

GETTING STARTED WITH YOUR STORMWATER MANAGEMENT PROGRAM AND PLAN: THOUGHTFUL CONSIDERATIONS

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Getting Started With Your Stormwater Management Program and Plan: Thoughtful Considerations was prepared by the New York State Department of Environmental Conservation. This manual is part of a series of assistance materials designed to help communities implement the Phase II Stormwater Program in New York State. It is meant to be used as a tool for any regulated traditional land use control MS4 and not to replace the requirements outline in the Municipal Separate Storm Sewer System (MS4) General Permit (GP-0-10-002). The authors would like to thank the New York State Association of Regional Councils for their valuable input and recommendations.

New York State Department of Environmental Conservation



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Introduction.....	1
Summary of the MS4 Program	2
<i>Minimum Control Measure 1: Public Education and Outreach</i>	2
<i>Minimum Control Measure 2: Public Involvement and Participation</i>	3
<i>Minimum Control Measure 3: Illicit Discharge Detection and Elimination</i>	3
<i>Minimum Control Measure 4: Construction Site Stormwater Runoff Control</i>	3
<i>Minimum Control Measure 5: Post Construction Stormwater Management</i>	4
<i>Minimum Control Measure 6: Pollution Prevention and Good Housekeeping</i>	4
Getting Started	4
Understanding the Problem.....	5
<i>Where is the System</i>	5
<i>What is the System</i>	6
<i>Geographic Areas of Concern</i>	6
<i>Pollutants of Concern</i>	6
<i>Receiving Waters</i>	7
Identifying Your Resources	7
<i>Stormwater Program Coordinator</i>	8
<i>Local Stormwater Public Contact</i>	8
<i>Public Education and Outreach Staff</i>	8
<i>Oversight of Construction Activities</i>	8
<i>Receipt and Consideration of Information Submitted by the Public</i>	9
<i>Pollution Prevention and Good Housekeeping</i>	9
Coordination and Communication	10
Program Deadlines.....	11
Moving Forward	11

Getting Started With Your Stormwater Management Program and Plan: Thoughtful Considerations

This document has been developed to provide guidance on the thoughts and considerations that are necessary during the beginning stages of developing and implementing a Stormwater Management Program and Plan that will meet Federal and State regulatory requirements. As the owner or operator of a regulated small Municipal Separate Storm Sewer System (MS4), this guidance is meant to help you understand the basic context and intent of the stormwater regulations, and will help you to identify important characteristics, issues and concerns while developing your program.

Introduction

Stormwater is water caused by precipitation (rain or snow melt) that doesn't soak into the ground but runs off into waterways. It flows from rooftops, over paved areas and bare soil, and through sloped lawns while picking up a variety of materials on its way. The quality of runoff is affected by a variety of factors and depends on the season, local meteorology, geography and the activities which lie in the path of the flow. Although the amount of pollutants from a single residential, commercial, industrial or construction site may seem unimportant, the combined concentrations of contaminants threaten our lakes, rivers, wetlands and other water bodies. Pollution conveyed by stormwater degrades the quality of drinking water, damages fisheries and habitat of plants and animals that depend on clean water for survival. Pollutants carried by stormwater can also affect recreational uses of water bodies by making them unsafe for wading, swimming, boating and fishing.

To address certain stormwater issues, the EPA's existing Phase II Stormwater Rule, which was finalized in 1999, regulates owners or operators of small Municipal Separate Storm Sewer Systems (MS4s) that are located within the boundaries of a Bureau of the Census-defined "Urbanized Area" based on the latest decennial Census. The Bureau of Census recently released its 2010 Census providing an update to the boundaries of Urbanized Areas. As a result, many previously unregulated communities that are now located within the new Urbanized Area boundaries are subject to regulation.

To protect water quality, owners/operators of these regulated small MS4s are required to obtain a permit and develop programs to reduce pollutants that may enter into and be discharged from their separate storm sewer system. The required programs are comprised of six elements that, when implemented together, are expected to reduce pollutants discharged into receiving waterbodies.

