STORMWATER MANAGEMENT PLAN

Prepared for:
Town of Evans

October 2007

Customized by:

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Based on:

MODEL STORMWATER MANAGEMENT PLAN

By: Western New York Stormwater Coalition

WNY
Stormwater
Coalition

INSPECTION FORMS FOR PP/GH

Spreadsheets for documenting municipal maintenance operations for compliance with Pollution Prevention/Good Housekeeping BMPs.

MEASURABLE GOALS SUMMARY

Summary in tabular format of all Minimum Control Measures, Best Management Practices, and Measurable Goals.

ATTACHMENTS

A CD is attached at the end of the report that includes electronic files of the original Model Stormwater Management Plan, this SWMP, and the Appendix.

The following software programs are needed to open the files in the Appendix and SWMP:

- Adobe Acrobat Reader
- Microsoft Word 2003
- Microsoft Excel 2003
- Microsoft Publisher 2003

The CD is organized into the following folders:

SWMP
This folder includes the original Model SWMP, this SWMP, Inspection Forms for PP/GH, and the Measurable Goals Summary.

APPENDIX
The Appendix contains reference materials and is organized into the following folders:

1. Public Education
   - Household General Audience
   - Poster
   - Public Education Display
   - Small Business Brochures
   - Teacher Education Package

2. Public Participation and Involvement

3. Illicit Discharge Detection & Elimination

4. Construction Site Runoff Control
   - Construction Permit Program
     - Construction Inspection Checklists
     - Plan Review and Guidance

5. Post-Construction Stormwater Management
   - Funding

6. GH-PP for Municipal Operations

7. General Information

INTRODUCTION

The Western New York Stormwater Coalition Stormwater Management Plan has been developed to comply with the New York State Department of Environmental Conservation General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (GP-02-02). It is a shared Stormwater Management Plan providing policy and management guidance to the regulated municipalities and agencies that are members of the Coalition.

The Town of Evans is a member of the Western New York Stormwater Coalition and a party to this Stormwater Management Plan.

The Stormwater Management Plan is based on the Federal Stormwater Phase II rule, issued in 1999, which requires municipal separate storm sewer system (MS4) owners and operators, in U.S. Census-defined urbanized areas, to develop a Stormwater Management Program. There are six program elements designed to reduce the discharge of pollutants to the maximum extent practicable. The program elements, titled Minimum Control Measures, include:

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

Each Minimum Control Measure and the Best Management Practices that have been implemented to maintain compliance with the NYSDEC GP-02-02 General Permit are described in the plan. For each Best Management Practice, responsibilities to achieve and sustain compliance are clearly defined. Portions of the work necessary are provided through the collective efforts of the Western New York Stormwater Coalition members. The remaining work is the responsibility of Town of Evans' designated Stormwater Management Officer.

Certain components of this program have been codified into local law. Refer to the Local Law for Stormwater Management and Erosion and Sediment Control and the Local Law to Prohibit Illicit Discharges, Activities and Connections to Separate Storm Sewer Systems. These laws were adopted by the Town of Evans in 2007.

This Stormwater Management Plan should be updated on an annual basis in order to take into consideration the latest technologies and information to maintain compliance with the NYSDEC GP-02-02 General Permit. An electronic version of this document and its appendices are provided.

STORMWATER MANAGEMENT PLAN

GENERAL DEFINITIONS AND REQUIREMENTS

Best Management Practices (BMPs) - Activities or structural improvements that help reduce the quantity and improve the quality of stormwater runoff. BMPs include public education and outreach, treatment requirements, operating procedures, and practices to control runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

Clean Water Act - Amendments made to the Federal Water Pollution Control Act in 1972 to establish water quality standards and to create the National Pollutant Discharge Elimination System to protect the waters of the U. S. by regulating the discharge of pollutants from point source discharges and municipal separate storm sewer systems.

Combined Sewer System – A sewer system designed to convey both sanitary wastewater and stormwater.

Detention Pond – Pond that stores a volume of water for a given period of time and then discharges the water downstream.

Discharge – An outflow of water from a stream, pipe, ground water system or watershed.

Ecosystem – all of the plants and animals in an area that interact to make up the local environment.

