

**CITY OF GROVEPORT**  
**STORM WATER MANAGEMENT PLAN**



**October 31, 2016**

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## **Certification**

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."



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Marsha Hall  
City Administrator  
City of Groveport, Ohio

## **Background**

The United States Environmental Protection Agency (US EPA) developed a storm water program to address the water quality of stormwater runoff from Municipal Separate Storm Sewer Systems (MS4). An MS4 is municipality owned conveyance or system of conveyances (including roads, catch basins, curbs, gutters, ditches, man-made channels, or municipally-owned storm drains). MS4s are owned or operated by a public body, are designed and used for collecting stormwater, are not combined sewer systems (sewage and stormwater in a common pipe) and are not part of a Publicly Owned Treatment Works (POTW).

US EPA addressed the storm water program in two phases. Phase I addressed storm water runoff from large and medium MS4s. Large municipalities with a separate storm sewer system serving a population greater than 250,000 and medium municipalities with a service population between 100,000 and 250,000 had to obtain NPDES permits. Initial application deadlines for large and medium municipalities were November 16, 1992 and May 17, 1993, respectively. As part of their individual NPDES permit applications, the large and medium MS4s had to develop a storm water management program (SWMP). The Phase II regulations address storm water runoff of MS4s serving populations less than 100,000, called small MS4s. More particularly, small MS4s located partially or fully within urbanized areas (UAs), as determined by the U.S. Bureau of the Census, and also on a case-by-case basis for those small MS4s located outside of UAs that Ohio EPA designates into the program. Automatically designated Small MS4s, those in UAs, were required to apply for permit coverage and develop and submit a SWMP by March 10, 2003. Groveport is considered an automatically designated Small MS4.

## **Executive Summary**

The City of Groveport has prepared this Storm Water Management Plan (SWMP, or the "Plan") in accordance with the Phase II program, to meet obligations of its MS4 permit issued by the Ohio Environmental Protection Agency (Ohio EPA). This document outlines the City's program to develop, implement and enforce a storm water management program designed to reduce the discharge of pollutants to the maximum extent practicable (MEP), to protect water quality, and to satisfy the appropriate requirements of the Clean Water Act (CWA) in accordance with Ohio Revised Code 6111 and the Ohio EPA NPDES Phase II program. This SWMP addresses the Six Minimum Control Measures (MCMs) set forth in the Small MS4 permit. The plan also identifies the City's legal authority to implement the requirements of the current version of the Ohio EPA General Construction Permit. This SWMP serves an update to the SWMP developed by the City at the inception of the program. The SWMP is reviewed annually and updated, as needed.

## **Legal Authority**

The Charter of the municipality of Groveport and City of Groveport codified ordinances Chapter 935, provide the City with the legal authority to control the quality of separate storm water discharge to the storm sewer system. The City of Groveport has both the fiscal resources and legal authority to fully implement its Storm Water Management Plan.

## **Permit Coverage Area**

The SWMP covers all areas within the incorporated City limits. In 2016, the City of Groveport has an estimated population of 5,604 (Mid-Ohio Regional Planning Commission, July, 2010) and encompasses approximately 10 square miles.

The City is largely residential, with concentrations of commercial and industrial areas along main thoroughfares such as State Route 317. The industrial areas generally include distribution-type activities, rather than large scale manufacturing facilities.

## **Reporting Requirements**

The City of Groveport submits a “Small MS4 Annual Report” to Ohio EPA, annually by March 31<sup>st</sup>. Any updates to the SWMP are summarized in the Annual Report. The Annual Report includes the status of compliance with the permit conditions, an assessment of the appropriateness of the best management practices (BMPs) and progress towards achieving measureable goals for each of the Six Minimum Control Measures.

A summary of the activities the City will undertake during the subsequent annual reporting cycle and any changes to the BMPs or measurable goals will be included in the annual report.

## ***Storm Water Management Plan (SWMP)***

The SWMP is expected to result in reductions in the adverse effects of storm water discharges by the City of Groveport to the maximum extent practicable (MEP) to protect water quality, and to satisfy the appropriate water quality requirements of Ohio Revised Code (ORC) 6111 and the Clean Water Act. The SWMP includes best management practices, control techniques, and system, design, and engineering methods. The plan should be reviewed, modified and updated to include provisions as Ohio EPA and/or City of Groveport staff determines appropriate after program reviews for effective storm water quality management.