Summary of the MS4 Program

As a delegated state under the NPDES program, New York administers EPA's Phase II Stormwater Rule. New York State has issued a Municipal Separate Storm Sewer System General Permit (GP-0-10-002) that details each of the conditions that must be addressed by the regulated small MS4 in order for them to be authorized to discharge stormwater. In its broadest sense, this general permit requires that regulated entities develop, implement, and enforce a Stormwater Management Program (SWMP). The primary focus of the Stormwater Management Program is to properly address and manage the pollutants contained in stormwater runoff that are transported through the MS4 and discharged to waters of the State, to satisfy the water quality requirements of the Environmental Conservation Law (ECL) and Clean Water Act (CWA). The regulated entity must also prepare a Stormwater Management Program Plan (SWMP Plan) that documents the practices, procedures and policies that are in place and those that are being implemented to protect water quality.

Only those entities that develop and implement a Stormwater Management Program and obtain permit coverage are authorized to discharge stormwater from their small MS4. To gain coverage under this MS4 General Permit the owner or operator of the MS4 must submit a completed Notice of Intent (NOI) to the NYS Department of Environmental Conservation (the Department) within 180 days of receiving written notification by the Department about the requirement to be regulated under the Phase II Stormwater Rule. After the municipality gains coverage under the MS4 General Permit they are expected to expand on the information and activities provided in the NOI and develop an effective SWMP which must include milestones for implementing each aspect of their stormwater management program. It is expected that by the end of the first three-year permit term the municipality will have fully developed and will commence full implementation of their stormwater management program. Failure to submit a complete NOI and obtain a valid SPDES Permit is a violation of Article 17 of the New York State Environmental Conservation Law (ECL). ECL § 71-1929 provides for civil penalties of up to \$37,500 per violation per day and also for injunctive relief.

The NOI is the foundation of your municipality's Stormwater Management Program and conveys to the Department your plans to more fully develop a program that meets the requirements outlined in the permit. Thoughtful considerations and appropriate planning while preparing the NOI can profoundly assist in the development and implementation of an effective Stormwater Management Program. An acceptable NOI will serve as the initial Stormwater Management Program Plan since it is the first document where the municipality identifies the actions to be taken that satisfy the requirements for each of the six required program components referred to as Minimum Control Measures (MCM) in the MS4 General Permit. These six MCMs (identified below), when developed and implemented together, will result in significant reductions of pollutants being discharged through the MS4. The following summarizes the intent and purpose of each MCM. A complete listing of the required elements for each MCM can be found within the text of the General Permit and in other guidance documents.

Minimum Control Measure 1: Public Education and Outreach-A well-informed and educated community is central to the success of the MS4 program, as such, MCM 1 focuses

on reaching out to and informing the public about the program and their specific role in it. Educating the public of the personal responsibilities that are expected of them and others in the community, including the individual actions that can be taken to protect or improve the quality of the receiving waterbodies, will provide an increased level of compliance. The municipality will also accomplish greater support from the community if they fully understand the purpose and requirements of the MS4 program. Therefore, the General Permit requires the regulated MS4 develop and implement a formal program to educate the public concerning the issues of stormwater pollution.

Minimum Control Measure 2: Public Involvement and Participation- Similar to educating the public, MCM 2 focuses on involving the public in both the development and implementation of the program. Citizens who take an active role in the decision making process take responsibility in the program and therefore, are more likely to adhere to the requirements and will provide less resistance to program policies. Encouraging the public to frequently participate and offer information on a volunteer basis will provide an economic benefit by maximizing resources, in addition to shorter implementation schedules. To address the goals of minimum control measure 2 the General Permit requires the regulated MS4 develop and implement a formal program to involve the public in activities and decisions that relate to the issues of stormwater pollution.

