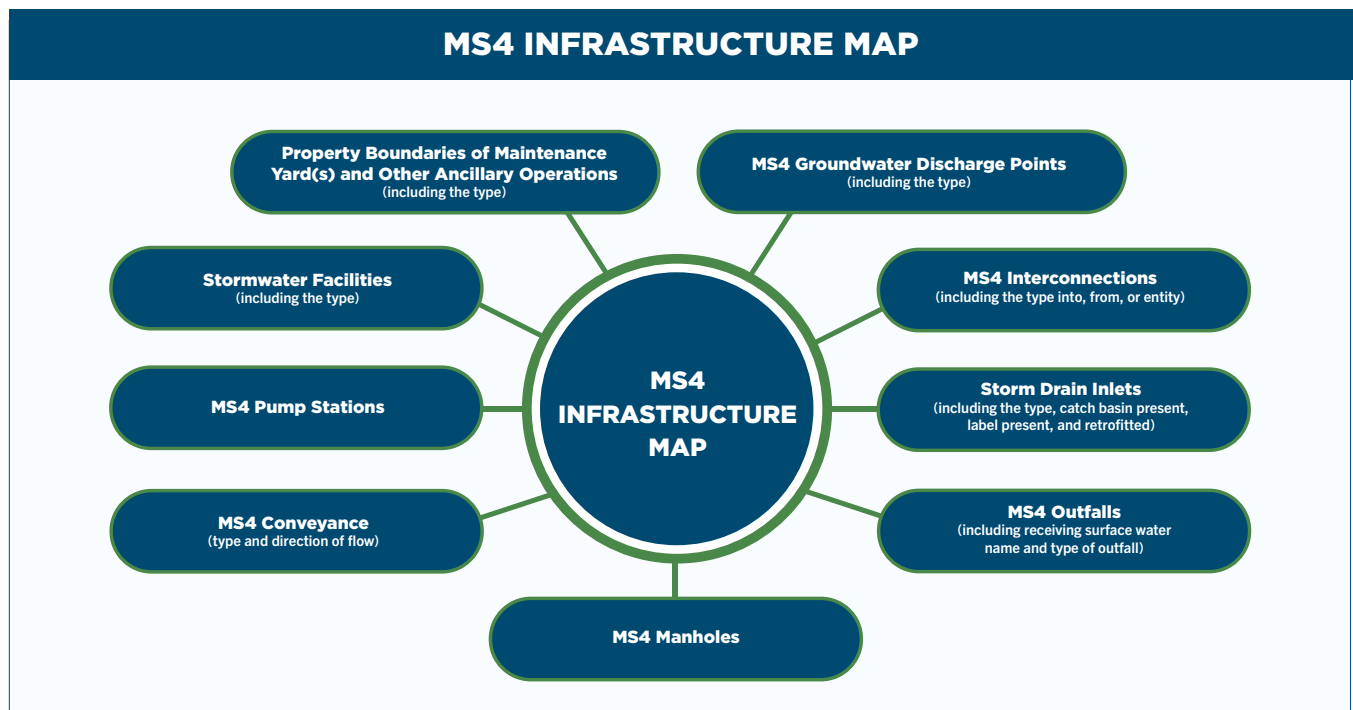
The MS4 Infrastructure Map is required to be submitted electronically to NJDEP as a georeferenced shapefile, geodatabase, or an AutoCAD file. Alternatively, the permittee can use the NJDEP Mapping Application (see *References for link*), where the data is automatically submitted to the Department.

The permittee is also required to develop, update, implement, and enforce a program to detect, investigate, and control any localized stream scouring from MS4 outfalls owned or operated by the permittee, as well as an ongoing Illicit

Discharge Detection and Elimination Program. The program for stream scouring and the Illicit Discharge Detection and Elimination Program shall be described in the written SPPP using the Stream Scouring Investigation Recordkeeping Form, and the Illicit Connection Inspection Report Form and the USEPA Guidance document, respectively (see *References for links*).

For stream scouring, inspections of MS4 outfalls shall be performed at least once every five years, with a minimum of 20% of the total number of outfalls per year on rotation. All new/newly identified outfalls shall be inspected within 30 days of identification. MS4 outfalls shall be investigated within 30 days of receipt of all complaints and reports of stream scouring and remediated within 12 months or a schedule for completion shall be submitted to the MS4 Case Manager before the 12-month deadline (see *References for link*).