Erosion – the overall process of the transport of material on the earth's surface including the movement of soil and rock by agents such as water, wind, or gravity.

Groundwater – all of the water contained in void space beneath the earth's surface.

Heavy Metals - Metals such as zinc, copper, lead, mercury, chromium, cadmium, iron, manganese, nickel, molybdenum and silver that, even in low concentrations can be toxic or lethal to humans, animals and aquatic life.

Illicit Discharge - The term refers to any discharge to an MS4 that is not composed entirely of stormwater unless authorized via an NPDES permit or otherwise excluded from regulation. Thus, not all illicit discharges are illegal or prohibited.

Industrial Waste - Unwanted materials from an industrial operation. It may be liquid, sludge, solid, or hazardous waste.

Large Municipal Separate Storm Sewer System (Large MS4) – all municipal separate storm sewers that are located in an incorporated place with a population of 250,000 or more according to the latest Census.

Maximum Extent Practicable (MEP) – a water quality standard that applies to all MS4 operators under NPDES permits. The standard has no exact definition, as it was intended to be flexible to allow operators to tailor their stormwater programs to their particular site.

Medium Municipal Separate Storm Sewer System (Medium MS4) – all municipal separate storm sewers that are located in an incorporated place with a population of more than 100,000 but less than 250,000.

Municipal Separate Storm Sewer Systems (MS4) - Areas with a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, and storm drains) that are not a combined sewer or part of a publicly owned treatment system and are owned or operated and regulated by a municipality or authorized agency. MS4s may be small, medium or large with the medium or large MS4s being principally determined by population size.

Non-Point Source Pollutants (NPS) – pollution coming from many diffuse sources whose origin is often difficult to identify. This pollution occurs as rain or snowmelt travels over the land surface and picks up pollutants such as fertilizer, pesticides, and chemicals from cars. This pollution is difficult to regulate due to its origin from many different sources. These pollutants enter waterways untreated and are a major threat to aquatic organisms and people who fish or use waterways for recreational purposes.

National Pollutant Discharge Elimination System (NPDES) – the EPA's regulatory program to control the discharge of pollutants to waters of the United States.

Notice of Intent (NOI) - An application to notify the permitting authority of a facility's intention to be covered by a general permit. This exempts a facility from having to submit an individual or group application.

Nutrients - The term typically refers to nitrogen and phosphorus or compounds containing free amounts of the two elements. These elements are essential for the growth of plant life, but can create problems in the form of algal blooms, depletion of dissolved oxygen and pH changes in streams and other water bodies when higher concentrations are allowed to enter drainage systems and lakes.

Ordinance - A law based on state statutory authority developed and approved by a governmental agency to allow them to regulate the enforcement of criteria contained within the specific law and to invoke sanctions and other enforcement measures to ensure facilities comply with the criteria.

Outfall – the point where a sewer or drainage discharges into a receiving waterway.

Point Source Pollution – pollution coming from a single, definable source, such as a factory.

Retention Pond – Pond that stores a volume of water without allowing it to discharge downstream.

Runoff – any drainage that leaves an area as surface flow.

Sanitary Sewer – an underground pipe system that carries sanitary waste and other wastewater to a treatment plant.

Sediment – material derived from the weathering of rock such as sand and soil. This material can be detrimental to aquatic life and habitats if too much is allowed to wash into rivers and ponds.

Site Plan – a geographic representation of the layout of buildings and other important features on a tract of land.

Small Municipal Separate Storm Sewer Systems (SMS4s) - These are MS4s that are not merely determined by population, but are much broader in scope. MS4s are land areas with conveyances that are designated because of one or more of the following criteria: 1) they discharge to sensitive waters; 2) they are experiencing high growth or have a high growth potential; 3) they are contiguous to urbanized areas and other MS4s; 4) they are a significant contributor of pollutants to the waters of the U. S.; or 5) they have ineffective protection of water quality through other programs.

Standard Operation Procedures or Standards of Practice (SOPs) – Specific municipal operations impacted by the proposed operation and maintenance programs.

State Pollutant Discharge Elimination System (SPDES) – the state's regulatory program to control the discharge of pollutants to waters of the Unites States.

Storm Drain – any drain which drains directly into the storm sewer system, usually found along roadways or in parking lots.

