



LAWRENCEVILLE

GEORGIA

STORMWATER AUTHORITY AGENDA

Wednesday, September 20, 2023
6:00 PM

Third Floor GwMA Conference Room
70 S. Clayton St, GA 30046

Call to Order

Review of Current Projects

- [1.](#) Discuss Objectives and Goals for SWMP and MS4 Permit

Comments from Utility Board Staff

Final Adjournment



LAWRENCEVILLE

GEORGIA

AGENDA REPORT
MEETING: STORMWATER AUTHORITY
AGENDA CATEGORY: REVIEW OF CURRENT PROJECTS

- Item:** Discuss Objectives and Goals for SWMP and MS4 Permit
- Department:** Engineering
- Date of Meeting:** Wednesday, September 20, 2023
- Fiscal Impact:** 2024-2029
- Presented By:** Madison Smith, Stormwater Coordinator
- Action Requested:** None

Summary: The MS4 Permit Program runs on a 5-year term (2019-2024). May 2023 to June 2024 is the last year in the permit term where the City will be renewing the permit. The City is required to review, update, and or change the Stormwater Management Program (SWMP) during this time and submit the updated SWMP to GA Environmental Protection Division (GA EPD) for review with the permit renewal. The City’s stormwater management objectives should be determined for how we address the MS4 Permit requirements while staying ahead of new technologies and approaches to develop a robust and effective program. This should also include how to determine capital improvement projects with a holistic approach to meeting infrastructure demands, while evaluate budgetary needs for operating the program. I would like to discuss the goals, objectives, and ideas that will drive the Stormwater Management Program forward for the next 5 years and begin reviewing our current SWMP to modify as necessary.

Fiscal Impact:

- Operating budget
 - o Public Education and Outreach Program
 - o Public Involvement
 - o Maintenance of stormwater management facilities
- Capital Improvement Budget
 - o Equipment purchases

Attachments/Exhibits:
Overview of MS4 Requirements

1.



City of Lawrenceville
Stormwater Coordinator

MS₄ Permit and Program

NPDES and MS4

- GA DNR → GA EPD → City of Lawrenceville
- “In compliance with the provisions of the GA Water Quality Control Act (GA Laws 1964, pg. 416, as amended), hereinafter called the “State Act,” the Federal Clean Water Act, as amended (33 U.S.C. 1251 et. Seq.), hereinafter called the “Clean Water Act”, and the Rules and Regulations promulgated pursuant to each of these acts, all new and existing stormwater point sources covered under this permit are authorized to discharge stormwater from this municipal separate storm sewer system to the Waters of the State of Georgia in accordance with the limitations, monitoring requirements, and other conditions set forth in Parts 1 through 5 and Appendix B, hereof.”
- Permit effective date, June 11, 2019.

Why Stormwater Management?

- To mimic natural hydrology
- To reduce physical, chemical and biological degradation of streams
- To meet local, state, and federal requirements
- To allow for future growth and development
- Stormwater management is the leading cause of water quality impairments



What happens with increased impervious surfaces?

- Increased volume of runoff
- Increased peak discharge
- Increased velocities
- Shorter time to peak flow
- More frequent bank-full events
- Increased flooding
- Lower stream baseflow
- Less groundwater recharge



Reporting

- MS₄ permit runs on a 5-year term
 - May 1, 2019 to April 30, 2020
 - May 1, 2020 to April 30, 2021
 - May 1, 2021 to April 30, 2022
 - May 1, 2022 to April 30, 2023
 - May 1, 2023 to April 30, 2024

- Coming up to our next 5-year term
 - Renewal
 - Evaluate program successes
 - Update SWMP and SWPPP
 - Update SOPs
 - Update Ordinances to meet new models or higher standards set forth by the City



What drives good stormwater management?