For illicit discharges, inspections of MS4 outfalls once every five years, with a minimum of 20% of the total number of outfalls per year on rotation, during dry weather conditions should be completed to determine if there is unexpected flow or other evidence of an illicit discharge. All new/newly





identified outfalls shall be inspected within 30 days of identification. MS4 outfalls shall be investigated within 30 days of identification of dry weather flows discovered during routine inspection and maintenance of other elements or the MS4, as well as for receipt of all complaints and reports of illicit connections. Illicit connections shall be eliminated within one

year of discovery, or an extension must be requested from the NJDEP within 11 months from the discovery of connection. All investigations and actions taken shall be documented using the NJDEP Illicit Connection Inspection Report Form, which shall also be attached to the MSRP Annual Report (see *References for link*).

## VIII. WATERSHED IMPROVEMENT PLANS

All Tier A MS4 municipalities are now required to develop a Watershed Improvement Plan, describing the actions the municipality will take to:

- Improve water quality in water bodies that have total maximum daily loads (TMDLs)
- Improve water quality in water bodies listed as impaired
- Reduce or eliminate flooding

A TMDL is a plan for restoring water bodies that have a water quality impairment by identifying the maximum amount of a pollutant allowed to enter a water body so that it will meet and continue to meet the water quality standard for that pollutant. TMDLs identify both point sources and nonpoint sources. Point sources (defined in TMDLs as wasteload allocations) include wastewater treatment plant discharges and stormwater outfalls from residential and other urban land uses. Non-point sources (defined in TMDLs as load allocations) include runoff from agricultural, forested, and barren land uses, as well as tributary baseflow. NJDEP has developed a TMDL Look-up Tool (see *References for link*) which allows municipalities to view the TMDLs and associated pollutants that are applicable to the watersheds in their community. New Jersey Future is working with NJDEP to develop an enhanced TMDL lookup tool that will identify specific pollutant loading reduction requirements at the sub-watershed level, rather than providing a 100+ page report that the municipality will have to review to understand required pollutant reductions.

In addition to TMDLs, water body impairments also need to be addressed through the Watershed Improvements Plan (WIP). The list of impaired waterways in New Jersey (303D List) are identified in the NJDEP's Integrated Assessment Report (and available in GIS on NJDEP's GeoWeb, see *References for link*). The impairments are listed based on the pollutant of concern and the designated use of the water body.

Finally, municipalities must address flooding impacts in their communities. Municipalities should prioritize flooding risk based on the level of threat to human health and safety, severity of the environmental impacts, and the frequency or likelihood of occurrence.



The Watershed Improvement Plan must be developed in the following three phases:

### PHASE 1

## WATERSHED INVENTORY REPORT (PART IV.H.1.D)

- ➔ **Prepare and submit to the NJDEP the Watershed Inventory Report, with a summary and electronic map including:**
  - ▶ All stormwater outfalls owned/operated by the permittee and associated receiving waterbodies
  - ▶ Drainage area for each outfall(s) and interconnection into another entities' storm or sanitary sewer system
  - ▶ Water quality classification of all receiving waterbody segments
  - ▶ All stormwater interconnections from the municipality into another entity storm or sanitary sewer system
  - ▶ All stormwater connection points into the municipality from another entity
  - ▶ All storm drain inlets owned/operated by the permittee within or bordering the municipality
  - ▶ Area associated with each water quality impairment for waters that lie within or bordering the municipality
  - ▶ Overburdened communities
  - ▶ Impervious areas
  - ▶ Location and ownership of all stormwater outfalls and basins/infrastructure not owned/operated by the permittee

(Deadline 1/1/2026)

### PHASE 2

## WATERSHED ASSESSMENT REPORT (PART IV.H.1.E AND F)

- ➔ **Prepare and submit to the NJDEP the Watershed Assessment Report, including:**
  - ▶ Assessment of potential water quality improvement project(s) by sub-watershed and parameter and estimate of the percent reduction in loading of the TMDL/impaired parameters due to these project(s)
  - ▶ Summary of feedback from public information sessions
  - ▶ Estimate of funding needs for each project
  - ▶ Identification of potential funding sources
  - ▶ Estimate of an implementation schedule
  - ▶ Watershed Assessment Report shall be posted on the permittee's municipal website, along with an announcement of a 60-day comment period for formal public input