Minimum Control Measure 3: Illicit Discharge Detection and Elimination- A significant portion of flows from MS4s are not directly attributable to precipitation runoff. They are due to illicit and/or inappropriate discharges and connections to the MS4. Illicit discharges enter the system through direct (e.g. wastewater piping either mistakenly or deliberately connected to the storm drain) or indirect connections (e.g., infiltration into the MS4 from cracked sanitary systems, spills collected by storm drains, or the direct discharge of anything other than stormwater into a storm drain). These untreated discharges contribute high levels of pollutants, including heavy metals, toxics, oil and grease, nutrients, viruses, and bacteria to receiving waterbodies. Therefore, the MS4 General Permit requires the regulated MS4 develop and implement a program to detect and eliminate these types of discharges. In order to implement this aspect of your program, you will need to develop and adopt a local law or regulatory mechanism, map stormwater outfalls and their associated drainage areas, establish an outfall monitoring program, conduct public education regarding the problems created by non-stormwater discharges, and conduct enforcement actions or provide oversight of voluntary compliance to eliminate these discharges.

Minimum Control Measure 4: Construction Site Stormwater Runoff Control- Though most communities welcome a certain level of development, construction sites can present a risk to water quality. Stormwater runoff from construction sites contain pollutants that if not properly controlled can become mobilized and eventually discharged into local rivers and streams causing physical, chemical, and biological harm to our surface waters. For example, excess sediment can disrupt aquatic habits or require dredging. Therefore, the MS4 General Permit requires the regulated MS4 develop and implement a program to oversee construction activities to ensure they are properly controlled. In order to implement this aspect of your

program, you will need to develop a local law or regulatory mechanism to control the discharge of pollutants from construction projects.

Minimum Control Measure 5: Post Construction Stormwater Management-

Increase in impervious cover reduces the ability for water to infiltrate into the ground, resulting in an increase in surface runoff, flooding and changes to stream morphology. Additionally, as runoff flows over areas altered by development, it picks up pollutants that have accumulated on the surface of the impervious cover such as oil and grease, pesticides, and heavy metals. To reduce the impact that new, as well as existing development has on the amount and the increase quantity of pollutants contained in the runoff strategies and management practices should be implemented to mimic the predevelopment conditions to the maximum extent practicable. To address this, the MS4 General Permit requires the regulated MS4 develop and implement a program to oversee the design, construction and maintenance of post-construction stormwater practices in order to eliminate the potential impacts that development (both new and existing) has on receiving waterbodies.

Minimum Control Measure 6: Pollution Prevention and Good

Housekeeping- Municipal operation and maintenance activities can become sources of pollutants that need to be minimized through the SWMP. Good housekeeping measures for municipal operations will reduce or prevent this pollution from entering nearby waterbodies with stormwater runoff. This measure applies to pollution that: (1) collects on streets, parking lots, open spaces; (2) results from municipal vehicle storage and maintenance; (3) results from actions such as poor maintenance of storm sewer systems or environmentally damaging land development and flood management practices; or (4) originates from or is controlled at municipal facilities and properties or municipal operations in the community. This measure may also result in cost savings, because proper and timely maintenance of storm sewer systems can help avoid repair costs and damage caused by age and neglect. Therefore, the MS4 General Permit requires the regulated MS4 to inventory and maintain all of its department operations and identify sources of pollutants of concern created by the operations.

Getting Started

As you begin the process of developing your Stormwater Management Program and filling out your NOI you must tailor your program, including all necessary documentation, to meet the specific water quality and quantity needs of your community, while continually satisfying the requirements of the General Permit. The complexity and intensity of your SWMP will be determined by the activities that occur within your community and their potential to introduce pollutants to your storm sewer system. The focus of the information provided herein is intended to direct you during the 180 days prior to the submission of the Notice of Intent (NOI). It is not intended to provide a step-by-step process for filling out the NOI. Much of the information provided below is not required to be completed prior to submission of the NOI, however being mindful of these tasks and deliverables will be beneficial while establishing your program. The guidance document titled “Critical Path to Compliance” provides additional information regarding activities that are expected to occur after the successful completion of the NOI.

As the owner or operator of the MS4, you should focus on three specific categories or tasks during the early stages of developing a SWMP and preparing the NOI. These three tasks are i) understanding the problem, ii) identifying your resources including potential staffing needs, and iii) evaluating coordination and communication within your municipality. These tasks all incorporate some aspect of one or more of the 6 MCMs and will help prioritize the needs of your municipality as the development of the SWMP moves forward.

