

# ***Summary of Lambertville's Current Stormwater Management Program***

Stormwater Utility Feasibility Study  
Stormwater Focus Group

## **OVERVIEW**

Throughout New Jersey, communities like Lambertville face pressures to manage their stormwater permit requirements, nuisance flooding, and surface water quality issues, as well as an overall need to upgrade their aging **Municipal Separate Storm Sewer System (MS4)** infrastructure. To meet the needs of the National Pollutant and Discharge Elimination System (NPDES) – **MS4** Permit (N.J.A.C. 7:14) effective January 1, 2023, the updated Stormwater Management Rule (N.J.A.C. 7:8), and other stormwater needs (i.e., Total Maximum Daily Load (TMDL) mandates, infrastructure improvements, etc.), communities are examining their current financial policies and identifying additional financial sources.

Traditionally, municipalities allocate funds from their general fund to implement stormwater management activities. This approach means stormwater management services must compete with other community priorities, such as police and fire services, planning and zoning, parks, public works activities, etc. Using a general fund, without increasing taxes or receiving annual supplemental grant funding, can lead to uncertainty from year to year for resources budgeted to established municipal programs over time. Further, overall annual general fund budget priorities may not guarantee that the funding will be allocated in a manner to meet the ongoing stormwater program needs and/or that it is allocated in an equitable way. For example, tax exempt organizations do not pay taxes which go into the general budget which in turn funds stormwater.

A successful stormwater program is one that proactively maintains existing stormwater assets, improves upon the quality of water in both the local and regional watersheds, and maintains compliance with regulatory requirements. A stormwater utility is one way of providing the necessary resources required to proactively respond to meet the stormwater programs' needs in an equitable fashion.

In 2023, Lambertville initiated a Stormwater Utility Feasibility Study to evaluate the feasibility of establishing a dedicated revenue stream to fund all elements of the stormwater program. The Lambertville Stormwater Utility Feasibility Study will identify and document the level of effort and funding expended historically for stormwater management activities. Additionally, an understanding of current and future levels of service and operating policies will be considered to support discussions on necessary operational and capital improvements for stormwater services to address needs of the community and regulatory compliance.

## **LOCATION & COMPOSITION**

The City of Lambertville is located in the southwestern part of Hunterdon County, New Jersey and is approximately 1.14 square miles (787 acres). As of 2021, it has a population of 4,116 (2021 Population Estimate, U.S. Census Bureau) and is a mix of residential, educational, and commercial land use. Located along the banks of the Delaware River, Lambertville sits at the downstream end of the Swan Creek, Ely Creek, Jacobs Creek, and Alexauken Creek Watersheds, and therefore, is heavily influenced by upstream activities. About two-thirds of Lambertville lies within the lowlands of the Delaware River.

## DRAINAGE BASINS

Lambertville sits within the larger Delaware River Basin with Swan, Ely, and Alexauken Creeks being the major tributaries that flow through the City. The Delaware and Raritan (D&R) Canal runs parallel to the Delaware River throughout the City limits. The reservoir dam impounds Swan Creek's main stem above the City and is the primary source of drinking water for the Lambertville residents who do not rely on private wells.

### Swan Creek

Swan Creek (see inset figure) begins and flows through a portion of neighboring West Amwell Township where it enters the reservoir impoundment and continues through Lambertville's southern section. The stream primarily flows through residential neighborhoods and is adjacent to roads. It is partially underground where it crosses State Route 29.

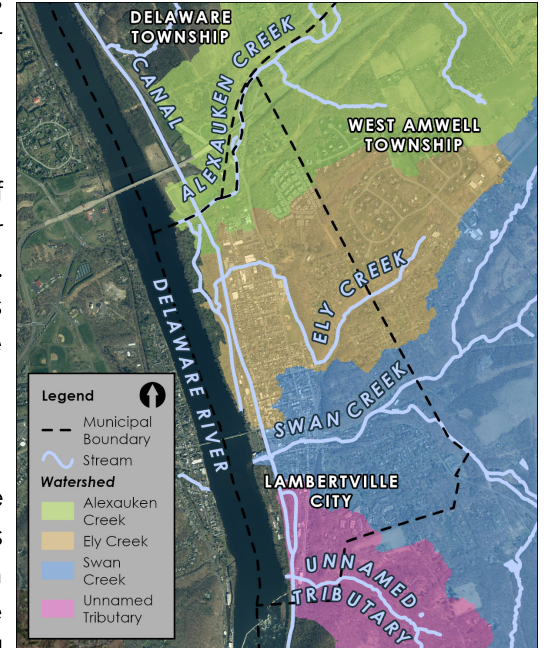
### Ely Creek

Ely Creek runs down the slope and behind Ely Field and the Lambertville Public School and runs under Route 29. When there is heavy runoff or backflow from the river, localized flooding occurs on the north side of the City. There are several pieces of infrastructure along its route that have been proposed or installed to reduce flood risk.