The following six Minimum Control Measures (MCMs) are part of the City’s Small MS4 permit:

1. Public Education and Outreach
2. Public Participation/Involvement
3. Illicit Discharge Detection and Elimination
4. Construction Site Storm Water Runoff Control
5. Post-Construction Storm Water Management in New Development and Redevelopment
6. Pollution Prevention/Good Housekeeping for Municipal Operations.

Each measure, addressed separately below, includes BMPs, measurable goals, rationale, decision process, responsible parties, time schedules and other appropriate information.

## TMDL

Two principle waterways are located in Groveport: Big Walnut Creek and Walnut Creek (Walnut Creek is known locally as "Little Walnut Creek"). Blacklick Creek is tributary to Big Walnut Creek. The following Hydrologic Unit Codes pertain to the Groveport MS4:

Big Walnut- 05060001-160-030- section from Alum Creek to Scioto River

Blacklick Creek- 05060001-140-060 - section from Brice to Big Walnut

Little Walnut Creek - 05060001-130-060

The Total Maximum Daily Load (TMDL) program was established under section 303(d) of the Clean Water Act and focuses on identifying and restoring polluted rivers, streams, lakes and other surface waterbodies. A TMDL is a quantitative assessment of water quality problems in a water body and contributing sources of pollution. It specifies the amount of pollutant that needs to be reduced to meet water quality standards, allocates pollutant load reductions, and provides the basis for taking actions needed to restore a waterbody.

Groveport has two separate watersheds in which the U.S. EPA has approved a TMDL. They are Big Walnut Creek and Walnut Creek. All segments of these waterbodies within the Groveport MS4 jurisdiction are in full attainment with their associated water quality standards; therefore, the SWMP does not address any specific BMPs targeted toward TMDL compliance.

Targeted Pollutants will be grouped as follows throughout the SWMP:

<b>Pollutant</b>	<b>Cause</b>	<b>Source</b>
Sediment	Disturbed ground	Construction Sites Landscaping Projects
Nutrients	Fertilizer	Homes, businesses
	Yard Waste	Homes, businesses, city maintenance
	Solid Waste	Homes, businesses, construction sites
	Sewage (pet & human)	Failing sewage systems, pet owners
Chemicals	Vehicle fluids (greases, oils, antifreeze)	Homes, businesses, construction sites, city maintenance (parking lots, streets)
	Salt	Homes, businesses, city de-icing activities
Bacteria	Sewage (pet waste, human waste)	Septic systems, pet owners

The City of Groveport has made this Stormwater Management Plan Update available to the public and engaged in a public involvement process. That process is on-going and has been documented and the Stormwater Management Plan presented is a culmination of those efforts.

**Minimum Control Measures**

The City believes it has the legal authority to implement BMPs under all MCMs.

**1. Public Education/Outreach**

**A. Introduction and Decision Process**

MCM 1 establishes a public education program to distribute educational materials to the community or conduct equivalent outreach activities concerning the impacts of storm water discharges on water bodies and the steps that the public can take to reduce pollutants in storm water runoff. This control measure will continue to target homeowners, commercial property owners, the general public (those visiting Groveport and non-homeowners), the development community and students K-12.

The City’s program is predicated largely on increasing awareness of how the City’s MS4 functions through information dissemination. As awareness increases, the program will continue to be enhanced to include more active public as well as business participation.

The planned public education program will use a variety of strategies in which to reach a diverse audience. The City’s local strategies include reaching commercial areas through brochures and publications, reaching school age children through the Groveport School System, reaching homeowners through City publications and website, and reaching the development community through design standards established in Chapter 935 of the municipal code, which is available for review on the City’s website. In addition, the construction industry will be targeted for educational information via pre-construction meetings, on-site visits, brochures and a newsletter. As a result of this outreach program, diverse audiences will be informed of the importance of reducing storm water pollution, ways they can incorporate pollution reduction in their daily lives, and opportunities for individual or group involvement. Public education and outreach programming is designed to reach at least 50% of the City’s total population over the permit term. Additional documentation of number of people reached through each task will continue to be tracked.