Storm Sewer – an underground pipe system that carries runoff from streets and other surfaces.

Stormwater – stormwater or snow melt runoff, and surface runoff and drainage.

Stormwater Management – any measure associated with the planning, maintenance, and regulation of facilities which collect, store, or convey stormwater.

Stormwater Pollution Prevention Plan (SWPPP) - A plan developed by a facility or entity that thoroughly evaluates potential pollutant sources at a site and selects and implements appropriate best management practice measures designed to prevent or control the discharge of pollutants in stormwater runoff.

Surface Runoff – the flow of water across the land surface that occurs when the rainfall rate exceeds the ability of the soil to absorb the water. Also occurs on impervious surfaces, such as parking lots, where water cannot infiltrate at all.

Surface Water – any water that remains on the earth's surface, such as ponds, rivers, streams, impoundments, wetlands, oceans, etc.

Total Maximum Daily Load (TMDL) – a regulatory limit of the maximum amount of a pollutant type that can be released into a body of water in a twenty-four hour period without adversely affecting water quality.

Tributary – a stream which drains into another larger stream or body of water.

Urbanized Area (UA) - Is a land area consisting of one or more central places and the adjacent densely settled surrounding area (urban fringe) that together have a residential population of at least 50,000 and a minimum average population density of at least 1,000 people per square mile.

Watershed – a geographic area in which water flowing across the surface will drain into a certain stream or river and flow out of the area via that stream or river. All of the land that drains to a particular body of water. Also known as a catchment or drainage basin.

Waters of the US - These are surface waters defined as wetlands, lakes (including dry lakes), rivers, streams (including intermittent streams, ephemeral washes and arroyos), mudflats, sandflats, sloughs, wet meadows, playa lakes, natural ponds, and man-made impoundments.

Wetlands – an area of land where part of the surface is covered with water or the soil is completely saturated with water for a large majority of the year. Wetlands provide an important habitat for many different types of plant and animal species. Wetlands are also natural stormwater control areas, since they filter out pollutants and are able to retain large amounts of water during storm events.

LIST OF COMMONLY USED ABBREVIATIONS

BMPs – Best Management Practices

CWA – Clean Water Act

ECDEP – Erie County Department of Environment and Planning

GIS – Geographic Information System

MCM – Minimum Control Measure

MEP – Maximum Extent Practicable

MS4 - Municipal Separate Storm Sewer System

NOI – Notice of Intent

NPS – Non-Point Source Pollutants

NPDES – National Pollution Discharge Elimination System

NYSDEC – New York State Department of Environmental Conservation

SOP – Standard Operating Procedure or Standard of Practice

SPDES – State Pollution Discharge Elimination System

SWMP – Stormwater Management Plan

SWPPP – Stormwater Pollution Prevention Plan

TMDL – Total Maximum Daily Load

USACOE – United States Army Corps of Engineers

USEPA – United States Environmental Protection Agency

WNYSC – Western New York Stormwater Coalition

SECTION 1 - PUBLIC EDUCATION AND OUTREACH ON STORMWATER IMPACTS

1.1 Description of Minimum Control Measure

The Public Education and Outreach minimum control measure consists of Best Management Practices (BMPs) that focus on the development of educational materials designed to inform the public about the impacts that stormwater discharges have on local water bodies and the steps that the public can take to reduce pollutants in stormwater runoff. These BMPs describe steps that the public can take to reduce the impact of stormwater pollutants. They also describe how the public, as individuals or collectively as a group, can participate in reducing pollutants and their impact on the environment. The Public Education and Outreach program and BMPs, in combination, are expected to reach all of the constituents within the MS4's permitted boundary. The target pollutant sources are construction site runoff, impacts from new and re-development projects, illicit discharges, and other pollutant sources as identified to be of local concern, i.e. approved TMDL parameters.