### Alexauken Creek

Alexauken Creek flows through Delaware, West Amwell, and East Amwell Townships; a combined region facing ever-increasing development pressure. It forms the border between Delaware Township and Lambertville's northern edge. Within the City limits, it runs through the surrounding residential areas along with some forested buffer areas and other open spaces before flowing under the D&R Canal and joining the Delaware River (see Figure 1).

Both Swan Creek and Alexauken Creek Watersheds have a history of localized and flash flooding from heavy precipitation events. Flooding in these tributaries also occurs when the Delaware River reaches flood stage and backflows into its tributaries as documented by the March 2005 Stormwater Management Plan, recent precipitation events including Tropical Storm Ida in 2021, and City staff experience. In addition, the low-lying portions of Lambertville are hemmed in by steep slopes parallel to the river to the east that produce fast-moving runoff during heavy precipitation events and overwhelm the existing capture and conveyance systems.



## UNDERSTANDING THE STORMWATER PROGRAM'S EXISTING LEVEL OF SERVICE

To better understand current stormwater program costs in Lambertville, the Project Team reviewed a variety of background documents, developed and distributed a questionnaire on all elements of stormwater management, and conducted video phone interviews. The questionnaire was used to capture current conditions, policies, level of service, and potential unmet needs as they relate to drainage infrastructure and stormwater management. The questionnaire was provided to staff prior to the interviews, which were

conducted on November 20, 2023. This exploratory effort targeted current levels of effort and spending relative to the stormwater program. The following sections summarize the data gathered during the interview process.

### ***Organizational Roles: Current City Departments and Services Related to Stormwater***

There are several departmental units in Lambertville that have a role in stormwater management. Each with a significant role in stormwater management is listed below in alphabetical order:

City Clerk's Office – Maintains and updates the stormwater webpage for the City as well as providing administrative support in the form of tracking projects, grants, and the Stormwater Pollution Prevention Plan (SPPP). This office records and maintains all records created for the Stormwater Management Plan.

City Council– As the elected representatives of the residents of the City of Lambertville, the City Council reviews applications for significant capital improvement projects and reviews and adopts ordinances as they relate to stormwater.

City Engineer/Planning Board Engineer – Currently the City uses the services of an engineering consultant to serve as the City Engineer/Planning Board Engineer on an on-call basis. The City Engineer contributes to the MS4 annual reporting, capital improvement planning, infrastructure planning, and aspects of regulation and enforcement of the stormwater management program. The City Engineer reviews non-City led projects with the City Planner and conducts any potential major development project stormwater management design for City projects. In addition, the City Engineer inspects City and non-City infrastructure construction projects for compliance with specifications and code, contributes to floodplain management tasks, participates in budgeting and prioritizing major stormwater repair and new capital infrastructure projects, supervises contractors, and performs contract administration on stormwater-related projects.

Lambertville has adopted NJDEP's Model Stormwater Control Ordinance (SCO) as of May 2021. Any proposed major development applications in compliance with the SCO and Stormwater Management Rule (N.J.A.C. 7:8) are reviewed by the Planning Board Engineer and presented to the Planning Board for approval. This position works closely with the Mayor, the Construction Official, Planning Board and Public Works Department to plan for and maintain the stormwater system.

City Planner– The City Planner is a part-time consultant who serves on the Planning Board and Zoning Board of Adjustment. This role supports the stormwater program by participating in the major development project stormwater management reviews with the City Engineer. In their role for community planning, they are tasked with observing, documenting, and altering the patterns of development activities and growth in Lambertville. A Master Plan re-examination concluding in 2019 included a recommendation to evaluate and revise the City's Stormwater Management Plan and related ordinances to be consistent with the updated NJDEP Stormwater Management Rule (N.J.A.C. 7:8), which was adopted in April 2021.