(Deadline 1/1/2027)

### PHASE 3

## FINAL WATERSHED IMPROVEMENT PLAN REPORT (PART IV.H.1.E AND F)

- ➔ **Prepare and submit to the NJDEP the Final Watershed Improvement Plan Report, including:**
  - ▶ Summary of proposed locations and load reductions of water quality improvement projects, both public and private, to be implemented
  - ▶ Summary of the public comments received, and the changes made to the Final Plan
  - ▶ Summary of how the projects will be coordinated with other regulatory requirements, such as:
    - Flood protection; endangered habitat/species; surface and ground drinking water protection; climate change/resiliency; green infrastructure/SWM requirements; wildlife corridors; green acres; environmental justice; Combined Sewer Overflow Long Term Control Plans; wetlands; riparian buffers; forest corridors; related ongoing projects; Pinelands Commission; Highlands Council; and Delaware River Basin Commission
  - ▶ Proposed implementation schedule for the water quality improvement projects
  - ▶ Schedule of the public information sessions to be held
  - ▶ Problems identified that are outside the jurisdiction of the permittee
  - ▶ Costs, broken down by project and year, and the funding opportunities that will be sought
  - ▶ Description of how stormwater related problems in overburdened communities have been prioritized

(Deadline 12/1/2027)



Semi-annual public information sessions are required to be conducted by the municipality beginning on or before January 1, 2026, throughout the development of the Watershed Improvement Plan. Once the Watershed Improvement Plan has been implemented in accordance with the schedule set forth in the Plan, the municipality must update the Plan every two years based on the review of the revisions to the impairments of the permittee's water bodies as per the NJDEP's Integrated Assessment Report and newly adopted TMDLs.

While the requirement for the Watershed Improvement Plan is within the municipal MS4 permit, watersheds do not follow political boundaries. As a result, it is recommended that municipalities located within common watersheds work together to plan and develop their Watershed Improvement Plans on a regional level.

Projects should be targeted based on the TMDL parameters and specific water quality impairments. Proposed actions could range from policy and ordinance modifications to nonpoint source interventions to green infrastructure stormwater practices. Green infrastructure refers to a set of stormwater management practices that use or mimic the natural water cycle to capture, filter, absorb, and/or reuse stormwater. These types of practices address a wide range of pollutants and also reduce stormwater runoff volume and rates from urban land uses. Some examples of green infrastructure are rain gardens, pervious pavement, impervious surface disconnection, and infiltration systems.



In many cases, traditional systems such as detention basins with concrete low-flow channels can be retrofitted to incorporate green infrastructure practices. New Jersey Future's Green Infrastructure Municipal Toolkit is a one-stop online resource useful to any municipality in New Jersey interested in planning, implementing, and maintaining green infrastructure in their communities.





## IX. PUBLIC PARTICIPATION REQUIREMENTS

The MS4 permit requires the permittee to comply with applicable State and local public notice requirements, as described above in Part IV.B.1 and Part IV.C.1. The permittee also must develop and maintain a dedicated stormwater webpage on its municipal website, with elements of the MS4 stormwater program available to the public by providing links to the latest versions of the items listed above in Part IV.B.2.a. A Public Education and Outreach Program is also mandatory to ensure public involvement in

educational and pollution prevention activities regarding the impacts of stormwater discharges on surface and/or ground water as well as how to reduce pollutants in stormwater and mitigate flow. Additionally, the permittee is required to conduct activities from at least three of the five categories listed in Attachment A of the Tier A MS4 permit, where at least one activity is required to involve educating businesses and the public about hazards associated with illicit connections and improper disposal of waste.