Watershed Planning – Using the “watershed” as the framework for managing land use and developing large-scale solutions to regional stormwater quantity and quality issues. Stormwater master planning and watershed planning help to establish the priorities for SWM decision-making and should be incorporated early into an effective program.

Pollution Prevention – Preventing stormwater from picking up contaminants and becoming polluted through several management measures. Pollution prevention management practices are to prevent stormwater from encountering pollutants rather than providing structural controls for treatment and pollutant removals.

Erosion & Sediment Control – Controlling erosion and soil loss from construction areas and resulting in downstream sedimentation. Sediment loadings to surface waters are highest during the construction phase of development.

Development Regulations – Addressing the stormwater impacts of new development and redevelopment through stormwater management requirements and minimum standards.

Operations & Maintenance – Ensuring that stormwater management systems and structural controls work as designed and constructed. Ongoing maintenance is crucial in preventing reductions in hydraulic capacity and pollutant removal efficiency.

Floodplain Management – Preserving the function of floodplain areas to reduce flood hazards, minimize risks to human life and property, reduce modifications to streams, and protect water quality. It involves the designation of flood-prone areas and limiting of their uses to those compatible with a given degree of flood risk.



Acronyms

- DNR
 - Department of Natural Resources
- NPDES
 - National Pollutant Discharge Elimination System
- MS₄
 - Municipal Separate Storm Sewer System
- CWA
 - Clean Water Act
- SWMP
 - Stormwater Management Program
- SWPPP
 - Stormwater Pollution Prevention Plan
- IDDE
 - Illicit Discharge Detection & Elimination
- PCSM
 - Post Construction Stormwater Management
- HVPS
 - Highly Visible Polluted Sources
- MEP
 - Maximum Extent Practicable
- LDA
 - Land Disturbing Activity

What is the SWMP?

Structural and Source Control Measures

Illicit Discharge Detection and Elimination Program

- IDDE

Industrial Facility Stormwater Discharge Control

Construction Site Management

Highly Visible Pollutant Sources

- HVPS

Enforcement Response Plan

- ERP

Impaired Waters

Municipal Employee Training

Public Education

Public Involvement

Post-Construction Stormwater Management



Structural and Source Control Measures

MS₄ Control Structure Inventory & Map

- Each reporting period, update the inventory and map of MS₄ control structures.
 - Min. – The inventory and map must include catch basins, ditches, detention/retention ponds, and storm drain lines
- Provide the updated inventory and map, the number of MS₄ structures added during the reporting period, and the total number of structures in the inventory, in each annual report.



MS₄ Inspection & Maintenance Program

- Conduct inspections of the MS₄ structures so that 100% of the structures are inspected within the 5-year permit term.
 - Provide the number and percentage of the total structures inspected and documentation
- Conduct maintenance on the MS₄ structures as needed.
 - Provide the number of the total structures maintained and documentation



Planning Procedures

- Develop or update, as needed, a comprehensive planning document which addresses, in part, areas of new development and redevelopment to reduce pollutants in discharges from the MS₄. Describe any changes made to the stormwater portion of the document during the reporting period in each annual report.

Street Maintenance

- Conduct street cleaning using either of the following methods:
 - Conduct street maintenance and cleaning at a frequency of at least one mile per reporting period.
 - Provide documentation of any street sweeping activities conducted
 - If the permittee does not engage in street sweeping, then implement an alternate method of street cleaning, such as trash/litter removal.
 - Provide documentation of the litter removal activities conducted

Flood Management Projects

- Ensure proposed flood management projects (e.g., detention and retention ponds) are assessed for water quality impacts during the design phase.
- Conduct an assessment, using the procedures described in the SWMP, of existing permittee-owned flood management projects (e.g., detention and retention ponds) for potential retrofitting to address water quality impacts and conduct any feasible retrofitting activities.