Construction Official – Serves as the FEMA Community Rating System (CRS) Coordinator, Zoning Officer, and Floodplain Manager.

Environmental Commission – Educates the public about the City's stormwater management measures, as well as apply for grant funding to develop the Watershed Improvement Plan as part of the City's MS4 compliance.

Finance Department – The Finance Department is responsible for the day-to-day financial operations of Lambertville including matters that may relate to stormwater management.

Lambertville Municipal Utilities Authority – The Lambertville Municipal Utilities Authority (LMUA) addresses the engineering and operational oversight of the sanitary system for Lambertville as well as receiving and treating flows from Stockton and portions of Bucks County. With approximately eight full-time employees. While this group currently has no direct role in stormwater management or maintenance of stormwater infrastructure within the City, the close proximity of the two systems often means that maintenance and/or repairs on one system impacts the other.

Mayor – The Mayor is the lead on all stormwater-related planning in the City and is involved in identifying and applying for funding, mapping infrastructure, managing consultants, public engagement and liaising, and working with the Public Works Department, LMUA, City Council, Environmental Commission, and other groups. The Mayor oversees all activities including annual budgets and capital plans. Revenue and expenditures are evaluated and reviewed with other staff and the City Council, while daily operations for stormwater management are carried out mainly by the Public Works Department.

Planning Board – The Planning Board has jurisdiction over all land use proposals which include site plans, subdivisions, major development reviews, and conditional uses of properties within the City. The Planning Board is responsible for creating and maintaining the City's Master Plan for development. It is charged with creating and recommending to the Mayor and Council land use ordinances consistent with the vision of the Master Plan. The Planning Board approves any proposed development projects following review by the Planning Board Engineer. Both major development reviews and the Master Plan contain aspects of stormwater in which the planning board plays a role. The Planning Board Secretary maintains training records for all board members in relation to stormwater management training.

Police Department – The Police Department's involvement in the stormwater program includes responding to health and safety emergencies caused by flooding. Their response may include closing off flooded roads and reporting flooding or other storm related hazardous conditions to the local emergency alert system. Their role in water quality permit compliance includes notifying appropriate staff and/or departments if they encounter activities which could be of concern relative to MS4 permit such as reporting legal and illegal activities that impact the drainage system integrity (e.g., motor vehicle accidents and spills). The Lambertville Police Department engages the public, education, and business communities on risk mitigation strategies during major storm events to reduce injuries, fatalities, and the need for rescue operations.

Public Works Department – The Public Works Department is the lead department on MS4 compliance with the Director being the Stormwater Management Program Coordinator and involved in the following activities:

- Stormwater quality management (watershed planning, water quality monitoring and assessments, BMP retrofit planning);
- Regulation and enforcement (e.g., development plan review, NPDES compliance and reporting, TMDL implementation plans, code enforcement, erosion and sediment controls, floodplain management);
- Capital improvements (major construction projects, minor construction projects, land acquisition, capital project oversight); and
- Data Management (GIS, BMP inventories, complaint tracking, reporting databases).

With seven full-time staff, this department is responsible for operating and maintaining the stormwater infrastructure within Lambertville in addition to responsibilities that include solid waste collection, leaf pick up, recycling, and general maintenance of buildings and municipal properties.



Stormwater maintenance activities include routine inspections and any repairs of infrastructure that can be performed in-house. The Drainage System Maintenance Plan dated August 2018, outlines these tasks as well as identifies problem areas. These tasks are performed regularly and without formalized reporting outside of NJDEP permit-required compliance reporting. Contractors may be brought in when in-house resources are unavailable for repair work or the scope warrants additional resources.

Drainage system cleaning (i.e., clearing inlets grates of debris and making minor repairs) impacts the overall capacity to effectively manage runoff flows and compliance with MS4 permit obligations targeting physical infrastructure.

It is from staff experience and knowledge of the system that the Public Works Department can pre-plan response actions when a significant rainfall event is forecasted. Pre-event clearing of inlets where historical flooding has occurred is one proactive measure used in Lambertville. Completing field checks to determine if areas that have had drainage blockages need immediate cleaning (such as headwalls or low-lying street-ends) is another pre-event planning effort that may be undertaken by Public Works. Like many communities, Lambertville has become more proactive in addressing impacts of such storms as storm frequency and intensity increases. Although these proactive measures are important, the City understands that these measures cannot fully address the challenges of climate change and intense storm impacts.