## X. FINANCING OPPORTUNITIES

NJDEP recognizes that the former Tier B permittees and the various new requirements in the 2023 MS4 Permit will require significant upgrades to New Jersey municipalities' stormwater programs. These upgrades are critical to address a number of stormwater issues such as increased flooding impacts from climate change, water quality impairments and TMDLs, and aging stormwater infrastructure. As a result, NJDEP released approximately \$19 million in grants as part of the 2023 Municipal Stormwater Assistance Grants Program for municipalities to work on compliance with the MS4 Tier A permit. This program is available to all Tier A municipalities, with \$25,000 grants available to original Tier A municipalities and \$75,000 grants available to previous Tier B municipalities. Funding is available on a rolling basis through December 31, 2023.

NJDEP has also released a number of grant/loan opportunities in recent years including the Stormwater Utilities Feasibility Study Grants and the Stormwater Competitive Grant Program. As municipalities develop their

Watershed Improvement Plans, funding opportunities and mechanisms will need to be pursued to pay for projects that address flooding, water quality impairments and watershed TMDLs. The following list of current funding sources include:

- ➔ Stormwater utilities can be established in New Jersey as defined in the Clean Stormwater and Flood Reduction Act. They are a dedicated funding mechanism to pay for a community's stormwater management program (similar to a water/sewer utility). More information regarding stormwater utilities can be found at the NJ Stormwater Utility Resource Center (*see References for link*)
- ➔ New Jersey Water Bank (NJWB) for low-interest loans with potential for principal forgiveness (*see References for link*)
- ➔ NJDEP grant and loan programs (*see References for link*)
- ➔ FEMA grant opportunities (*see References for link*)

## XI. CLOSING

The new MS4 permit includes significant additional municipal requirements compared to the 2018 permit, including greatly enhanced GIS mapping requirements; the addition of the Watershed Management Plan that must address stream impairments, TMDLs stormwater load reductions, and flooding reductions; and the inclusion of 101 former Tier B municipalities that are now subject to

this permit. Deadlines are approaching, so it is critical that municipalities begin planning to address the requirements immediately. New Jersey Future looks forward to providing municipalities with tools that will assist them in not only complying with the MS4 permit requirements, but more importantly improving the quality of stormwater runoff and reducing flooding.