**B. Best Management Practices**

The City utilizes existing programs specifically for the dissemination of information to its citizens and businesses about the steps they can take to reduce storm water pollution. These include a website, a publication sent to all residents, pre-construction meetings with site developers and use of the Municipal Building for public announcements and education materials. The MS4 Consultant and the City Engineer work together to accomplish MCM 1, which includes the following BMPs intended to target a majority of the population through various mechanisms:

BMP	Target Audience	Rationale Statement	Outreach Strategy	Measureable Goals	Target Pollutants
Theme	Estimated % of population reached				
Responsible Party					
<i>BMP #1. Current MS4 Topics</i>	Homeowners & Businesses	Information provided to the community will enhance their understanding of the City stormwater program	Multiple sources of educational materials will reach the community in a number of ways	-Post quarterly updates on MS4 activities on the City Website -Post brochures on HSTS operation &	All targeted pollutants
<i>Theme: Pollution Prevention</i>	100% of population reached				
<i>Responsible Party: City Engineer &amp;</i>					

BMP	Target Audience	Rationale Statement	Outreach Strategy	Measureable Goals	Target Pollutants
Theme	Estimated % of population reached				
Responsible Party					
<i>MS4/NPDES Compliance consultant</i>				maintenance, Construction Site runoff, etc. in municipal buildings -Place information in utility bill -Monthly newsletter to all residents	
<i>BMP # 2. Operation and Maintenance of home sewage treatment systems; education for businesses</i>	Homeowners & Businesses	Educating residents and businesses about illicit discharges and how to better identify and report these discharges will assist the City in reducing the amount of pollutants that have a negative impact on streams.	Direct mailing to residents with HSTSs. Educational meetings with businesses.	-Direct mail a HSTS maintenance brochure to all HSTS owners in the MS4;  Meet with and disseminate illicit discharge brochure to 50% of Groveport businesses	Bacteria, Nutrients
<i>Theme: Illicit Discharges</i>	100% of HSTS owners; 50% of businesses				
<i>Responsible Party: City Engineer &amp; MS4/NPDES Compliance consultant</i>					
<i>BMP #3. Rain Barrels &amp; Rain Gardens</i>	Workshop Attendees	Through the promotion and use of rain barrels and rain gardens, citizens will enhance water quality in the MS4 by minimizing the quantity of water entering the MS4.	Workshop	-Hold one rain garden workshop per year	Oils/Grease, sediment, nutrients & chemicals
<i>Theme: Benefits of Rain Harvesting</i>	2% of target population				
<i>Responsible Party: Chief Building Official &amp; MS4/NPDES Compliance consultant</i>					

BMP	Target Audience	Rationale Statement	Outreach Strategy	Measureable Goals	Target Pollutants
Theme	Estimated % of population reached				
Responsible Party					
<i>BMP #4. Provide teacher resources/K-12 Stormwater Education</i>	Groveport Schools students	Teachers are a valuable resource for reaching young children and teens and educating them about the needs of proper storm water management and general environmental topics.	Provide teacher packets geared toward stormwater education	Direct deliver teacher packets to all Groveport schools	All targeted pollutants
<i>Theme: Water Cycle/Stormwater Education</i>	100% of target population				
<i>Responsible Party: Chief Building Official &amp; MS4/NPDES Compliance consultant</i>					
<i>BMP #5. Construction site sediment and erosion control practices</i>	Construction contractors and site developers	The development community has the potential to have major impacts on stream degradation or improvement. An informed development community may well result in improved stream quality in the City.	Training and direct dissemination of information	-Have a pre-construction meeting for sites >1 acre in size -Provide on-site sediment and erosion control training for existing and new site developers	Sediment
<i>Theme: Construction Site Runoff</i>	100% of target population				
<i>Responsible Party: City Engineer &amp; MS4/NPDES Compliance consultant</i>					

## **2. Public Participation/Involvement**

### ***A. Introduction and Decision Process***

This minimum control measure ensures the City complies with State and local public notice requirements and satisfies this measure's minimum performance standards when implementing a public involvement/participation program. The City of Groveport recognizes that a successful storm water program relies not only on the MS4 owners and operators and the regulatory community, but also upon the input, assistance and understanding of the general public. The City's program includes means and methods to give the public opportunity to play an active role in both the development and implementation of the NPDES Phase II program.