Municipal Facilities

Excluding Any Facilities Addressed in Section 3.3.3

- Each reporting period, update the inventory of municipal facilities with the potential to cause pollution and provide in each annual report.
- Implement the program to control runoff from municipal facilities with the potential to cause pollution. The program shall include the facility inspection prioritization, inspection frequency, and inspection documentation protocol as described in the SWMP.



Pesticide, Fertilizer, & Herbicide Application

- Utilize a program to reduce pollution by the application of pesticides, fertilizer, and herbicides by commercial applicators and distributors in accordance with the GA Department of Ag requirements.
- Implement the program to reduce pollution caused by the municipal use of pesticides, fertilizers, and herbicides, as described in the SWMP.





Illicit Discharge Detection & Elimination Program (IDDE)

Non-Stormwater Discharges

- Water line flushing
- Landscape irrigation
- Diverted stream flows
- Rising groundwater
- Uncontaminated groundwater infiltration
- Uncontaminated pumped groundwater
- Discharges from potable water sources
- Foundation drains
- Air conditioning condensation
- Irrigation water
- Springs
- Water from crawl space pumps
- Footing drains
- Lawn watering
- Individual residential car washing
- Flows from riparian habitats and wetlands
- Swimming pool discharges
- Street wash water
- Flows from fire fighting activities



Legal Authority

- Re-evaluate and modify the existing IDDE Ordinance when necessary for compliance with this permit.



Outfall Inventory & Map

- Each reporting period, update the inventory and map showing the location of all outfalls from the MS4 and the names and location of all waters of the State that receive discharges from those outfalls with each annual report.
- Provide the number of outfalls added during the reporting period, and the total number of outfalls in the inventory in each annual report.



IDDE Plan

- Implement the IDDE Plan below, following the procedures described in the SWMP, to detect and address non-stormwater discharges to the MS4.
 - Conduct dry weather screening inspections on 100% of total outfalls within the 5-year permit term.
 - Provide the number and percentage of outfall inspections conducted during the reporting period and documentation of the inspections in each annual report.
 - Implement investigative and follow-up procedures when the results of the screening indicate a potential illicit discharge.
 - Ensure any identified illicit discharges are eliminated. Provide information on any eliminated discharges or on any enforcement actions taken for illicit discharges during the reporting period in each annual report.



Spill Response Plan



- Implement the procedures described in the SWMP to prevent, contain, and respond to spills that may discharge to the MS4. Provide documentation on spill occurrences during the reporting period in each annual report.

Public Reporting Procedures

- Implement the procedures described in the SWMP to promote, publicize, and facilitate public reporting of illicit discharges. The permittee must perform at least one formal notification to the public of methods available to report an observed illicit discharge (e.g., website posting, newsletter, bill insert) at least once each reporting period. Provide the documentation on any activities conducted during the reporting period in each annual report.
- Implement the procedures for receiving and responding to complaints related to illicit discharges described in the SWMP. Provide information on each complaint related to IDDE that was received and investigated during the reporting period in each annual report, including its status.

Proper Management & Disposal of Used Oil & Toxic Materials ^{1.}

- Implement the activities to facilitate the proper management and disposal of used oil and toxic materials, including educational activities, household waste collection programs, etc., described in the SWMP. The permittee must perform at least one activity to facilitate the proper management and disposal of used oil and toxic materials at least once each reporting period. Provide details on any activities performed during the reporting period in each annual report.

Sanitary Sewer Infiltration Controls

- If the permittee owns or operates the sanitary sewer within its jurisdiction, implement the activities to detect and eliminate seepage and spillage from municipal sanitary sewers to the MS₄ described in the SWMP. The permittee must perform at least one activity to detect and eliminate seepage and spillage from municipal sanitary sewers to the MS₄ at least once each reporting period. Provide details on any activities performed during the reporting period in each annual report.



Industrial Facility Stormwater Discharge Control

Industrial Facility Inventory

- Each reporting period, update the inventory of facilities with industrial activities that potentially discharge to the MS₄. At a minimum, this shall include facilities listed on the EPD's Industrial Stormwater General Permit Notice of Intent and No Exposure Exclusion online listings. Provide an updated inventory in each annual report.