## XII. REFERENCES

1. Additional Conditions applicable to UIC permits at N.J.A.C. 7:14A-8.9, UIC Corrective Action (N.J.A.C. 7:14A-8.11) and UIC Operating Criteria (N.J.A.C. 7:14A-8.16).
2. Checklist and Request for MS4 Stormwater Permits: [https://nj.gov/dep/dwq/forms\\_storm.htm](https://nj.gov/dep/dwq/forms_storm.htm)
3. Clean Communities statewide litter abatement program [www.njclean.org](http://www.njclean.org)
4. Conditions for General Permits at N.J.A.C. 7:14A-6.13.
5. Conditions for reopening and modification of small MS4 permits at N.J.A.C. 7:14A-16.4(b)21 and N.J.A.C. 7:14A-25.7(b).
6. Construction Site Stormwater Runoff website [www.nj.gov/dep/dwq/5g3.htm](http://www.nj.gov/dep/dwq/5g3.htm)
7. DEP Mapping Application: [https://www.nj.gov/dep/dwq/msrp\\_map\\_aid.htm](https://www.nj.gov/dep/dwq/msrp_map_aid.htm)
8. EPA's guidance for Green Infrastructure: [www.epa.gov/green-infrastructure](http://www.epa.gov/green-infrastructure)
9. EPA's National Menu of Stormwater Best Management Practices: [www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater](http://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater)
10. EPA's Trash Free Waters resource page: [www.epa.gov/trash-free-waters](http://www.epa.gov/trash-free-waters)
11. FEMA grant opportunities: <https://www.fema.gov/grants>
12. Illicit Connection Inspection Report Form: [https://www3.epa.gov/npdes/pubs/idde\\_manualwithappendices.pdf](https://www3.epa.gov/npdes/pubs/idde_manualwithappendices.pdf)
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15. Model ordinances: [https://www.nj.gov/dep/dwq/example\\_ordinance.htm](https://www.nj.gov/dep/dwq/example_ordinance.htm)
16. Model SPPP: <https://dep.nj.gov/wp-content/uploads/npdes-stormwater/sppp-model-2023.pdf>
17. MS4 Case Manager List: [https://www.nj.gov/dep/dwq/msrp\\_managers.htm](https://www.nj.gov/dep/dwq/msrp_managers.htm)
18. MSRP Annual Report: [https://www.nj.gov/dep/dwq/tier\\_a.htm](https://www.nj.gov/dep/dwq/tier_a.htm)
19. MSRP Annual Report Service Tool: <https://www.njdeponline.com>
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22. NJDEP Integrated Water Quality Assessment Report: <https://www.state.nj.us/dep/wms/bears/assessment-report20182020.html>
23. NJDEP GeoWeb: <https://www.nj.gov/dep/gis/geoweb splash.htm>
24. NJDEP grant and loan programs: <https://dep.nj.gov/grantandloanprograms/>
25. NJ Green Infrastructure Municipal Toolkit: <https://gitoolkit.njfuture.org/>
26. NJ Developers Green Infrastructure Guide: <https://developersguide.njfuture.org/>
27. NJ Stormwater Utility Resource Center: <https://stormwaterutilities.njfuture.org/>
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29. Requirements for Discharges to Ground Water at N.J.A.C. 7:14A-7.
30. Sample Template for SPPP Form: [https://www.nj.gov/dep/dwq/pdf/sppp\\_bmp\\_form.pdf](https://www.nj.gov/dep/dwq/pdf/sppp_bmp_form.pdf)
31. SPC Training, Municipal Board and Governing Body Member Training "Asking the Right Questions in Stormwater Review Training" Tool, and SWMDR Training: [www.njstormwater.org/training.htm](http://www.njstormwater.org/training.htm)
32. Stormwater Management website [www.njstormwater.org/](http://www.njstormwater.org/)
33. The Stormwater Management rules at N.J.A.C. 7:8.
34. Stream Scouring Investigation Recordkeeping Form: [https://www.nj.gov/dep/dwq/tier\\_a.htm](https://www.nj.gov/dep/dwq/tier_a.htm)
35. Stormwater Discharges from Municipal Sources: [www.epa.gov/npdes/stormwater-discharges-municipal-sources](http://www.epa.gov/npdes/stormwater-discharges-municipal-sources)
36. Supplemental Questionnaire: [www.nj.gov/dep/dwq/tier\\_a.htm](http://www.nj.gov/dep/dwq/tier_a.htm)
37. Tier A MS4 Permit
38. Tier A MS4 Permit webpage: [www.nj.gov/dep/dwq/tier\\_a.htm](http://www.nj.gov/dep/dwq/tier_a.htm)
39. TMDL Look-up Tool: <https://www.nj.gov/dep/dwq/msrp-tmdl-rh.htm>
40. USEPA Guidance document: [www.nj.gov/dep/dwq/tier\\_a\\_guidance.htm](http://www.nj.gov/dep/dwq/tier_a_guidance.htm)