### ***B. Best Management Practices***

The City utilizes existing programs specifically for the dissemination of information to its citizens and businesses about the steps they can take to reduce storm water pollution. These include a website, a publication sent to all residents, pre-construction meetings with site developers and use of the Municipal Building for public announcements and education materials. Audiences targeted with this BMP range from school age children to construction site developers. The City's stormwater program team will work together to accomplish MCM 2, which includes the following BMPs intended to target a majority of the population through various mechanisms:

<b>BMP</b>	<b>Target Audience</b>	Rationale Statement	Outreach Strategy	Measureable Goals	Target Pollutants
Theme	<b>Estimated % of population reached</b>				
Responsible Party					
<i>BMP #1. Current MS4 Topics</i>	<b>Homeowners &amp; Businesses</b>	Information provided to the community will enhance their understanding of the City stormwater program	Multiple sources of educational venues reach	-Post quarterly updates on MS4 activities -Post brochures on HSTS operation & maintenance, Construction Site runoff, etc. -Place information in utility bill	All targeted pollutants
<i>Theme: Pollution Prevention</i>	100% of population reached				
<i>Responsible Party: City Engineer &amp; MS4/ Compliance consultant</i>					
<i>BMP # 2. Illicit Discharge outreach for businesses</i>	<b>Businesses</b>	Educating businesses about illicit discharges and how to better identify and report these discharges will assist the City in reducing the amount of pollutants that have a negative impact on streams.	Meetings with businesses.	Meet with and disseminate illicit discharge brochure to 50% of Groveport service-oriented businesses over the permit term	Bacteria, Nutrients
<i>Theme: Illicit Discharges</i>	50% of service – oriented businesses				
<i>Responsible Party: City Engineer &amp; MS4/NPDES Compliance consultant</i>					
<i>BMP #3. Rain Barrels &amp; Rain Gardens</i>	<b>Workshop Attendees</b>	Through the promotion and use of rain barrels and rain gardens, citizens will enhance water quality in the MS4 by minimizing the quantity of water entering the MS4.	Workshop	-Hold one rain garden workshop per year to be advertised in City Newsletter / Utility Bill insert	Oils/Grease, sediment, nutrients & chemicals
<i>Theme: Benefits of Rain Harvesting</i>	2% of target population				
<i>Responsible Party: MS4/NPDES Compliance consultant</i>					

<b>BMP</b>	<b>Target Audience</b>	Rationale Statement	Outreach Strategy	Measureable Goals	Target Pollutants
Theme	<b>Estimated % of population reached</b>				
Responsible Party					
<i>BMP #4. Provide teacher resources/K-12 Stormwater Education</i>	<b>Groveport Schools students</b>	Teachers are a valuable resource for reaching young children and teens and educating them about the needs of proper storm water management and general environmental topics.	-Provide teacher packets -Hold a curriculum day for students	Direct deliver teacher packets to all Groveport schools & meet with school personnel -Provide one in-class workshop annually for students	All targeted pollutants
<i>Theme: Water Cycle/Stormwater Education</i>	<b>100% of target population</b>				
<i>Responsible Party: MS4/NPDES Compliance consultant</i>					
<i>BMP #5. Construction site sediment and erosion control practices</i>	<b>Construction contractors and site developers</b>	The development community has the potential to have major impacts on stream degradation or improvement. An informed development community may well result in improved stream quality in the City.	Training and direct dissemination of information	Have a pre-construction meeting for sites >1 acre in size -Provide on-site sediment and erosion control training for existing and new site developers	Sediment
<i>Theme: Construction Site Runoff</i>	<b>100% of target population</b>				
<i>Responsible Party: City Engineer &amp; MS4/NPDES Compliance consultant</i>					

### **3. Illicit Discharge Detection and Elimination**

#### **A. Introduction and Decision Process**

Through this minimum control, the City has developed and implemented an enforceable program to detect and eliminate illicit discharges to the MS4. The City has developed and maintains a comprehensive map, showing the location of all outfalls, and the names and location of all surface waters of the state that receive discharges from those outfalls. The comprehensive MS4 map shall also include catch basins, pipes, ditches, flood control facilities (retention/detention ponds), post-construction water quality BMPs and private post-construction water quality BMPs which have been installed to satisfy Ohio EPA's NPDES Construction Storm Water general permit and/or local post-construction water quality BMP requirements.