Inspection Program

- Implement the industrial facility inspection program which includes the facility inspection prioritization, inspection frequency, and inspection documentation protocol described in the SWMP. Conduct inspections on 100% inventoried facilities that discharge to the MS₄ within the 5-year permit term. Provide the total number of facilities, the number and percentage of inspections conducted during the reporting period, and documentation of the inspections in each annual report.
- Implement a monitoring program for stormwater runoff from industrial facilities, waste facilities, and hazardous waste treatment, storage and disposal facilities, as defined in the SWMP. Provide the results of any monitoring conducted during the reporting period in each annual report. The permittee may use monitoring results provided by the industrial facility. This shall include all facilities that the permittee determines are contributing a substantial pollutant loading to the MS₄.

Enforcement Response Plan

- Implement enforcement procedures described in the SWMP and in accordance with the ERP. If a stormwater violation is noted at an industrial facility that discharges to the MS₄. Provide documentation on any enforcement actions taken during the reporting period in each annual report.

Educational Activities

- Implement education activities for industrial facilities (e.g., brochure distribution, website posting) during the reporting period. Conduct an educational activity related to industrial facilities at least once each reporting period. Provide documentation of any education activities performed during the reporting period in each annual report.



Construction Site Management

Legal Authority

- Re-evaluate and modify the existing Erosion and Sedimentation (E&S) Ordinance when necessary for compliance with this permit. The permittee must ensure that the E&S Ordinance provides the authority to issue land disturbing activity permits; require BMPs to prevent and minimize E&S; require erosion, sedimentation and pollution control plan submission and review prior to commencing construction, conduct inspections and enforcement, including stop work orders, bond forfeiture, and monetary penalties; and require education and certification for persons involved in land development, design review permitting, construction, monitoring, inspection and other land disturbing activities. If the E&S Ordinance is revised during the reporting period, submit a copy of the adopted ordinance in the annual report.

Site Plan Review Procedures

- Ensure that 100% of the site plans are reviewed in accordance with the site plan review procedures described in the SWMP.
- Provide a list of the site plans received and the number of plans reviewed, approved, or denied during the reporting period in each annual report.
- Provide the number of Land Disturbing Activity (LDA) permits issued during the reporting period in each annual report.

Inspection Program

- Implement the construction site inspection program. The purpose of the inspections is to ensure that structural and non-structural BMPs at construction sites are properly designed and maintained as specified in the Construction General Permits (CGPs).
- The construction site inspection program shall include the facility inspection prioritization, inspection frequency, and inspection documentation protocol described in the SWMP or in accordance with the Manual for Erosion and Sediment Control in Georgia. At a minimum, the permittee must conduct at least one inspection at each active construction site during the reporting period.
- Provide the number of active sites and the number of inspections conducted by the permittee during the previous reporting period in each annual report.

Enforcement Procedures

- Implement enforcement procedures for 100% of the E&S violations documented at construction sites as described in the SWMP and in accordance with the ERP. Provide documentation on any enforcement actions taken by the permittee during the reporting period in each annual report, including the number and type (Notice of Violation, Stop Work Order, etc.).

Certification

- All builders, developers, contractors, and other entities involved in construction activities subject to the CGPs shall comply with the certification requirements of the GA Erosion and Sedimentation Act and the rules adopted by the GSWCC.
- Ensure that MS₄ staff involved in construction activities subject to the CGPs are trained and certified in accordance with the rules adopted by the Georgia Soil and Water Conservation Commission. Provide the number and type of current certifications in each annual report.



Highly Visible Pollutant Sources (HVPS)

HVPS Facility Inventory

- Each reporting period, update the inventory of HVPS facilities that discharge to the MS₄. Provide an updated inventory in each annual report.

