



Middlesex Township

Cumberland County, Pennsylvania

June 2026

Municipal Separate Storm Sewer System (MS4) Stormwater Management Program (SWMP)



SWMP Overview

Clean water is fundamental to the health, environmental quality, and economic vitality of Middlesex Township. Managing stormwater runoff from developed areas is an important component of protecting local waterways from pollutants that can be transported by rainwater flowing across roads, parking lots, rooftops, and other impervious surfaces.

Middlesex Township in Cumberland County, Pennsylvania is committed to responsible environmental stewardship and the protection of its water resources. In support of this commitment, the Township maintains and implements a Stormwater Management Program (SWMP) in accordance with its Municipal Separate Storm Sewer System (MS4) Permit issued by the Pennsylvania Department

of Environmental Protection (PA DEP). The Township's original MS4 Permit became effective on July 31, 2018, and was renewed effective August 1, 2023. The permit establishes the framework through which the Township manages stormwater discharges from its regulated MS4 area and works to improve water quality throughout the community.

Although much of Middlesex Township remains rural and suburban in character, the municipality includes a highly developed transportation and commercial corridor formed by Interstate 76 (Pennsylvania Turnpike), Interstate 81, and U.S. Route 11. This area, along with other developed portions of the Township, contributes stormwater runoff to local waterways including Conodoguinet Creek, Letort Spring Run, Wertz Run, and Hogestown Run. Protection of these waterways is a primary objective of the Township's stormwater management efforts.

The MS4 Permit is intended to reduce pollutant discharges to the maximum extent practicable, eliminate illicit discharges and connections, and protect and improve surface water quality in accordance with the federal Clean Water Act and Pennsylvania's Clean Streams Law. To achieve these goals, permittees are required to develop, implement, and maintain a comprehensive Stormwater Management Program organized around six Minimum Control Measures (MCMs). These measures address MCM 1 - public education and outreach, MCM 2 - public involvement and participation, MCM 3 - illicit discharge detection and elimination, MCM 4 - construction site stormwater runoff control, MCM 5 - post-construction stormwater management, and MCM 6 - pollution prevention and good housekeeping for municipal operations.

This SWMP serves as the Township's roadmap for compliance with its MS4 Permit. The SWMP identifies the Best Management Practices (BMPs), implementation schedules, responsible parties, measurable goals, and performance metrics that will be used to satisfy the requirements of each MCM. Together, these activities provide a systematic approach for reducing pollutants in stormwater runoff, maintaining regulatory compliance, and promoting the long-term protection of the Township's water resources.

Progress toward achieving these objectives will be documented through ongoing program implementation, monitoring, recordkeeping, and annual reporting. Through continued execution of this SWMP, Middlesex Township demonstrates its commitment to environmental stewardship, regulatory compliance, and the preservation of clean and healthy waterways for current and future generations.