#### **B. Best Management Practices**

The City of Groveport continues to minimize the potential for illicit discharges to the storm water system through use of an ordinance and abatement program. The water quality assessment of creeks and waterways within the City has been completed and all outfall screening information was added to the City's Geographic Information System (GIS). The City has completed a GIS map for the urbanized area, including the incorporation of storm water system information. The City Engineer will maintain and regularly update the map as new information becomes available.

The City coordinated with the Franklin County Board of Health to identify on-site home sewage treatment systems (HSTS) within the incorporated City limits and added this information to the GIS product. The City will continue to partner with the Franklin County Board of Health to evaluate existing HSTS, both on-lot and discharging, to ensure they are operating in compliance. Franklin County Public Health (FCPH) had the authority to regulate sewage treatment systems under both Ohio Revised Code Chapter 3718 and Franklin County Public Health Regulation 720. Staff sanitarians are responsible for investigating all illicit discharge and sewage nuisances. FCPH follows a defined procedure for investigating potential sewage related complaints. In addition, FCPH conducts yearly inspections of all aeration systems which are part of their Operations and Maintenance Plan to ensure they are operating as intended. For systems that do not contract with FCPH, a qualified/approved independent contractor must inspect the system and certify compliance back to FCPH.

The City has an on-going system surveillance program that has established priorities and goals for dry weather screening of outfalls. All MS4 identified outfalls have been screened at least once and the data collected from this screening has been used to establish priority areas and goals for the on-going system surveillance program. Priority areas include those are not connected to the sanitary sewer at this time. At a minimum, these areas will be annually inspected. As stated above, mechanisms are in place for investigating, tracing and eliminating sources of illicit discharge from HSTS.

The City in cooperation with Franklin County Public Health will investigate and take measures to eliminate sources of illicit discharge. Enforcement procedures for non-compliant HSTS will be pursued via FCPH as previously identified. The City will pursue other illicit discharges per applicable City Codes stated above.

The City Engineer, FCPH, City Police Chief, Stormwater Compliance Consultant and the Public Works Superintendent work together to accomplish MCM 3.

BMP	Legal Authority	Measurable Goals	Target Pollutants
Responsible Party			
<i>BMP #1. Authorizing Legislation</i>	Codified Ordinance 935.11 Illicit Discharge to the Municipal Separate Storm Sewer System  <a href="http://www.conwaygreene.com">http://www.conwaygreene.com</a>	Continue to enforce Illicit Discharge ordinance	All targeted pollutants
<i>Responsible Party: City Engineer, Law Director &amp; Public Works Superintendent</i>			
<i>BMP # 2. Operation and Maintenance of home sewage treatment systems; education for businesses</i>		-Direct mail a HSTS maintenance brochure to all HSTS owners in the MS4;	Bacteria, Nutrients
<i>Responsible Party: City Engineer &amp; MS4/NPDES Compliance consultant</i>		Individually meet with and disseminate illicit discharge brochure to 50% of Groveport service-type businesses	
<i>BMP #3. Storm sewer system map</i>		-Update map annually	All targeted pollutants
<i>Responsible Party: City Engineer &amp; MS4/NPDES Compliance consultant</i>			
<i>BMP #4. IDDE Surveillance &amp; Screening</i>		-Continue to implement IDDE Plan and screen outfalls, as needed	All targeted pollutants
<i>Responsible Party: City Engineer, Police Chief, Public Works Superintendent &amp; MS4/NPDES Compliance consultant</i>		-Track illicit discharges and resolution	

#### **4. Construction Site Storm Water Runoff Control**

##### **A. Introduction and Decision Process**

This minimum control measure ensures the management and monitoring of storm water run-off from construction sites where there is a disturbance of one acre or greater. The City of Groveport recognizes that sediment laden runoff from construction sites, if unchecked, can deposit more sediment and pollutants in a stream than would be deposited there over the course of decades from other land use types. The resulting siltation, and other construction-related pollutants (*e.g., concrete wash water, trash and debris fuel tank, sanitary waste, etc.*), can cause physical, chemical, and biological harm to the waterways.