Street sweeping, brush and leaf collection, and snow removal are elements of MS4 permit compliance and parts of the overall stormwater program. Public Works Department available staff time is limited, and drainage facility complexity is growing. Additional personnel are needed to fully comply with state regulations to perform inspections and carry out needed repairs.

Tax Assessor – The Tax Assessor compiles all property data. Parcel information from this office is incorporated into the mapping efforts regarding type of property (e.g., residential or commercial). While this role does not have a current, direct role in stormwater, property data and the database itself can play a role in future stormwater services with regard to information management and potential distribution of fees.

Zoning Board of Adjustment – The Zoning Board of Adjustment considers applications for use variances that are specific exceptions not otherwise permitted in certain zones of the City's established land use ordinances. The Board hears appeals decisions made by the City's Zoning Enforcement Officer and interprets the land use ordinance when requested to do so. Site plans are reviewed by this Board in coordination with the City Engineer and can include review of stormwater management practices and/or requirements.

In addition to the above departments, committees, boards, and individual roles, Lambertville coordinates with several cross-jurisdictional entities within the stormwater system as both Hunterdon County and NJDOT have infrastructure within the City. There is often confusion about responsibility for maintenance and capital projects that has a major impact on effective management of stormwater infrastructure. For example, the seven inlets and trash racks that drain to a culvert at the base of Music Mountain on Ely Creek often become clogged with debris. While the City is responsible for cleaning the creek, NJDOT is responsible to clean the below ground trunk line and culvert which can take a lengthy coordination process with the State to achieve.

### ***Renewed MS4 Permit and New Compliance Requirements***

Lambertville is required to comply with federally mandated and NJDEP issued MS4 Permit. NJDEP renewed the permit with additional compliance standards effective on January 1, 2023. Lambertville has been regulated as

a designated MS4 permittee since the early 2000s and was classified as a Tier B community under the previous NJDEP permit structure. Effective January 1, 2023, Lambertville was reclassified as a Tier A permittee.

Annually, Lambertville prepares a status report that is provided to the state covering efforts undertaken for the previous year. The current permit is effective for the period 2023 through 2027. It includes modified and new compliance requirements and associated timelines for each element. A summary of these changes, published by NJDEP, is attached to this document for reference. The summary outlines the enhanced and additional practices, responsibilities, and actions that Lambertville's Public Works Department and other units will undertake continuously to maintain conditions and remain in compliance. Lambertville has five years to fully comply with the terms of the permit for activities/tasks that are new.

It has been a challenge for the City to maintain compliance with existing permit requirements and the reclassified tier brings additional pressures on capacity in order to address the permit mandates. When identified, Lambertville is required to take corrective action on any non-compliance issues and report on the status, though the new mandates do allow for up to a five-year period to meet individual requirements outlined in the, "*Tier A Deliverables Timeline*" handout.

Under the updated permit conditions, Lambertville is responsible for ensuring that private stormwater infrastructure (e.g., detention basins at Rock Creek Woods, Lambertville Station, Lambert's Hill, etc.) are maintained by increasing inspection activities and enforcing the regulations. Lambertville will have to create, communicate, and train staff in the standard operating procedures and document all compliance. GIS-based mapping of the existing infrastructure is an additional requirement, which will aid in Lambertville's planning for and prioritizing improvements.

Retrofitting and/or replacing all municipal storm drain inlets to the current standard is an example of the increased MS4 permit mandates. Currently, retrofitting occurs as roadwork projects are planned and performed, however there are many that still need to be addressed. This equates to a significant increase in material purchases and labor hours for installation over the current effort of the regular inspection and repair program.

Tier A also requires a more complex approach to tree maintenance and a more robust tree maintenance ordinance that will require additional time and expertise to evaluate, draft, and implement.

Additional and/or more frequent staff training, public education, facility upgrades, storm system mapping, pollutant modeling and study efforts as well as the need for a stormwater engineer who can oversee programs and coordinate compliance operations must be addressed. These requirements place an increased burden on what are already limited resources.

## **Maintenance Efforts**

Lambertville is in the process of digitizing the locations of all inlets and outfalls and other above-ground infrastructure within the existing conveyance system in order to build an inventoried resource. This will allow the data to be more readily accessible to staff in all departments who may be using the data to make capital program improvements and other decisions.