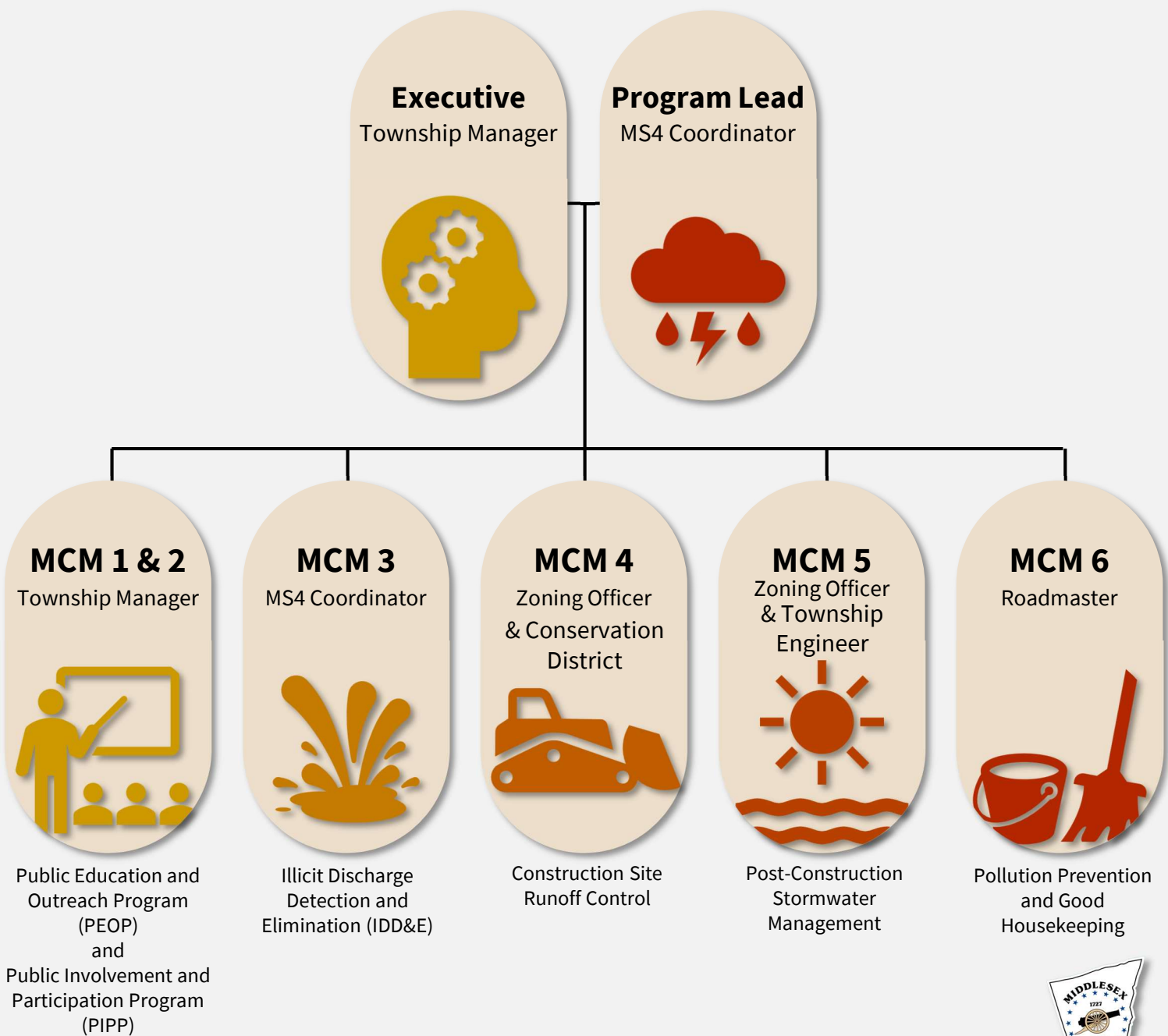


Middlesex Township MS4 SWMP

Program Structure

Directed By: Middlesex Township Manager and Middlesex Township MS4 Coordinator

Middlesex Township's SWMP requires participation of the entire Middlesex Township staff. However, there are several key positions that spearhead compliance and compliance documentation for each of the MCMs (listed below). The leadership relies on performance of staff and reporting and pollution reduction efforts of Township residents, businesses and site developers.



MCM 1 and 2 – Public Education and Outreach & Public Involvement and Participation

Goal/Purpose: An informed and knowledgeable community is instrumental to the success of a comprehensive stormwater management program. As the community understands the need for and importance of stormwater management, they become aware of how their responsibilities and actions can help protect and improve the waters of Middlesex Township and the greater Chesapeake Bay Watershed.

The overarching goals for this program are:

- **Education:** provide information regarding pollution in stormwater runoff and its effects on surface waters.
- **Participation:** provide opportunities for the public to collaborate in stormwater pollution reduction.

Programs: Combined Public Education and Outreach Program/Public Involvement and Participation Program (PEOP /PIPP)

Overview: The Middlesex municipal staff, headed by the Township Manager and assisted by the MS4 Coordinator, administrative staff, and Township consultant, are responsible for the development and implementation of MCMs 1 and 2.

The Township implements the Combined PEOP/PIPP by providing educational and public participation opportunities, including routine and specialized training for municipal staff, distribution of educational materials and newsletters, website updates, announcements for Bulk Waste Collection Days and Household Hazardous Waste Collection Days, stormwater discussions during Board of Supervisors meetings, and responses to stormwater complaints.

Participants: There are three key groups that engage in education and participation opportunities:

- **Municipal employees and Municipal Boards and Committees:** As staff administer the MS4 Permit, it is imperative that they are knowledgeable about stormwater management, illicit discharges, and pollution reduction.
- **Residents:** Residents are directly impacted by policy changes and associated fiscal responsibilities. By understanding the context and benefits of pollution reduction, residents can advocate for and participate in the continued success of the program.
- **Businesses:** The Township hosts several businesses such

as trucking-affiliated businesses, corporate headquarters, agri-businesses, and recreational facilities. It is essential to educate this community to gain support of the Township programs and to encourage practices that reduce stormwater pollution.