##### **B. Best Management Practices**

The City relies on a two-fold approach to construction site runoff control. First, the City reviews the storm water pollution prevention plan (SWPPP) for all submitted construction drawings within the City where land disturbance is one or more acre. No construction activity (clearing, grubbing, grading, filling or excavating) may be started prior to City approval. Second, Section 1399.08 of the City Code provides for inspection of all construction in the City. The Code requires the implementation of sediment and erosion controls as well as pollution prevention practices for pollutants other than sediment (concrete wash water, trash and debris, fuel tanks, etc.) at construction sites. The Code is applicable to all construction activities where the common plan of development or sale disturbs one or more acres of land. The Code is updated to meet or exceed technical requirements of the current version of the Ohio EPA General NPDES for Storm Water Associated with Construction Activities.

The City conducts construction site inspections on a regular basis to ensure implementation and compliance with the approved Storm Water Pollution Prevention Plan. An initial inspection (within the first month after construction activities commence) is conducted and follow-up visits done at least once per month on construction sites to ensure compliance. An alternate inspection frequency or schedule may be established based on TMDL concerns, proximity to waterways, amount of disturbed area, compliance history with site, etc. Any sites found to be out of compliance will be subject to appropriate enforcement action established in City Code.

The City Engineer and MS4/NPDES Compliance consultant are responsible for implementation of MCM 4.

BMP	Legal Authority	Measurable Goals	Target Pollutants
Responsible Party			
<i>BMP #1. Update and enforce a construction site runoff and erosion and sediment control regulatory mechanism</i>	Code Chapter 1399 – Erosion and Sediment Pollution Control Regulation Code 935 – Stormwater Management Policy <a href="http://www.conwaygreene.com">http://www.conwaygreene.com</a>	Continue to enforce a construction site runoff and erosion and sediment control regulatory mechanism.	Sediment, Oil & Grease, Nutrients & Chemicals
<i>Responsible Party: City Engineer, Law Director &amp; MS4/NPDES Compliance consultant</i>			
<i>BMP # 2. Site Plan Review</i>		-Review plans submitted to the City to ensure appropriate BMPs are included per the latest version of the Ohio EPA General Construction Permit	Sediment, Oil & Grease, Nutrients & Chemicals
<i>Responsible Party: City Engineer &amp; MS4/NPDES Compliance consultant</i>			
<i>BMP #3. Site Inspection</i>		-Conduct erosion and sediment control inspections associated with active construction projects to ensure SWPPP compliance	Sediment, Oil & Grease, Nutrients & Chemicals
<i>Responsible Party: City Engineer &amp; MS4/NPDES Compliance consultant</i>			
<i>BMP #4. Complaint Process</i>		Maintain complaint log with follow up actions conducted	Sediment, Oil & Grease, Nutrients & Chemicals
<i>Responsible Party: City Engineer &amp; MS4/NPDES Compliance consultant</i>			

## 5. Post-Construction Storm Water Management

### A. Introduction and Decision Process

This minimum control measure establishes an implementation and enforcement program to address storm water runoff from new development and redevelopment projects that disturb greater than or equal to one acre, including projects less than one acre that are part of a larger common plan of development or sale, that discharge into the City's MS4. The measure ensures that controls are in place that will reduce water quality impacts from post-construction site developments.

The City addresses the post-construction storm water management in new development and redevelopment with structural and non-structural BMPs, in keeping with the BMP requirements of the current version of the

Ohio EPA Construction General Permit. Such measures may include revisiting existing stormwater management basins to ensure effective controls are in place to properly manage storm water runoff. In addition, the City has a program in place to review post-construction BMP plans and operation and maintenance plans to ensure they are properly implemented. Implementation of such measures help minimize water quality impacts by reducing erosion and sedimentation along waterways. City Code Sections 1399.04 and 935.06(b) of the City Code provides for the implementation of post-construction water quality BMPs on new development and redevelopment where the larger common plan of development or sale disturbs one or more acre.