Structures and features that require maintenance efforts are also impacted by relationships with County, State, and private property owners. Access is required to perform maintenance such as streambank stabilization. † A

formalization of maintenance responsibilities for infrastructure owned by other entities within the City is also needed.

Additional efforts and expenditures carried out to ensure effective performance of the drainage system include the following:

- *Inlet Inspections and Maintenance:* Currently, routine inspections occur on a bi-annual basis and both pre-and post-storm for locations of known, recurring issues. Updated MS4 Permit elements impact how inlets are handled. For example, the City has 59 months from January 2023 to retrofit or replace inlets to meet permit standards and inspection is required at least once a year. These mandates would require an increased effort by additional staff and/or equipment.
- *Culvert Inspections:* Frequency of culvert inspection needs to be increased due to age. This requires additional support due to difficulty of access and structural evaluation needs.
- *Pipe Inspections:* Pipe inspections, using closed circuit television (CCTV) occur only within the sewage system to determine what repair or replacement work is necessary. However this equipment is not currently available for the stormwater conveyance system.
- *Pipe Repair:* Currently, stormwater pipes are evaluated for repairs on a reactive basis. This approach reduces effectiveness in sustaining the performance of the pipe network. A more proactive program where (1) pipes are regularly inspected, (2) repairs are prioritized and aligned with street maintenance programs; and (3) repairs addressed immediately based on risk of failure, is a more effective best practice for long-term operation. The inventorying and GIS mapping of the existing system as required by the MS4 Permit aids in establishing baseline data and tracking issues and risk.
- Researching easements for ownership of infrastructure and maintenance responsibilities.

Effective August 2021, and later amended in 2023, the stormwater management ordinance requires the establishment of minimum stormwater management requirements and controls for major development and/or redevelopment and to reduce the amount of nonpoint source pollution entering surface water and groundwater. Any new major development or subdivisions for major developments requiring site plan review, including those undertaken by the City of Lambertville, is affected.

## Current Level of Service

Data from fiscal year 2022 was reviewed to understand the current level of service for the stormwater management program. In the "Next Steps" section summarized below, the data on budgets and expenditures will include a breakout of projects and staff by cost or time spent attributed to stormwater. The final cost documentation shall be categorized in five service areas.

- **Capital Projects** – This includes projects that are typically contracted out that improve, rehabilitate, or otherwise construct facilities that are stormwater management related. Currently, Lambertville does not have a proactive planning or budgeting process for these items and they are dealt with on an event basis making funding and planning a challenge.
- **Planning & Permitting Compliance** – This includes efforts related to planning for projects or permits as well as costs for permit compliance (including fees and public outreach efforts).
- **Personnel** – This includes costs related to human resources; specifically, the percentage of time/salary that is devoted to stormwater activities. For this study, it includes staff operating within the Public Works Department and the City Engineer and City Planner.

- **Maintenance** – This includes projects or efforts that seek to maintain existing facilities or structures. It can include minor repairs, mowing operations, street sweeping, for example.
- **In-house Projects** – This includes projects undertaken by the City directly.

### ***Next Steps in Program/Services Revenue and Cost Evaluation***

A review of current expenditures and anticipated costs relating to stormwater over a five-year period will be evaluated and a summary will be prepared. The review will look at the current costs and sources of funding for stormwater management to the extent that the information is readily available. This includes how resources currently distributed are generated and how potential fees paid by users may impact property owners. This analysis will be discussed in the second meeting of the Stormwater Focus Group.