Inspection Program

- Implement the HVPS facility inspection program which includes the facility inspection prioritization, inspection frequency, and inspection documentation protocol described in the SWMP. Conduct inspections on 100% of inventoried facilities that discharge to the MS₄ during the 5-year permit term. Provide the total number of facilities, the number and percentage of inspections conducted during the reporting period, and documentation in each annual.

Enforcement Procedures

- Implement enforcement procedures to be utilized if a stormwater violation is noted at an HVPS facility that discharges to the MS₄ as described in the SWPM and in accordance with ERP. Provide documentation on any enforcement actions taken at HVPS facilities during the reporting period in each annual report.

Educational Activities

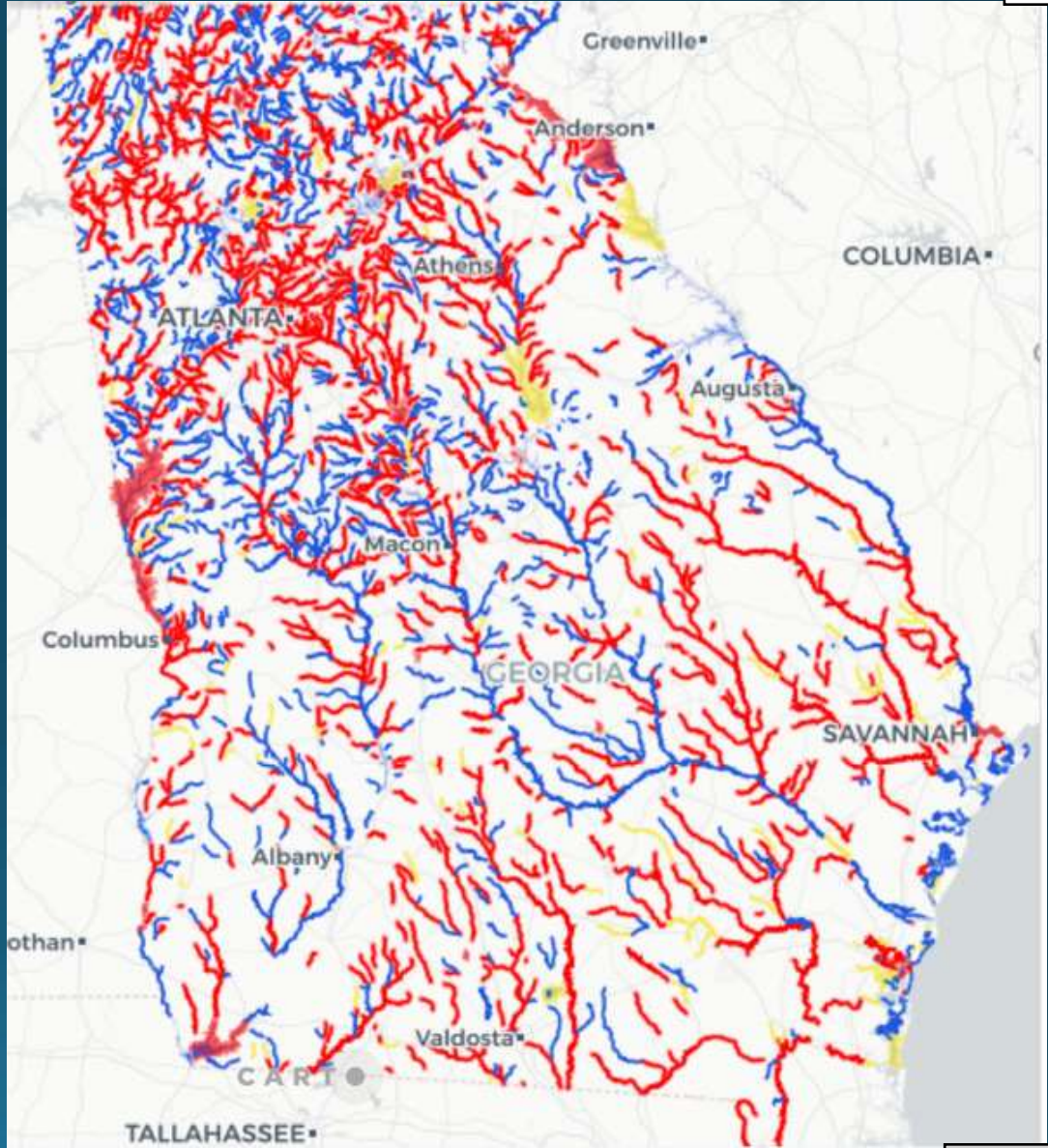
- Implement educational activities for HVPS facilities (e.g., brochure distribution, website posting) during the reporting period. Conduct an educational activity related to HVPS facilities at least once each reporting period. Provide documentation of any educational activities performed during the reporting period in each annual report.