As part of this minimum control, the City seeks to effectively manage quantities of post-development flow, manage the amount of impervious cover within its system, increase natural land set aside for riparian buffers and stream maintenance, and enhance existing storm water practices through inclusion of water quality components. The City of Groveport's stormwater management policy (City Code Chapter 935) contains storm water management design requirements. With the City's enforcement of this policy and through plan review working with developers, the City seeks to achieve the most effective structural and non-structural stormwater management (SWM) BMPs for development sites, which will help protect the City's waterways from adverse impacts of storm water runoff. Through review of development projects, the City also enforces its Stream Corridor Protection Zone (Chapter 935.08(e)), as a non-structural SWM BMP.

Chapter 935.12 establishes the requirement that developers who construct post-construction BMPs for developing or redeveloping sites covered by the Ohio EPA's NPDES Construction General Permit, shall prepare an Operations and Maintenance Plan and enter into an Inspection and Maintenance Agreement for post-construction BMPs. Covered projects owned by the City of Groveport do not require post-construction Operation & Maintenance Agreements but post-construction Operations & Maintenance plans are developed for each capital project.

The City conducts reviews of all SWPPPs and post-construction plans for new development and redevelopment where one or more acres of land are disturbed. No construction activity (clearing, grubbing, grading, filling or excavating) may be started prior to City approval of the SWPPP. In addition, the City requires submittal of a long-term operations and maintenance plan and the inspection and maintenance agreement shall identify the party responsible to conduct long-term maintenance, the routine and non-routine maintenance task required, schedules for inspection and maintenance activities, legal agreements such as access and maintenance easements, and a map showing the location of such easements. Inspection reports are reviewed annually with follow up, as necessary.

Prior to occupancy the City will conduct an inspection to ensure permanent storm water quality practices are constructed per the approved Storm Water Pollution Prevention Plan (SWPPP). Once approved, the facility is subject to the requirements of the O&M Plan developed for the facility. Enforcement protocol for non-compliance is established in City Code, Chapter 935.99.

Post-construction inspection reports will be reviewed annually for all facilities subject to these requirements to ensure BMPs remain functional. An annual reminder letter will be sent to facilities under the post-construction program requiring them to submit a copy of their annual inspection report to the City. As part of the annual evaluation of post-construction BMPs, the City will add new post-construction BMPs to the MS4 System Map.

In accordance with Section 1399.08 of the City Code, established enforcement procedures, including stop work orders, Notices of Violation, fines and criminal penalties are in place for facilities found in violation of post-construction storm water management. The City's escalated enforcement plan includes written notification to non-compliant facilities detailing deficiencies and a timeframe for corrective action. Should the entity fail to correct the deficiency the City will follow-up with a Notice of Violation letter that may result in fines or criminal penalties.

### ***B. Best Management Practices***

The City of Groveport will continue with existing programs that have a positive impact on storm water run-off mitigation. The City Engineer and **MS4/NPDES Compliance consultant** are responsible for implementation of MCM 5.