Documentation: Documentation maintained to support MCM 1 implementation includes:

- Newsletters
- Presentation content
- Website
- Board of Supervisors meeting minutes
- Flyers

Metrics:

- Number of newsletters distributed
- Number of flyers distributed
- Number of website updates
- Number of staff training sessions conducted and participant attendance
- Number of stormwater-related discussions at public meetings
- Number of stormwater complaints received and addressed



MCM 3 - Illicit Discharge Detection and Elimination (IDD&E)



Goal/Purpose: The purpose of the Illicit Discharge Detection and Elimination (IDD&E) Program is to find, correct, and prevent contaminated stormwater discharges from entering the Township's storm sewer system.

Programs: Illicit Discharge Detection and Elimination

Overview: The IDD&E Program has several components that support the elimination of pollutant discharges.

The Middlesex Township Stormwater Ordinance establishes enforcement authority to protect water quality by prohibiting non-stormwater discharges to the stormwater system.

The Township maintains a database of storm sewer system maps and inspects outfalls at least once during a five-year permit term. An outfall with a confirmed illicit discharge is classified as a priority outfall and will be inspected more frequently.

Dry weather screenings are performed by the Township's professional consultants, with the assistance of the Township's Highway Department staff, to identify potential illicit discharges.

Township staff investigates and pursues remedies for illicit discharges reported by municipal residents and businesses or observed by Township personnel.

If an illicit discharge is a toxic substance, the Township notifies Pennsylvania Department of Environmental Protection (PA DEP) and, when reasonably possible, downstream users of the affected waters. If an illicit discharge does not originate within the Township boundary, the adjacent municipality/MS4 is notified.

Municipal staff participates in educational programs and trainings that emphasize their responsibilities in identifying and preventing potential illicit discharges.

The Township continues to encourage residents and businesses to report any unusual fluids entering or discharging from the storm sewer system.

Participants: Township staff carry out the tasks of the program, with assistance from:

- Municipal residents
- Businesses
- Professional consultants
- Adjacent municipalities
- First responders

Documentation: Documentation maintained to support MCM 3 implementation includes:

- IDD&E Manual
- MS4 outfall mapping
- Dry weather screening reports
- Complaint and investigation logs with corrective action reports
- Employee training records

Metrics:

- Number of outfalls screened
- Number of potential illicit discharges identified
- Number of public complaints received
- Number of investigations conducted
- Number of illicit discharges eliminated
- Number of corrective actions completed



MCM 4 – Construction Site Stormwater Runoff Control



Goal/Purpose: The primary goal of this Minimum Control Measure (MCM) is to prevent and minimize sediment pollution and other construction-related pollutants from entering the Municipal Separate Storm Sewer System (MS4) and receiving waters as a result of earth disturbance activities within Middlesex Township.

Programs: Construction Stormwater Inspections

Overview: Middlesex Township and the Cumberland County Conservation District (CCCD) maintain a Memorandum of Understanding (MOU) that establishes a cooperative approach to the implementation and enforcement of construction-related erosion and sediment (E&S) control requirements. Under this agreement, CCCD serves as the lead agency for the review and approval of E&S plans, site inspections, investigations, and enforcement actions associated with earth disturbance activities.

The Township supports these efforts through the administration and enforcement of its Subdivision and Land Development Ordinance (SALDO) and Stormwater Management Ordinance, both of which require the installation and maintenance of approved E&S Best Management Practices (BMPs) throughout construction activities. As part of the permitting process, the Township issues building permits and notifies CCCD whenever a proposed project involves earth disturbance activities exceeding one acre. The Township Engineer conducts construction-phase stormwater inspections on approved development projects to verify compliance with approved plans and permit requirements. The Township works collaboratively with CCCD to address non-compliance issues, investigate complaints, and respond to reports of sediment discharges or other pollutants associated with construction activities..

Participants:

- Middlesex Township
- Cumberland County Conservation District (CCCD)
- Township Engineer
- Developers, contractors, and property owners involved in construction projects
- Public stakeholders who report potential construction-related stormwater concerns

Documentation: Documentation maintained to support MCM 4 implementation includes:

- Notifications provided by the Township to CCCD regarding qualifying earth disturbance activities
- Construction stormwater inspection reports prepared by the Township Engineer
- Correspondence related to compliance and enforcement actions
- Complaint records and investigation documentation, as applicable

Metrics:

- Number of construction-related stormwater complaints received
- Number of construction stormwater inspections conducted
- Number of compliance issues identified and addressed (when tracked by the Township)



MCM 5 - Post Construction Stormwater Management

Goal/Purpose: The primary goal of this Minimum Control Measure (MCM) is to ensure that Stormwater Control Measures (SCMs) are properly designed, constructed, operated, and maintained in accordance with the Township Stormwater Management Ordinance and applicable Chapter 102 regulations. Effective implementation of this measure helps control the discharge of stormwater runoff and associated pollutants from land disturbance, new development, and redevelopment projects that result in earth disturbance of one acre or more.