MS4s are encouraged to work together whenever and wherever possible in developing their SWMPs. Formal stormwater coalitions have been established in many areas of the state. Newly designated MS4s should seek out and consider joining a nearby stormwater coalition. Working together will result in greater environmental and economic benefits for all involved. If MS4s have established cooperative agreements prior to the deadline for submitting the NOI, they should note that in Section A of the NOI under *Cooperating Partners Including Regional Stormwater Entity*. Additionally, you should provide a description of the work that intends to be completed by each partner in Section E. *Initial Identification of Measureable Goals*.

Understanding the Problem

One of the initial steps in the development of your Stormwater Management Program is obtaining a solid understanding of your system and how it is being used. You will need to understand what components and features make up your separate storm sewer system, where your system is located, what land use activities have the potential to contribute pollutants to your system and what type of pollutants could be generated from these locations. To assist you in fully understanding your system, the permit requires that you develop a map showing the locations where your system discharges to surface waters or to another MS4 (outfalls), as well as delineate the land area that contributes flow to these outfalls (sewersheds). A basic understanding of the system within the context of your community will allow you to identify pollutants that have the potential to be present in your discharges (i.e. Pollutants of Concern) and areas and activities where the generation of pollutants is more likely (i.e. priority areas of concern). You will find this type of information will help in completing the NOI and will be essential in developing your plan to address the stormwater issues and concerns.

Where is the System- Besides Minimum Control Measures 4 and 5 (which apply to the municipal boundary, unless a waiver has been granted), the regulatory requirements apply to MS4s within the Urbanized Areas as identified by the US Census. Understanding the boundaries of the urbanized area is important because as a regulated MS4 it is required that you identify and prioritize the areas of concern. Categorizing the land use (e.g. industrial, residential, commercial, and agricultural) within the urbanized area boundary can be very helpful in prioritizing areas of concern. Prioritizing areas of concern and identifying land use will help in determining your target audience and allow you to more effectively direct your message for the education and outreach program. The urbanized area boundaries can be determined from the

maps provided by the New York State Department of Environmental Conservation (NYSDEC)¹. You can use these maps for quick reference to help facilitate activities during the planning phase, to develop a schedule for activities (such as where to begin your outfall mapping or what municipal facilities you will target), and to evaluate program effectiveness (such as what percentage of your system has been mapped). This map can also be used to help residents understand where the regulated areas of the municipality are located and will guide them to participate in the program more effectively.

What is the System- After the general boundaries of the system have been identified you should begin to identify and/or understand the specific components of the system. A Municipal Separate Storm Sewer System is defined as any conveyance or system of conveyances used for collecting or conveying stormwater that are owned or operated by a State, City, Town, Village, Borough, County, parish, district, association, or other public body. This includes roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains. Understanding the components that make up the system is instrumental in understanding how it is used and the source of pollutants that will be needed for development and implementation of future requirements of your Stormwater Management Program.

Geographic Areas of Concern- It is necessary for you to identify areas that have the potential to generate pollutants that could enter your system and the permit allows for prioritization of areas with the highest risk. Examples of Geographic Areas of Concern might include commercial areas, older residential areas served by individual septic systems, areas of growth (construction activities that have the potential to impact the MS4 are regulated to the municipal boundaries), areas where industrial activities occur, or areas that may be adjacent to or contributing discharge to waters already identified as being impaired. Additional information related to identification of areas and their associated pollutants can be found in *Urban Stormwater Management in the United States* published by The National Academies Press in 2009.²

Pollutants of Concern- It is important for you to understand the types of pollutants that can be anticipated from certain types of land use activities. Pollutants of Concern (POCs) are pollutants that are reasonably expected to be present in the stormwater discharge. The following Pollutants of Concern often result from common uses of land within communities and have the potential to be contained in stormwater:

1. **Nitrogen-** Dissolved in water. Common sources are residential fertilizer use, atmospheric deposition, and illicit discharges.