Enforcement Response Plan (ERP)

ERP

- Permittee must develop and implement an ERP that describes the action to be taken for violations associated with IDDE, construction, industrial, HVPS, and other SWMP programs.



Impaired Waters

Impaired Waters

- Identify any impaired waters located within the jurisdictional area which contain MS₄ outfalls or are within one linear mile downstream of MS₄ outfalls and within the same watershed.
- Identify the pollutant of concern and propose an Impaired Waters Plan addressing each pollutant of concern.
- Check annually whether an impaired water has been added within the jurisdictional area.
- Report on all monitoring activities.
- Report if a Total Daily Maximum Load containing a wasteload allocation specific to outfall(s) within the jurisdictional area.



Municipal Employee Training

Municipal Employee Training

- Must obtain stormwater-related training for its employees at least once each reporting period. The training must address such stormwater topics as are necessary for the employee to do his/her job and may include topics such as:
 - Inspection and maintenance of the MS₄
 - Good housekeeping practices at municipal facilities
 - Illicit discharge detection and elimination
 - Industrial facility inspections
 - Construction site inspections
 - Highly visible pollutant source inspections
 - Green infrastructure and Low Impact Development training
 - Runoff reduction/qualify training



Public Education

Public Education Program

Evaluate existing program to ensure that it meets the needs of your community. Implement, and revise, if necessary, the stormwater education program described in the SWMP.

- The Public Education Program must include activities chosen from the following list, or other activities proposed for EPD approval:
 - School presentations
 - Brochures placed in public places
 - Municipal website
 - Presentations to government officials
 - Newsletter
 - Utility bill insert
 - Ongoing social media program
 - Promotional items/giveaways
 - Booth at community event
 - Local access channel educational postings
- Specify the measurable goal for each type of activity. Each type of activity must be executed at least once during the reporting period.
- Details and documentation of each type of activity implementation must be provided in the annual report.



Public Involvement

Public Involvement Program

Evaluate the existing program to ensure that it meets the needs of the community. Implement, and revise, if necessary, the public involvement program described in the SWMP.

- The Public Involvement Program must include activities chosen from the following list, or other activities proposed for EPD approval:
 - Stream cleanup (e.g. Rivers Alive)
 - Great American Cleanup
 - Citizen Hotline
 - Citizen science/volunteer monitoring (e.g., Adopt-A-Stream)
 - Adopt-A-Road
 - Storm drain marking
 - Household hazardous waste disposal event
 - Recycling event
 - Local stormwater management panel
 - Comprehensive planning committees
 - Stakeholder Advisory committees
 - Pet waste stations
- Specify the measurable goal for each type of activity. Each type of activity must be executed at least once during the reporting period.
- Details and documentation of each type of activity implementation must be provided in the annual report.