# ATTACHMENT 1

TABLE 1

## NEW OR MODIFIED REQUIREMENTS FOR *ORIGINAL* TIER A MUNICIPALITIES

| Deadline                            | Permit Requirement   | Change from 2018 Permit |
|-------------------------------------|--|-------------------------|
| 1/1/2023                            | IV.E.1. Post Construction Stormwater Management Program, MSWMP, SCO, and Mitigation Plan | Modified                |
|                                     | IV.F.2.a.vi. Herbicide Application Management  | Modified                |
|                                     | IV.F.2.a.vii. Excess De-Icing Material Management  | New                     |
|                                     | IV.F.2.a.viii. Roadside Vegetative Waste Management                                      | New                     |
|                                     | IV.F.3.a.i. Storm Drain Inlet Inspection   | Modified                |
|                                     | IV.F.3.a.ii. Storm Drain Inlet Cleaning and Maintenance                                  | Modified                |
|                                     | IV.F.3.a.iii. Catch Basin Inspection   | Modified                |
|                                     | IV.F.3.a.iv. Catch Basin Cleaning  | Modified                |
|                                     | IV.F.3.a.v. MS4 Conveyance System Inspection and Cleaning                                | New                     |
|                                     | IV.F.3.a.vi. Stormwater Infrastructure Inspection  | New                     |
|                                     | IV.F.3.a.vii. Stormwater Infrastructure Maintenance                                      | New                     |
|                                     | IV.F.5.a. Municipal Maintenance Yard (MMY) and Other Ancillary Operations                | Modified                |
|                                     | IV.F.5.l. Aggregate Material, Wood Chips, and Finished Leaf Compost Storage              | Modified                |
|                                     | IV.F.5.m. Cold Patch Asphalt Storage   | New                     |
|                                     | IV.F.5.o. Construction and Demolition Waste, Wood Waste, and Yard Trimmings              | Modified                |
|                                     | IV.F.5.p. Storage of Scrap Tires   | New                     |
|                                     | IV.F.5.q. Storage of Inoperable Vehicles or Equipment                                    | New                     |
|                                     | IV.F.5. r. Covering of Outdoor Refuse Containers and Dumpsters                           | New                     |
|                                     | IV.G.2. Stream Scouring  | Modified                |
|                                     | IV.G.3. Illicit Discharge Detection and Elimination                                      | Modified                |
| 4/1/2023                            | IV.B.2. Development of Municipal Stormwater Webpage                                      | Modified                |
| 7/1/2023                            | IV.A.2. Stormwater Pollution Prevention Plan Requirements                                | Modified                |
| 1/1/2024                            | IV.F.1.b. Adopt and Enforce Community Wide Ordinances (new)                              | New                     |
|                                     | IV.F.2.a.ix. Roadside Erosion Control  | New                     |
|                                     | IV.F.5.f. Bulk Liquid Storage (Secondary Containment)                                    | New                     |
| 1/1/2026                            | IV.F.2.a.i. Triannual Street Sweeping  | Modified                |
|                                     | IV.F.2.a.ii. Annual Street Sweeping  | Modified                |
|                                     | IV.F.6. SPC Training   | New                     |
|                                     | IV.G.1. MS4 Mapping  | New                     |
| 1/1/2027                            | IV.H.1.d. Watershed Improvement Plan - Phase 1 (Watershed Inventory Report)              | New                     |
| 12/1/2027                           | IV.H.1.e-f. Watershed Improvement Plan - Phase 2 (Watershed Assessment Report)           | New                     |
|                                     | IV.H.1.g. Watershed Improvement Plan - Phase 3 (Watershed Improvement Plan Report)       | New                     |
|                                     | IV.F.2.a.iv. Storm Drain Inlet Retrofitting  | Modified                |
| Within 12 months from rule adoption | IV.F.9. Stormwater Management Rule Amendment Training                                    | New                     |



# ATTACHMENT 1

TABLE 2

## NEW OR MODIFIED REQUIREMENTS FOR NEW TIER A (FORMER TIER B) MUNICIPALITIES

| Deadline | Permit Requirement   | 2018 MS4 Tier A Permit Change | Included in Former Tier B Permit? |
|----------|--|-------------------------------|-----------------------------------|
| 1/1/2023 | IV.E.1. Post Construction Stormwater Management Program, MSWMP, SCO, and Mitigation Plan (if applicable) | Modified                      | Yes                               |
|          | IV.F.2.a.v. Storm Drain Installation   | New                           | No                                |
|          | IV.F.2.a.vi. Herbicide Application Management  | New                           | No                                |
|          | IV.F.2.a.vii. Excess De-Icing Material Management  | New                           | No                                |
|          | IV.F.2.a.viii. Roadside Vegetative Waste Management  | New                           | No                                |
|          | IV.F.3.a.i. Storm Drain Inlet Inspection   | Modified                      | Yes                               |
|          | IV.F.3.a.ii. Storm Drain Inlet Cleaning and Maintenance  | Modified                      | Yes                               |
|          | IV.F.3.a.iii. Catch Basin Inspection   | Modified                      | Yes                               |
|          | IV.F.3.a.iv. Catch Basin Cleaning  | Modified                      | Yes                               |
|          | IV.F.3.a.v. MS4 Conveyance System Inspection and Cleaning  | New                           | No                                |
|          | IV.F.3.a.vi. Stormwater Infrastructure Inspection  | New                           | No                                |
|          | IV.F.3.a.vii. Stormwater Infrastructure Maintenance  | New                           | No                                |
|          | IV.F.5.h. Discharge of Stormwater from Secondary Containment   | New                           | No                                |
|          | IV.F.5.i. Vehicle/Equipment Maintenance and/or Repair  | New                           | No                                |
|          | IV.F.5.j. Equipment and Vehicle Wash Wastewater Containment  | New                           | No                                |
|          | IV.F.5.m. Cold Patch Asphalt Storage   | New                           | No                                |
|          | IV.F.5.p. Storage of Scrap Tires   | New                           | No                                |
|          | IV.F.5.q. Storage of Inoperable Vehicles or Equipment  | New                           | No                                |
|          | IV.F.5.r. Covering of Outdoor Refuse Containers and Dumpsters  | New                           | No                                |
|          | IV.K.b. Supplemental Questionnaire   | New                           | No                                |
| 7/1/2023 | IV.F.5.l. Aggregate Material, Wood Chips, and Finished Leaf Compost Storage                              | New                           | No                                |
|          | IV.F.5.n. Street Sweepings and Storm Sewer Clean-out Material Storage                                    | New                           | No                                |
|          | IV.F.5.o. Construction and Demolition Waste, Wood Waste, and Yard Trimmings                              | New                           | No                                |
|          | IV.F.10. Municipal Board and Governing Body Member Training  | New                           | No                                |