¹ Reference Maps for urbanized area boundaries are available at: <http://www.dec.ny.gov/chemical/8695.html>

² A downloadable copy of this book can be found on: <http://www.nap.edu>

2. **Metals**- May come from illicit discharges, municipal operations and atmospheric deposition.
3. **Pathogens**- Possibly from illicit discharges and pet wastes left on paved surfaces
4. **Phosphorus**- Attaches to soil particles. A common source is fertilizer used in household, business or municipal operations.
5. **Dissolved Oxygen/ Oxygen Demand**- Bio-degradable materials that consume dissolved oxygen in water as they decay. Sources include illicit discharges and municipal operations.
6. **Silt/ Sediment**- Soil/dirt that fall out of suspension quickly. Common sources include construction, soil erosion and municipal operations.
7. **Temperature**- Discharging surface runoff that has increased temperature due to extended contact with impervious cover.
8. **Turbidity**- Smaller soil particles that make the water cloudy. Common sources include construction, soil erosion and municipal operations.
9. **Floatables**- Street litter that floats on or near the surface.

Receiving Waters- You should identify all waterbodies that have the potential to receive discharges from your storm sewer system including any impaired waters listed on the State's Section 303(d) list or having an established Total Maximum Daily Load (TMDL).³ If you do identify that your system has the potential to discharge to an impaired waterbody, then the land area contributing flow to that waterbody should be identified as a "Geographic Area of Concern". Additionally, the pollutant(s) listed in the 303 (d) list as causing the impairment would be considered to be a potential "Pollutant of Concern" and information would need to be gathered about the activities that could likely generate the pollutant.

Identifying Your Resources

One condition of the General Permit requires that you identify staff or other personnel who will be responsible for various elements of your stormwater management program. These program elements include, but are not limited to: education, training, outreach, reporting, construction review and oversight, receiving and dispatching information submitted by public, and oversight of municipal operations impacting stormwater. The municipality may already have staff that are well suited to handle many of these requirements such as the Department of Public Works (DPW), the Highway Superintendent, the Code Enforcement/ Building Inspector, and any other Public Relations staff. Your staff should become familiar with the stormwater requirements as it pertains to their own responsibilities, as well as with any overlapping responsibilities of others. Staff should also review existing programs, policies and procedures and determine how they may be modified or expanded to address stormwater requirements. Your existing staff may also be

³ Information about impaired waterbodies is available in the MS4 Toolbox on NYSDEC website: MS4 Toolbox: <http://www.dec.ny.gov/chemical/8695.html> and Waterbody Inventory/Priority Waterbodies List: <http://www.dec.ny.gov/chemical/23846.html>

useful in identifying areas of concern from field observations, history of complaints, and so forth. Identifying potential roles and capabilities for existing staff is also beneficial because if such resources exist you may not need to consider expanding your work force to accommodate the requirements of the General Permit. Where gaps in staffing may exist and are identified early in the process, you will have more time to obtain and allocate funding or hire new staff in a timely fashion.

Stormwater Program Coordinator- As many of these tasks are related, a single individual can be responsible for a variety of activities or programs. It is however, important to ensure that there is an individual who will oversee the coordination and implementation of your entire Stormwater Management Program. This individual is identified as the Stormwater Program Coordinator. It is the duty of the Stormwater Program Coordinator to be familiar with every aspect of your Stormwater Management Program, coordinate all elements of the program, compile all necessary information, and address any concerns about stormwater management and compliance with the MS4 General Permit. You will find it helpful to identify and put in place this individual during the planning and preparation phase. This individual should assist in filling out the NOI and have input in the Stormwater Management Program development. The Stormwater Program Coordinator is the only position that is required to be filled during the initial development of the Stormwater Management Program, prior to submitting the NOI. Other staff charged with various duties of the program will not need to be fully in place prior to submission of the NOI. However, it is important to understand the duties and responsibilities of each task and activity in order to identify appropriate staff who will be assigned to these prior to submittal of the NOI or within the first year of the program.

Local Stormwater Public Contact- You should identify a local point of contact for public concerns regarding stormwater management and compliance with the General Permit. The name or title of this contact and the telephone number must be published, distributed to the public and kept updated with the Department.