Post-Construction Stormwater Controls

Ordinance Review

- The permittee must adopt ordinances, or update existing ordinances, when necessary for compliance with this permit, to address development and redevelopment, and enforcement of post-construction controls. The ordinance must provide the authority to conduct plan reviews, conduct plan reviews, conduct inspections, enter into inspection and maintenance agreements, and pursue enforcement. If the ordinance is revised during the reporting period, submit a copy of the adopted ordinance with the annual report.
- Ordinance revisions must include the adoption and implementation of the appropriate parts of either the latest edition of the Georgia Stormwater Management Manual (GSMM) or an equivalent or more stringent local design manual, which must meet or exceed the performance standards listed in the GSMM. All permittees must implement the GSMM to the MEP.

Performance Standards

- The permittee shall apply the standards for new development and redevelopment to any site that meets one or more of the following criteria:
 - New development that creates or adds 5,000 sqft or greater of new impervious surface area, or that involves land disturbing activity of one acre of land or greater.
 - Redevelopment that creates or adds or replaces 5,000 sqft or greater of impervious surface area, or that involves land disturbing activity of one acre or more, including projects less than one acre if they are part of a larger common plan of development or sale.

Approved Performance Standards

Stormwater
Runoff
Quality/Reduction

Stream
Channel/Aquatic
Resource
Protection

Overbank Flood
Protection

Extreme Flood
Protection

Trout Stream
Protection

Linear Transportation Projects

- The permittee must apply the performance standards during the design of all construction projects. However, the performance standards may be infeasible to apply, all or in part, for linear transportation projects being constructed by the permittee, local governments, or authorities. The permittee may develop a feasibility program which sets reasonable criteria for determining when implementing the performance standards in linear projects is infeasible. The permittee may develop this feasibility program and submit it to EPD for review. Upon submittal to EPD, the permittee, local governments, and authorities may begin implementation of this feasibility program for linear transportation projects only.



Green Infrastructure/Low Impact Development

Legal Authority

- The permittee shall continue to review and revise, where necessary, building codes, ordinances, and other regulations to ensure they do not prohibit or impede the use of GI/LID practices, including infiltration, reuse, and evapotranspiration. At a minimum, the permittee shall assess those regulations governing residential and commercial development, road design, land use, and parking requirements. During the regulatory review, the permittee should consider the inclusion of incentives for use of GI/LID practices into the ordinance. If the ordinance(s) are revised during the reporting period, submit a copy of the adopted ordinance(s) with the annual report.

GI/LID Program

- Implement the GI/LID Program approved by EPD. The GI/LID Program shall include procedures for evaluating the feasibility and site applicability of different GI/LID techniques and practices, and various structures and practices to be considered. If the GI/LID Program is revised during the reporting period, submit the revised program to EPD for review with the annual report.

GI/LID Structure Inventory

- Each reporting period, update the inventory of water quality-related GI/LID structures located within the permittee's jurisdiction and at a minimum, constructed after June 11, 2014, (e.g. bioswales, pervious pavement, rain gardens, cisterns, and green roofs). The inventory must, at a minimum, include permittee-owned GI/LID structures, those publicly-owned GI/LID structures owned by other entities, and privately-owned non-residential GI/LID structures. Track the addition of new water quality-related GI/LID structures through the plan review process and ensure that the structures are added to the inventory.
- Provide an updated inventory, including the type and total number of structures, in each annual report.

Inspection & Maintenance Program

- Conduct inspections on 100% of the total privately-owned non-residential (e.g., mixed use development, commercial, etc.) and permittee-owned GI/LID structures, included in the inventory within the 5-year permit term. Provide the number and/or percentage of the total structures inspected, and documentation of the inspections conducted during the reporting period in each annual report.

Inspection & Maintenance Program

- Conduct maintenance on the permittee-owned GI/LID structures, as needed. Provide the number of the total structures maintained and documentation of the maintenance performed during the reporting period in each annual report.
- Implement procedures for ensuring privately-owned non-residential GI/LID structures are maintained as needed. Provide documentation of these activities in each annual report.