1.2 General Permit Requirements

An MS4 must, at a minimum:

Plan and conduct an ongoing public education and outreach program designed to describe:

- The impacts of stormwater discharges on waterbodies.
- Pollutants of concern and their sources.
- Steps contributors of these pollutants can take to reduce pollutants in stormwater runoff
- Steps contributors of non-stormwater discharges can take to reduce pollutants. Non-stormwater discharges are defined in the MS4 Permit and include:
  - Waterline flushing.
  - Landscape irrigation.
  - Diverted stream flows.
  - Rising ground waters.
  - Uncontaminated ground water infiltration.
  - Uncontaminated pumped ground water.
  - Discharges from potable water sources.
  - Foundation and footing drains.
  - Air conditioning condensate.
  - Irrigation water.
  - Springs.
  - Water from crawl space and basement sump pumps.
  - Lawn watering runoff.
  - Water from individual residential car washing.
  - Flows from riparian habitats and wetlands.
  - Dechlorinated swimming pool and water reservoir discharges.
  - Residual street wash water.
  - Discharges or flows from fire fighting activities.
  - Any SPDES permitted discharge.

1.3 Methodology for Compliance with Permit Requirements

The WNYSC has developed many of the BMPs necessary for this MCM. These have included brochures, posters, webpage, education packages, and displays for community events. These BMPs will be updated by the WNYSC on an annual basis and made available to each MS4 that is a member of the WNYSC.

1.4 Best Management Practices

1.4.1 Stormwater Pollution Prevention Brochures

- Develop brochures to be displayed within municipal buildings, to target businesses and schools. There are ten brochures that have been developed and are titled as follows:
  - Automotive & Related Industries
  - Construction Site Stormwater Runoff Control
  - Concrete & Mortar Operations
  - Roadwork & Paving
  - Food & Restaurant Industries
  - Pools, Fountains & Spas
  - Mobile Cleaners: Carpet, Upholstery Cleaners, Janitorial Service Providers
  - Hospitals, Medical Treatment Centers & Healthcare Facilities
  - Pesticide Application, Lawn Care and Landscaping
  - Household Guide to Preventing Stormwater Pollution
- Continue brochure distribution through direct mailings, trade associations, public outreach events, and seminars.
- Utilize web page as an ordering mechanism to allow businesses, municipalities, schools, and the general public to request additional brochures or download the brochures directly.

Responsibility

Stormwater Management Officer

- Annually inventory existing stock of brochures and replenish as needed.

WNYSC

- Annually provide additional brochures to local MS4s upon request.
- Annually provide additional brochures to businesses, schools, and the general public upon request.

1.4.2 Public Education Posters

Prepare public education posters that can be placed within municipal buildings, libraries, and schools. Posters have been developed for Erie and Niagara Counties.

- Continue poster distribution to public libraries, and schools as requested. Display posters within municipal buildings.
- Posters are available on the web page with option to request full size from WNYSC.

Responsibility

Stormwater Management Officer

- Annually check posters for damage and outdated information. Replace damaged posters with new posters as they become available from the WNYSC.

WNYSC

- Annually develop new posters and deliver to each MS4, all public libraries, and schools on an as needed basis.

1.4.3 Webpage

- Maintain the web site that was designed to educate the public on the impacts of stormwater runoff on local waterbodies. The list of subjects for inclusion and discussion in the website is based on consideration of the following subjects:
  - Citizen reporting under the illicit discharge and construction programs
  - Water quality impacts of stormwater runoff to local water bodies
  - Steps the public can take to reduce stormwater pollution
  - Public involvement programs
- Maintain the website in accordance with the website maintenance schedule.
- Post new information to the website as necessary.

Responsibility

Stormwater Management Officer

- Annually update and maintain the MS4 website as necessary relative to stormwater education. Post the SWMP on the Town's website. Maintain a link from the Town's site to the WNYSC website.

WNYSC

- Annually update and maintain the website as necessary.

1.4.4 K-12 Education Packages

- Provide and distribute educational materials to school age children in order to foster an early age respect for the environment.
- Publicize environmental education opportunities to local educators regarding pollution prevention and stormwater quality issues to discuss in the classroom.
- Maintain age appropriate materials for distribution to local school students.
- Distribute educational materials to local schools.
- Update education materials as necessary to maintain consistency with current standards and to reflect input from school administrators and teachers.
- Maintain records of the number and types of education materials distributed to local schools.

Responsibility

WNYSC

- Annually update education materials and maintain records of the material distributed to each local school.