Public Education and Outreach Staff- To have a strong SWMP, the public needs to be aware of how their actions impact the MS4 and understand the role that they play in preventing the discharge of pollutants. Staff will need to be in place in order to establish an effective public education and outreach program. It will be the duty of this staff to reach out to the general public and target audiences to educate them about the impacts of stormwater discharges on waterbodies, pollutants that are contained in stormwater and their sources, and steps that can be done to reduce the amount of pollutants in both stormwater and non-stormwater discharges. They may also be charged with soliciting public input and identifying groups that could be helpful, such as, citizen advisory groups if any exist. The individual(s) responsible for education and outreach should understand the potential pollutant generating activities, the target audience (e.g. residents, business owners, industrial owners, municipal staff, property owners, or students), and be able to effectively communicate with them.

Oversight of Construction Activities- Polluted stormwater from improperly controlled construction sites is often conveyed through an MS4 and ultimately discharged into a receiving waterbody. The primary pollutants that are typically contained in construction site runoff are silt

and sediment due to the erosion of exposed and un-vegetated soil resulting from the construction activity. You will need to identify who will be responsible for review and acceptance of Stormwater Pollution Prevention Plans (SWPPPs) developed for construction sites within your municipal boundaries (unless a waiver is granted). You will also need to identify staff who will oversee construction activities to ensure that owners of construction projects comply with the municipality's land use regulations and implement their Stormwater Pollution Prevention Plan (SWPPP). Staff that will be responsible for oversight of construction activities must be adequately trained and understand the State and local erosion and sediment control requirements. The individual(s) selected to review the Stormwater Pollution Prevention Plans must be trained in the concepts of erosion and sediment controls, understand construction methods regarding stormwater practices and possess the ability to communicate effectively with consultants, design engineers and planning board members. It is important to mention that the person(s) reviewing the SWPPP to ensure that it contains all of the required components in many cases may not be the same person(s) overseeing the implementation of the SWPPP components during construction. The MS4 General Permit requires that you ensure that the individuals performing the construction related tasks be adequately trained and in some cases possess certain credentials. Some communities elect to fill these needs with in-house staff while others elect to contract with third parties (consultants, inspectors, etc.) to meet the requirements contained in the MS4 General permit.

Receipt and Consideration of Information Submitted by the Public- The Clean Water Act (CWA) necessitates that the public have a meaningful role in the development and implementation of the SWMP. The permit requires that you provide the opportunity for the public to submit questions, concerns, and information about local construction activities, illicit discharges and other stormwater issues related to the MS4. This public participation is intended to further strengthen your Stormwater Management Program by encouraging the public to take an active role in the development and implementation of the program, ensuring that the requirements of the General Permit are met. It will be necessary for staff to be in place that will be responsible to receive and consider any information submitted by the public. Although follow-up of every complaint or concern is not required, the municipality will need to review, consider, and compile all information submitted and document considerations and any follow up actions taken. You may find it useful to have the staff responsible for overseeing construction activities, also be responsible for this task. Common staff involved in both of these tasks can be extremely beneficial because the information received by the public can be quickly conveyed to the construction site operators, in addition to municipal staff.

Pollution Prevention and Good Housekeeping- The pollution prevention and good housekeeping requirements stipulate that you review all municipal operations (including local police and fire departments) and implement management practices to reduce stormwater pollutants to the maximum extent practicable. The pollution prevention and good housekeeping program is a crucial element in your SWMP. The municipality should scrutinize and alter (if necessary) its own actions, policies, and operations to improve or protect the quality of the receiving waterbodies. An effective pollution prevention and good housekeeping program can also reduce maintenance and supply costs by more thoroughly evaluating municipal operations such as de-icing roads, fertilizer application, and storm sewer system inspections. Regularly

maintaining catch basins and cleaning storm sewer pipes will prevent the accumulation of pollutants that are later released during storm events and will prevent costly repairs from blockages, backups and flooding. Staff will also be needed to provide the necessary training to employees on how to incorporate pollution prevention/ housekeeping techniques into municipal operations. This training should be directed to your municipality's own facilities and operations. The permit requires that at a minimum frequency of every three years your municipality performs and documents a self assessment of all municipal operations addressed in your SWMP to ensure that employees are utilizing the appropriate training. You may find it useful to have a third party conduct the wet weather (during a rain event) audit to highlight the path of any pollutants that are contained within the storm sewer system.