### Deliverables Timelines - 2023 MS4 Tier A Permit

Permit Citation	Description	New, Modified, or Unchanged from 2018 MS4 Tier A Permit	Included in Tier B	Compliance Schedule for Existing Tier A's	Compliance Schedule for New Tier A's
IV.A.2. Stormwater Pollution Prevention Plan Requirements	Submit an updated SPPP electronically to the Department	Modified	No	EDPA + 3 months	EDPA + 12 months
IV.B.1. Public Involvement, Participation, & Notice	Comply with applicable State and local public notice requirements	Unchanged	Yes	EDPA	EDPA
IV.B.2. Municipal Stormwater Webpage	Develop a dedicated stormwater webpage that contains links to all materials listed in IV.B.2.a. in one place	Modified	No	EDPA + 3 months	EDPA + 12 months
IV.C.1. Local Public Education and Outreach	Implement a Public Education and Outreach Program	Unchanged	Yes	EDPA	EDPA
IV.D.1. Construction Site Stormwater Runoff	Obtain Construction Activity NJPDES Stormwater General Permit or individual permit for construction site stormwater runoff activities	Unchanged	No	EDPA	EDPA
IV.E.1. Post Construction Stormwater Management in New Development and Redevelopment	Comply with N.J.A.C. 7:8 - develop, update, implement and enforce the following: a Stormwater Management Program to address post construction stormwater runoff, a Municipal Stormwater Management Plan (MSWMP), a Stormwater Control Ordinance (SCO), and if applicable, a Mitigation Plan; the same individual may not design AND review stormwater management projects	Modified	Yes	EDPA	EDPA
IV.F.1.a. Community Wide Ordinances (pre-existing)	Adopt and enforce ordinances for proper management of Pet Waste, Wildlife Feeding, Litter Control, Improper Disposal of Waste, Yard Waste, and Private Storm Drain Inlet Retrofitting	Unchanged	No	EDPA	EDPA + 12 months
IV.F.1.b. Community Wide Ordinances (new)	Adopt and enforce ordinances for proper management of Salt Storage Ordinance and Tree Ordinance	New	No	EDPA + 12 months	EDPA + 12 months
IV.F.2.a.i. Triannual Street Sweeping	At least once every 4 months, sweep all segments of roads owned or operated by the permittee and have storm drain inlets that discharge to surface water	Modified	No	EDPA + 12 months	EDPA + 12 months

### Deliverables Timelines - 2023 MS4 Tier A Permit

IV.F.2.a.ii. Annual Street Sweeping	At least once per year, sweep all segments of roads owned or operated by the permittee that do not have storm drain inlets that discharge to surface water	Modified	No	EDPA + 12 months	EDPA + 12 months
IV.F.2.a.iii. Storm Drain Inlet Labeling	Label all permittee owned or operated storm drain inlets that do not have permanent wording cast into the structure of the inlet if they are adjacent to municipal streets, within plazas, parking areas, maintenance yards or other permittee ancillary activities	Unchanged	Yes	EDPA	EDPA
IV.F.2.a.iv. Storm Drain Inlet Retrofitting	Retrofit or replace all municipal storm drain inlets within the standards set forth in permit Attachment B	Modified	Yes	EDPA + 59 months	EDPA + 59 months
IV.F.2.a.v. Storm Drain Installation	All storm drain installations must include a catch basin or other BMP designed for solids collection	New	No	EDPA	EDPA
IV.F.2.a.vi. Herbicide Application Management	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 'Roadside Vegetative Management' in Tier A permit Attachment E)	Modified	No	EDPA	EDPA
IV.F.2.a.vii. Excess De-Icing Material Management	Within 72 hours after the end of storm events, conditions permitting, remove piles of excess salt and de-icing materials that have been deposited during spreading operations on all streets and parking areas owned or operated by the permittee	New	No	EDPA	EDPA
IV.F.2.a.viii. Roadside Vegetative Waste Management	Ensure proper pickup, handling, storage, and disposal of wood waste and yard trimmings generated by the permittee	New	No	EDPA	EDPA
IV.F.2.a.ix. Roadside Erosion Control	Detect and repair erosion along roads owned or operated by the permittee and inspect and maintain the stability of shoulders, embankments, ditches, and soils along these roads to ensure that they are not eroding and contributing to the sedimentation of receiving waters	New	No	EDPA + 12 months	EDPA + 12 months
IV.F.3.a.i. Storm Drain Inlet Inspection	At least once per year, inspect ALL storm drain inlets owned or operated by the permittee	Modified	Yes	EDPA	EDPA
IV.F.3.a.ii. Storm Drain Inlet Cleaning and Maintenance	Develop, update, and implement a storm drain inlet cleaning and maintenance program	Modified	Yes	EDPA	EDPA