Programs:

- Township Stormwater Management Ordinance (Enacted 2011)
- SCM Inventory/GIS Database (Completed 2023)
- SCM Inventory and Database Updates (Initiated 2026)
- Long-Term Operations and Maintenance (O&M) Program (In Progress)

Overview: Middlesex Township administers and enforces its Stormwater Management Ordinance to ensure that post-construction stormwater management practices are designed, installed, and maintained in accordance with approved plans and applicable regulations. The ordinance establishes requirements for stormwater runoff management associated with land development and redevelopment projects and provides the framework for long-term SCM operation and maintenance.

To support program implementation, the Township completed an inventory and GIS database of known SCMs in 2023 and initiated updates in 2026 to improve inventory accuracy and support ongoing compliance efforts. As part of the long-term O&M program, the Township is identifying and reviewing recorded plans for development and redevelopment projects that include SCMs constructed since 2003. Newly identified SCMs are incorporated into the inventory as necessary.

The Township is also compiling operation and maintenance requirements documented in recorded plans, agreements, and approvals to support municipal oversight and enforcement.

During implementation of the long-term O&M program, the Township conducts interim compliance activities through complaint investigations and staff observations of malfunctioning or poorly maintained SCMs. Additional education and ordinance enhancements may be used to clarify owner responsibilities for inspections, maintenance, and record keeping.



These efforts help ensure that SCMs continue to function as designed, protecting water quality and reducing stormwater impacts throughout the Township.

Participants: Implementation of MCM 5 involves coordination among:

- Middlesex Township leadership and staff
- Township Engineer and design consultants
- Land developers and property owners
- Construction and maintenance contractors
- Third-party inspectors and maintenance providers
- Residents and stakeholders who report stormwater concerns.

Documentation: Documentation maintained to support MCM 5 implementation includes:

- Township Stormwater Management Ordinance
- SCM inventory and GIS database
- Recorded stormwater management plans and agreements
- SCM inspection and condition assessment reports
- Maintenance and corrective action records
- Complaint and investigation records

Metrics:

- Number of SCMs inventoried
- Number of SCM inspections conducted with deficiencies or functionality assessments
- Number of stormwater-related complaints investigated



MCM 6 – Pollution Prevention and Good Housekeeping

Goal/Purpose: The primary goal of this Minimum Control Measure (MCM) is to prevent and reduce stormwater pollution associated with municipal operations by ensuring that effective pollution prevention and good housekeeping practices are implemented throughout Township activities. Through employee training, routine maintenance, and adherence to established procedures, Middlesex Township seeks to minimize the discharge of pollutants to the Municipal Separate Storm Sewer System (MS4) and local waterways.

Programs:

- Municipal Employee Training Program
- Anderson Park Maintenance Program

Overview: Middlesex Township is committed to reducing pollutant discharges from municipal operations through proactive pollution prevention practices, routine maintenance activities, and employee education. The Township provides leadership in implementing and enforcing good housekeeping measures and, when necessary, utilizes the expertise of the Township engineering consultant to support training and program development.

Township employees whose duties may impact stormwater quality receive training appropriate to their responsibilities. Training topics include pollution prevention, good housekeeping practices, spill prevention and response, stormwater awareness, and proper maintenance techniques. Highway Department personnel routinely participate in training programs, attend seminars and workshops offered by outside agencies, and are encouraged to obtain certifications relevant to stormwater management and municipal operations.

Highway Department staff perform routine maintenance activities throughout the Township with special attention given to protecting stormwater quality. Municipal operations are conducted in accordance with established Standard Operating Procedures designed to reduce the potential for pollutant exposure and discharge.

Within the regulated MS4 area, Anderson Park is the Township's only municipally owned property apart from public road rights-of-way. Township staff continue to maintain the park in accordance with established procedures, including the management of trash, pet waste, and vegetation. These activities help reduce the potential for pollutants to enter the storm sewer system and support the Township's overall stormwater quality goals.

Participants: Implementation of MCM 6 involves the participation of:

- Highway Department personnel
- Township engineering consultant, as needed

Documentation: Documentation maintained to support MCM 6 implementation includes:

- Standard Operating Procedures (SOPs)
- Employee training materials and attendance records
- Highway Department work logs
- Anderson Park maintenance logs
- Municipal operations and maintenance records

Metrics:

- Number of employee training sessions conducted with attendance records
- Completion of routine municipal maintenance activities
- Consistency of maintenance activities performed in accordance with SOPs
- Number of pollution prevention or good housekeeping issues identified and addressed
- Continued implementation of maintenance activities that support stormwater quality protection