# ATTACHMENT 1

TABLE 2

## NEW OR MODIFIED REQUIREMENTS FOR *NEW* TIER A (FORMER TIER B) MUNICIPALITIES

| Deadline                            | Permit Requirement   | 2018 MS4 Tier A Permit Change | Included in Former Tier B Permit? |
|-------------------------------------|--|-------------------------------|-----------------------------------|
| 1/1/2024                            | IV.A.2. Stormwater Pollution Prevention Plan Requirements  | New                           | No                                |
|                                     | IV.B.2. Development of Municipal Stormwater Webpage  | New                           | No                                |
|                                     | IV.F.1.a. Adopt and Enforce Community Wide Ordinances (pre-existing)   | New                           | No                                |
|                                     | IV.F.1.b. Adopt and Enforce Community Wide Ordinances (new)  | New                           | No                                |
|                                     | IV.F.2.a.ix. Roadside Erosion Control  | New                           | No                                |
|                                     | IV.F.5.a. Municipal Maintenance Yard (MMY) and Other Ancillary Operations  | New                           | No                                |
|                                     | IV.F.5.b. Site Inspections   | New                           | No                                |
|                                     | IV.F.5.c. Inventory List of All Possible Sources of Pollutants in a Stormwater Discharge (Materials and Machinery) | New                           | No                                |
|                                     | IV.F.5.d. Container Labels   | New                           | No                                |
|                                     | IV.F.5.e. Spill Kits   | New                           | No                                |
|                                     | IV.F.5.f. Bulk Liquid Storage (Secondary Containment)  | New                           | No                                |
|                                     | IV.F.5.g. Establish, Maintain, and Implement BMPs for Fueling Operations   | New                           | No                                |
|                                     | IV.F.7. Annual Employee Training   | New                           | No                                |
|                                     | IV.F.8. Stormwater Management Design Review (SWMDR) Training   | New                           | No                                |
|                                     | IV.G.2. Stream Scouring  | New                           | No                                |
|                                     | IV.G.3. Illicit Discharge Detection and Elimination  | New                           | No                                |
| 1/1/2026                            | IV.F.2.a.i. Triannual Street Sweeping  | New                           | No                                |
|                                     | IV.F.2.a.ii. Annual Street Sweeping  | New                           | No                                |
|                                     | IV.F.6. SPC Training   | New                           | No                                |
|                                     | IV.G.1. MS4 Mapping  | New                           | No                                |
|                                     | IV.H.1.d. Watershed Improvement Plan - Phase 1   | New                           | No                                |
| 1/1/2027                            | IV.F.5.k. Salt and Other Granular De-icing Material Storage and Handling   | New                           | No                                |
| 1/1/2027                            | IV.H.1.e-f. Watershed Improvement Plan - Phase 2   | New                           | No                                |
| 12/1/2027                           | IV.F.2.a.iv. Storm Drain Inlet Retrofitting  | Modified                      | Yes                               |
|                                     | IV.H.1.g. Watershed Improvement Plan - Phase 3   | New                           | No                                |
| Within 12 months from rule adoption | IV.F.9. Stormwater Management Rule Amendment Training  | New                           | No                                |





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