1.4.5 Public Education Display for Community Events

The WNYSC has developed a display that consists of a poster board, public education materials, the Enviroscape watershed model, stormwater quiz cards, a prize wheel and promotional items (answering a quiz card successfully allows a spin on the wheel). Use of the items listed will depend on the audience and venue.

- Maintain the public education display to be used by the local MS4s at their community events.
- Maintain a reservation system that was established to mitigate potential conflicts between municipalities requesting the display for the same time period.

Responsibility

Stormwater Management Officer

- Annually use the display at two community events each year within each municipality. It is each municipality's responsibility to obtain the display from the ECDEP main office.

ECDEP (Erie County Department of Environment and Planning)

- Maintain the reservation system.
- Annually update the record of the number of times the display is distributed to the local municipalities.

1.4.6 Public Information Press Package

The WNYSC has developed a public information press package. Information in the press package is generic relative to dates and times. Specific dates and times are developed by the WNYSC and each municipality.

Not all components developed for the press package should be released with each announcement. For example, the invitation for public participation at the WNYSC meetings would not require any video or audio material. Printed notices in the local newspaper would be sufficient.

Utilize the public information press package for local news agencies. The press package includes the following:

- Information targeting stormwater pollution prevention for households. This includes available video and audio public service announcements developed by NYSDEC or USEPA
- Printed public service announcements developed by the WNYSC
- Invitation for public participation at two WNYSC meetings
- Invitation for public to review draft Annual Report (sample press release)
- Invitation for Community Cleanup Events (sample press release)

Responsibility

Stormwater Management Officer

- Annually document the distribution and content of each press release. The total number of press releases per year will vary. Target at least two per year to account for public review of the draft Annual Report and community cleanup events.

WNYSC

- Annually document the distribution and content of each press package. Target at least three press releases per year to account for the WNYSC meetings and public review of the draft Annual Report.
- Bi-Annually distribute printed, video and audio public service announcements to local news agencies and the MS4s.
- Bi-Annually document distribution and content of each press package.

SECTION 2 - PUBLIC PARTICIPATION / INVOLVEMENT

2.1 Description of Minimum Control Measure

The Public Involvement/Participation minimum control measure (MCM) consists of Best Management Practices (BMPs) that focus on involving the local public in development and implementation of the SWMP. Compliance with State and local public notice requirements will facilitate involvement of the public in development and implementation of the public involvement/participation program. The BMPs describe the plan to actively involve the public in development and implementation of the SWMP and the types of public involvement activities included in the program. The target audiences for the public involvement program are all groups that may have an interest in the particular BMPs in addition to all ethnic and economic groups and the general public located within the permitted boundary.

2.2 General Permit Requirements

An MS4 must, at a minimum:

- Comply with State and local public notice requirements when implementing a public involvement/participation program.
- Comply with public participation and involvement provisions of the CWA as applicable.
- Design and conduct a public involvement/participation program which:
  - Identifies key individuals and groups, public and private, who are interested in or affected by the stormwater permitting program.
  - Identifies types of input the MS4 would seek from them to support development and implementation of the program and how it is used.
  - Describes the public involvement/participation activities the MS4 will undertake to provide program access to those who want it and to gather the needed input.
- Identify a local point of contact for public concerns regarding stormwater management and compliance with this permit. The name or title of this contact and the telephone number must be published in public outreach and public participation materials and kept updated with the ECDEP (Erie County Department of Environment and Planning).
- Prior to submitting the annual report, present the draft annual report at a meeting that is open to the public where the public attendees are able to ask questions about and make comments on the report. This can be a regular meeting of an existing board within the MS4, such as planning, zoning, or the Town Board, etc. Recommendations for publicizing this public review opportunity are available from the NYSDEC and USEPA websites.
- Make public the following information:
  - The placement of the report on the agenda of this meeting
  - The opportunity for public comment
  - The date and time of the meeting
  - The availability of the draft report for prior review
- Include a summary of comments and intended responses in the annual report and make the final report available for public inspection.

2.3 Methodology for Compliance with Permit Requirements

In order to comply with this MCM, each municipality must involve the local public in their SWMP. By participating in the WNYSC, each municipality can comply with certain aspects of the SWMP such as public participation at the WNYSC meetings, incorporating a feedback mechanism into the webpage, community cleanup events, and public meetings in targeted Erie and Niagara County Watersheds. MS4s will be responsible for allowing public review of the SWMP and Annual Report.