### Deliverables Timelines - 2023 MS4 Tier A Permit

IV.F.3.a.iii. Catch Basin Inspection	At least once per year, inspect 1,000 or 20% of the total number of catch basins (whichever is greater) rotating the schedule to ensure all catch basins are inspected at least once every 5 years	Modified	Yes	EDPA	EDPA
IV.F.3.a.iv. Catch Basin Cleaning	Develop, update, and implement a catch basin cleaning and maintenance program	Modified	Yes	EDPA	EDPA
IV.F.3.a.v. MS4 Conveyance System Inspection and Cleaning	Develop, update, and implement an MS4 conveyance system inspection, cleaning, and maintenance program, e.g., ditches and pipes	New	No	EDPA	EDPA
IV.F.3.a.vi. Stormwater Infrastructure Inspection	Inspect all stormwater infrastructure (excluding those in IV.F.3.a.i. through v.) at least 4x per year and after each rainstorm exceeding 1"	New	No	EDPA	EDPA
IV.F.3.a.vii. Stormwater Infrastructure Maintenance	Perform maintenance on all stormwater infrastructure (excluding those in IV.F.3.a.i. through v.) per approved maintenance plans or more frequently as needed to ensure proper function and operation	New	No	EDPA	EDPA
IV.F.4. Inspection and Maintenance of Stormwater Facilities Not Owned or Operated by the Permittee	Develop, update, implement, and enforce a program to ensure adequate long-term cleaning, operation, and maintenance of stormwater facilities not owned or operated by the permittee that are not subject to conditions of another NJPDES stormwater permit and constructed after February 7, 1984	Unchanged	Yes	EDPA	EDPA
IV.F.5.a. BMPs and SPPP forms for each Municipal Maintenance Yard (MMY) and Other Ancillary Operation	Implement applicable BMPs for activities listed in permit section IV.F.5.b. through r at each municipal maintenance yard and ancillary operation site owned or operated by the permittee; include each site and corresponding materials and activities in the SPPP	Modified	No	EDPA	EDPA + 12 months
IV.F.5.b. Site Inspections	Conduct monthly site inspections and maintain logs	Unchanged	No	EDPA	EDPA + 12 months
IV.F.5.c. Inventory List	Maintain a list of all materials and machinery which could be a source of pollutants in a stormwater discharge	Unchanged	No	EDPA	EDPA + 12 months
IV.F.5.d. Container Labels	Properly label all containers	Unchanged	No	EDPA	EDPA + 12 months

### Deliverables Timelines - 2023 MS4 Tier A Permit

IV.F.5.e. Spill Kits	Conduct cleanups of spills immediately after discovery using dry cleaning methods	Unchanged	No	EDPA	EDPA + 12 months
IV.F.5.f. Bulk Liquid Storage	Provide secondary containment of aboveground storage tanks containing bulk liquid materials	New	No	EDPA + 12 months	EDPA + 12 months
IV.F.5.g. Fueling Operations	Establish, maintain, and implement BMPs to address vehicle fueling, receipt of bulk fuel deliveries, and inspection and maintenance of storage tanks	Unchanged	No	EDPA	EDPA + 12 months
IV.F.5.h. Discharge of Stormwater from Secondary Containment	Discharge stormwater accumulated in a secondary containment area as needed following visual inspection for contaminants	Unchanged	No	EDPA	EDPA
IV.F.5.i. Vehicle/Equipment Maintenance and/or Repair	Maintain vehicles and equipment to prevent exposure of pollutants to stormwater	Unchanged	No	EDPA	EDPA
IV.F.5.j. Wash Wastewater Containment	Manage equipment and vehicle washing activities to prevent unpermitted discharges of wash wastewater to storm sewer inlets or to surface or ground waters of the State	Unchanged	No	EDPA	EDPA
IV.F.5.k. Salt and Other Granular De-icing Material Storage and Handling	Store salt and other solid de-icing materials in a permanent structure; establish, maintain, and implement salt and de-icing material storage and handling BMPs	Unchanged	No	EDPA	EDPA + 36 months
IV.F.5.l. Aggregate Material, Wood Chips, and Finished Leaf Compost Storage	Store aggregate materials, wood chips, and finished leaf compost in a manner that minimizes stormwater run-on and pollutant run-off	Modified	No	EDPA	EDPA + 6 months
IV.F.5.m. Cold Patch Asphalt Storage	Store cold patch asphalt in a permanent structure or on an impervious surface and covered	New	No	EDPA	EDPA
IV.F.5.n. Street Sweepings and Storm Sewer Clean-out Material Storage	Store street sweepings, storm sewer and catch basin clean-out materials, stormwater basin clean-out materials and other similar materials up to 6 months in a manner that controls leachate and stormwater run-on or run through	Unchanged	No	EDPA	EDPA + 6 months