Coordination and Communication

The multitude of potential sources of pollution requires management of stormwater using a variety of methods and activities. Depending upon the individual circumstances of each municipality, at times these methods and activities can be very involved and complex. Each of the six Minimum Control Measures targets various audiences, as well as, sources of pollution. Although the permit structures each Minimum Control Measures to be a separate and discrete group of activities, they are intended to work together to address the various sources of pollutants and one Minimum Control Measure often is dependent and conditioned on the success of another. An effective Stormwater Management Program will use information gained or learned from one action to strengthen another. This can only be achieved if an open line of communication is present amongst all staff involved with the Stormwater Management Program. During the planning stages you should consider how you will provide coordination and cooperation amongst staff and municipal boards especially as it relates to recording, filing and tracking documents, scheduling important meetings, and distributing the necessary information to the public and developers.

Coordination and cooperation amongst staff is essential so that the work products and information gathered from each individual or group of individuals can be used by another. You should consider how you plan to provide this exchange of information. Other municipalities have found the following to be beneficial to provide for an effective means of communication:

- i) coordination meetings held at a designated frequency
- ii) generation of monthly reports shared amongst staff
- iii) work groups that meet at a regular frequency and report back to their own staff

Decisions on the method of communication and coordination may be based on the amount of staff assigned to various aspects of the program, the location of the staff, or other circumstances that may be determined to be the limiting factor for your specific municipality.

You should also consider how the public will be involved and informed of information related to the development and implementation of the Stormwater Management Program and/or compliance with the General Permit. Will this be done during a town meeting or some other

kind of publically involved assembly? Will information be distributed and gathered electronically through an internet site or social media application? Will email, mail, or other form of broadcasting such as newspapers be used to announce to the public of upcoming events or when information is available to them. Your municipality will most likely already have a protocol for announcing information to the public and may need to just evaluate this method to ensure it is appropriate for the Stormwater Management Program requirements.

Program Deadlines

Although this paper is structured to help you better understand the needs of your specific municipality as it pertains to regulatory boundaries, priority areas to target, and available resources, it is important to know how the development of your Stormwater Management Program and Plan is going to be evaluated under the General Permit. A municipality's compliance with the MS4 program is substantiated through successful completion of specific milestones. These milestones are designed to show that improvement is being made for each MCM and to prove that steady progress to minimize the discharge of pollutants is being achieved throughout the development and implementation of your SWMP. The General Permit specifies program development deadlines for specific tasks and these deadlines are considered to be enforceable limits. Table 1 provides a brief description of the deadlines required to be met by the end of the first year of developing and implementing your Stormwater Management Program. Additional deadlines for the second and third year of activity, as well as activities that are to be initiated in designated years are included in the General Permit.

The first year your efforts should be focused on building a foundation for your Stormwater Management Program and identifying primary concerns and/or entities that will become important to the further development and implementation of the program. The first year is instrumental to the overall success of your program as subsequent years build off of the activities initiated or achieved during this first year.

Moving Forward

It is important to realize that an effective Stormwater Management Program is a work in progress. It should be continually evaluated and evolve over time as new information becomes available. It is not crucial to have a perfect program prior to submission of the Notice of Intent nor does the NYS Department of Environmental Conservation expect this to be the case. Meeting all required milestones, understanding what measures are effective, and identifying what measures are not working (or possibly even hindering the program) and then adapting to this information is central to the successful implementation of your Stormwater Management Program.

If you consider the information that was presented in this document then your municipality will be well poised to develop a strong and effective Stormwater Management Program. Ensuring that all program deadlines are achieved in accordance with the schedules for each Minimum

Control Measure as outlined in the General Permit, will help to demonstrate that your Stormwater Management Program is on schedule and in compliance with the permit.