BMP	Legal Authority	Measurable Goals	Target Pollutants
Responsible Party			
<p><i>BMP #1. Update and enforce a post-construction site runoff and erosion and sediment control regulatory mechanism</i></p> <p><i>Responsible Party: City Engineer, City Law Director, &amp;MS4/NPDES Compliance consultant</i></p>	<p>Code Chapter 1399 – Erosion and Sediment Pollution Control Regulation Code 935 – Stormwater Management Policy <a href="http://www.conwaygreene.com">http://www.conwaygreene.com</a></p>	<p>Continue to enforce a construction site runoff and erosion and sediment control regulatory mechanism.</p>	<p>Sediment, Oil &amp; Grease, Nutrients &amp; Chemicals</p>
<p><i>BMP # 2. Post-Construction Operations &amp; Maintenance Plan Review &amp; Inspection &amp; Maintenance Agreements</i></p> <p><i>Responsible Party: City Engineer. City Law Director, &amp; MS4/NPDES Compliance consultant</i></p>	<p>Regulation Code 935 – Stormwater Management Policy</p>	<p>-Review plans submitted to the City to ensure appropriate BMPs are included per the latest version of the Ohio EPA General Construction Permit -Ensure I&amp;M Agreements are signed for each site</p>	<p>Sediment, Oil &amp; Grease, Nutrients &amp; Chemicals</p>
<p><i>BMP #3. Site Inspection</i></p> <p><i>Responsible Party: City Engineer &amp; MS4/NPDES Compliance consultant</i></p>		<p>-Review annual inspection reports and conduct follow up inspection, as necessary, to ensure O&amp;M Plan and I&amp;M Agreement compliance</p>	<p>Sediment, Oil &amp; Grease, Nutrients &amp; Chemicals</p>
<p><i>BMP #4. MS4 Map Update</i></p> <p><i>Responsible Party: City Engineer</i></p>		<p>Update MS4 map showing all post-construction BMPs</p>	<p>Sediment, Oil &amp; Grease, Nutrients &amp; Chemicals</p>

## **6. Pollution Prevention/Good Housekeeping for Municipal Operations**

### **A. Introduction and Decision Process**

The City of Groveport's MS4 maintenance activities on publicly-owned storm sewers, catch basins, streets, open channels along roads, parking lots and storm water utilities management practices is constantly evolving. Scheduled maintenance of these MS4 components is on-going and conducted as needed and when repairs are identified.

Appropriate, industry recognized storm water pollution prevention practices are implemented, annually reviewed, and updated pursuant to BMPs and the city's current NPDES Phase II Permit for the following activities:

- Street and Parking Lot Sweeping
- Catch basin and ditch cleaning
- Deicer application and storage
- Road kill management
- Trash collection
- Leaf and yard debris collection
- Street repairs and maintenance
- Water main repairs and maintenance
- Pesticide, herbicide and fertilizer application and storage
- Parks, cemetery and golf course grounds management
- Police department activities

The City of Groveport has a variety of programs in place to provide "good housekeeping". These programs include the following:

- The proper disposal of waste oils and greases used in the City's maintenance facility;
- The careful use of salt and grits during snow removal periods using measures appropriate to conditions;
- The enclosed storage of all City salt and grits;
- Spraying for weed control;
- Very limited pesticide/herbicide use on City property.

The Public Works Department located at 7400 Groveport Road, is subject to standards for pollution prevention and good housekeeping and has its own SWPPP. The SWPPP for this facility is updated annually, and as necessary, to reflect changes in municipal operations. Municipal employees attend annual training that reiterates and focuses goals geared toward good housekeeping practices, effective implementation of the facility SWPPP and overall compliance with the City's Stormwater Management program.

### **B. Best Management Practices**

The City of Groveport will continue with existing programs that have a positive impact on storm water run-off mitigation from municipal activities. The Public Works Superintendent, City Engineer and MS4/NPDES Compliance consultant are responsible for implementation of MCM 6.

City of Groveport staff involved in this MCM take advantage of training opportunities from state and local agencies that support good housekeeping for municipal operations.

BMP	Measureable Goals	Target Pollutants
Responsible Party		
<i>BMP #1. Employee Training Program</i>	Provide annual training to municipal staff to educate them on spill prevention and good housekeeping measures.	All targeted pollutants
<i>Responsible Party: Public Works Superintendent, City Engineer, and MS4/NPDES Compliance consultant</i>		
<i>BMP # 2. MS4 Maintenance Tracking</i>	-Track all activities for pollution prevention such as trash collection, catch basin cleaning, pesticide/fertilizer use, salt usage, street sweepings collected and oil recycling	All targeted pollutants
<i>Responsible Party: Public Works Superintendent &amp; MS4/NPDES Compliance consultant.</i>		
<i>BMP #3. Site Inspection</i>	-Conduct quarterly inspections of the public works maintenance facility and department activities to ensure compliance with the SWPPP	All targeted pollutants
<i>Responsible Party: Public Works Superintendent &amp; MS4/NPDES Compliance consultant</i>		

### Figure 1. Organizational Chart City of Groveport Stormwater Management Program