### Deliverables Timelines - 2023 MS4 Tier A Permit

IV.F.5.o. Construction and Demolition Waste, Wood Waste, and Yard Trimmings	Store construction and demolition waste, wood waste, and yard trimmings, temporarily in a manner that minimizes stormwater run-on and pollutant run-off	Modified	No	EDPA	EDPA + 6 months
IV.F.5.p. Scrap Tires	Store scrap tires in a covered container or enclosure to prevent exposure to stormwater	New	No	EDPA	EDPA
IV.F.5.q. Inoperable Vehicles or Equipment	Store inoperable vehicles or equipment temporarily provided drip pans are utilized and monthly inspections are conducted for leaks and filled drip pans	New	No	EDPA	EDPA
IV.F.5. r. Refuse Containers and Dumpsters	Ensure dumpsters and refuse containers that are exposed to stormwater are covered at all times	New	No	EDPA	EDPA
IV.F.6. SPC Training	SPCs attend mandatory Department training once per permit cycle	New	No	EDPA + 36 months	EDPA + 36 months
IV.F.7. Annual Employee Training	Train individuals responsible for implementation of the stormwater program permit conditions that apply to their job duties	Unchanged	No	EDPA	EDPA + 12 months
IV.F.8. Stormwater Management Design Review (SWMDR) Training	Ensure that all individuals that review and approve stormwater management designs for major development projects on behalf of the permittee for compliance with the Stormwater Management rules at N.J.A.C. 7:8 complete the training provided by the Department at least once every 5 years	Unchanged	No	EDPA	EDPA + 12 months
IV.F.9. Stormwater Management Rule Amendment Training	Ensure that all individuals that have completed the Department SWMDR course also complete any Department training courses related to Stormwater Management rule amendments	New	No	Within 12 months from adoption of 7:8 rule amendment	Within 12 months from adoption of 7:8 rule amendment
IV.F.10. Municipal Board and Governing Body Member Related Training	Ensure that all individuals serving on the municipal board and governing body watch the Department training videos once per term	Unchanged	No	EDPA	EDPA + 6 months
IV.G.1. MS4 Mapping	Develop, update, and maintain an MS4 Infrastructure Map; review annually, update as needed, post on the permittee's stormwater webpage, and submit electronically to the Department	New	No	EDPA + 36 months	EDPA + 36 months



### Deliverables Timelines - 2023 MS4 Tier A Permit

IV.G.2. Stream Scouring	Develop, update, and implement a program to detect, investigate, and control localized stream scouring from stormwater outfalls owned or operated by the permittee via inspections of 100 outfalls per year or 20% of the total number of outfalls (whichever is greater)	Modified	No	EDPA	EDPA + 12 months
IV.G.3. Illicit Discharge Detection and Elimination	Develop, update, implement and enforce an ongoing Illicit Discharge Detection and Elimination Program via inspections of outfalls owned or operated by the permittee via inspections of 100 outfalls per year or 20% of the total number of outfalls (whichever is greater)	Modified	No	EDPA	EDPA + 12 months
IV.H.1.d. Watershed Improvement Plan - Phase 1	Prepare the Watershed Inventory Report and submit it to the Department; conduct semi-annual public information sessions	New	No	EDPA + 36 months	EDPA + 36 months
IV.H.1.e. Watershed Improvement Plan - Phase 2	Prepare the Watershed Assessment Report and submit it to the Department; conduct public information sessions	New	No	EDPA + 48 months	EDPA + 48 months
IV.H.1.g. Watershed Improvement Plan - Phase 3	Prepare the Watershed Improvement Plan Report and submit it to the Department; conduct public information sessions; implement plan and review it every 2 years	New	No	EDPA + 59 months	EDPA + 59 months
IV.I. Additional Measures	Incorporate measures the Department requires to address TMDLs, regional stormwater management plans, or Water Quality Management Plans	Unchanged	Yes	per NJDEP implementation schedule	per NJDEP implementation schedule
IV.J. Recordkeeping	Retain copies of all records related to the MS4 permit for at least 5 years; make available to the Department upon request	Unchanged	Yes	EDPA	EDPA
IV.K.a. Annual Report	Submit the Annual Report and Certification to the Department via the MSRP Annual Report service through the Regulatory Services Portal by May 1st each year	Unchanged	Yes	EDPA	EDPA
IV.K.b. Supplemental Questionnaire	Submit the Supplemental Questionnaire to the Department by attaching it to the MSRP Annual Report by May 1st each year	Unchanged	No	EDPA	EDPA