Table 1: Program deadlines for first year

Minimum Control Measure 1: Public Education and Outreach	
i	List and Describe (if necessary) all pollutants of concern
ii	Development of education and outreach program and activities for the general public and target or priority audiences that address POCs, geographic areas of concern, and / or discharges to 303(d) / TMDL waterbodies.
Minimum Control Measure 2: Public Involvement and Participation	
i	Presentation of annual report in publically available format
ii	Prepare and submit annual report with attached comments
Minimum Control Measure 3: Illicit Discharge Detection and Elimination	
i	Identify and document procedures for identifying priority areas of concern (geographic, audiences, or otherwise) for IDDE program
ii	Identify and document priority areas of concern, available equipment, staff, funding, etc.
Minimum Control Measure 4: Construction Site Stormwater Runoff Control	
i	Identify and document procedures for the receipt and consideration of information submitted by the public. Identify the responsible personnel.
Minimum Control Measure 5: Post Construction Stormwater Management	
* There are no program deadlines for MCM 5 in year 1	
Minimum Control Measure 6: Pollution Prevention and Good Housekeeping	
i	Identify the municipal operations and facilities that will be considered for inclusion in the pollution prevention and good housekeeping program.
ii	Identify and document the pollution prevention and good housekeeping program priorities (geographic area, potential to improve water quality; facilities or operations most in need of modification or improvement).
iii	Identify and document management practices, policies, procedures, etc. that will be developed or modified.
iv	Identify the staff and equipment available.

If unexpected obstacles do occur, there are many resources available such as fact sheets, guidance manuals, websites, training videos, and partnering agencies and organizations. Links too many of these additional resources are provided in Appendix A. You should also never hesitate to contact the regional NYSDEC office for help with any program related questions or concerns.

The protection of the environment - including water quality - is a goal and mission that all cities, towns, villages, federal and state entities should assume and the Phase II Stormwater Program is simply a driver to achieve this goal.

Appendix A: List of MS4 Web Resources

DEC Resources

- MS4 Permit & Forms web page: <http://www.dec.ny.gov/chemical/43150.html>
- MS4 Toolbox web page: <http://www.dec.ny.gov/chemical/8695.html>
- Resources for Newly Designated MS4s web page: <http://www.dec.ny.gov/chemical/9006.html>
- Partners Available to Assist MS4s web page: <http://www.dec.ny.gov/chemical/9004.html>

EPA Resources

- EPA MS4 Designation Document: <http://www.epa.gov/npdes/pubs/fact2-1.pdf>
- EPAs MS4 Fact Sheet Series: <http://cfpub.epa.gov/npdes/stormwater/swfinal.cfm>
- EPA Menu of Best Management Practices: <http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm>
- National Pollutant Discharge Elimination System (NPDES): <http://cfpub.epa.gov/npdes/index.cfm>

Other Resources

- Stormwater Managers Resource Center: <http://www.stormwatercenter.net/>
- Center of Watershed Protection: <http://www.cwp.org/smr>
- Project WET: <http://projectwet.org/>
- County Soil and Water Conservation District (SWCD) Offices: <http://www.nys-soilandwater.org/DisLawPPT/dislaw.html>
- County Water Quality Coordinating Committee Contacts (WQCC): <http://www.nys-soilandwater.org/cwqcc/index.html>
- New York Association of Regional Councils (NYSARC): <http://www.nysarc.com/>
- New York State Association of Regional Councils Water Resource Program: <http://www.cnyrpd.org/nysarcwater/>
- Finger Lakes-Lake Ontario Watershed Protection Alliance (FOLLOWPA): <http://www.followpa.org/>
- On-Line Stormwater Training Videos: <http://www.ocgov.net/planning/environmentwater/StormwaterVideo5>
- Capital District Regional Planning Commission: <http://cdrpc.org>
- Stormwater Coalition of Albany County: <http://www.stormwateralbanycounty.org/>
- Chemung County Stormwater Coalition: <http://www.chemungcounty.com/index.asp?pageId=395>
- Ontario-Wayne Stormwater Coalition: <http://www.owsc.org/>
- Broome Tioga Stormwater Coalition: <http://www.broometiogastormwater.com/>