2.4 Best Management Practices

2.4.1 Identify Contact Person for Stormwater Program

Establish a "Stormwater Management Officer" that is responsible for the management of the MS4's stormwater management program. The Stormwater Management Officer would likely be the Highway Superintendent, Code Enforcement Officer, Engineer, or his/her staff. A consultant cannot be appointed as Stormwater Management Officer.

Responsibility
Municipal Board
- Annually update the designated person as Stormwater Management Officer as necessary.

2.4.2 Public Participation in Western New York Stormwater Coalition (WNYSC) Meetings

Twice per year, the WNYSC invites the public to participate in their planning meetings. Meeting notices will be placed in the Buffalo News and on the WNYSC website.

Responsibility
WNYSC
- Semi-Annually notify residents of their invitation to participate in WNYSC planning meetings.

2.4.3 Public Meetings in Targeted Erie and Niagara County Watersheds to Foster Public Involvement

Twice per year, the WNYSC holds a public meeting to present the status of regional efforts to assist regulated municipalities in the implementation of the Phase II Stormwater Regulations. In addition, educational information is presented and made available to the public, and public comments are received.

Responsibility
WNYSC
- Semi-Annually publish a notice in the local paper for each public meeting held by the WNYSC, notifying the public of their invitation to participate.

2.4.4 Incorporate Feedback Mechanism into Webpage

Through either the WNYSC, and/or the municipality's website, provide a means for public input/comment regarding the stormwater management program.

Responsibility

Stormwater Management Officer & WNYSC

- Annually document input and comments or complaints received, and actions taken.

WNYSC

- Maintain a form on the website that interested residents can download to document their input/comments on the municipality's stormwater management program. Provide a means for comments to be emailed directly to the municipal Stormwater Management Officer or the WNYSC.

2.4.5 Public Review of Annual Report

All regulated MS4s must submit an annual report by June 1 of each year that updates the NYSDEC on the status of their stormwater management program. Before submittal of the annual report to NYSDEC, a draft report must be prepared and made available to the public for their review and comment.

Responsibility

Stormwater Management Officer

- Annually publish a notice to notify residents of their opportunity to review the draft annual report.

2.4.6 Public Review of Stormwater Management Plan

Provide the public with an opportunity to review and comment on the Stormwater Management Plan. Evaluation of its effectiveness, in conjunction with the public, will be measured.

Responsibility

Stormwater Management Officer

- Annually provide an opportunity for the public to comment on the effectiveness of the Stormwater Management Plan, and offer suggestions for improvements. This will be accomplished during the required public meeting to review the Annual Report.

2.4.7 Community Cleanup Event

Inform and encourage residents about the many opportunities that exist to participate in area community cleanup events: Household Hazardous Waste Collection events held several times per year by Erie and Niagara Counties; the nationally sponsored "Great American Cleanup" events that can be organized locally; and locally sponsored volunteer cleanup activities such as Buffalo Niagara Riverkeepers spring shoreline cleanup and Fall Beach Sweep.

Responsibility

Stormwater Management Officer and/or WNYSC

- Have information on local cleanup opportunities available at the office of the ECDEP or local Stormwater Management Officer, along with an application for volunteer group sign-up. Also, advertise these events on the Town and/or County website.
- Schedule at least one stream or roadway cleanup per year.

2.4.8 Identify Key Individuals and Groups Who are Interested in/or Affected by the Permitting Program

Environmental groups identified as having an interest in the WNYSC's Stormwater Management Program include: Erie County Environmental Management Council (EMC), municipal Conservation Advisory Committees (CACs), the Buffalo Niagara Riverkeepers, Citizens Coalition for the Environment (CCE), and the Erie County Water Quality Committee (ECWQC).

Responsibility

Stormwater Management Officer

- Annually as needed, outreach to the MS4 CACs regarding the activities of the WNYSC and how the groups may assist with their local Stormwater Management Program.

WNYSC

- Annually as needed, outreach to the Erie County EMC, Buffalo Niagara Riverkeepers, CCE, and ECWQC regarding the activities of the WNYSC and how the groups may assist with the Stormwater Management Program.

2.4.9 Identify Types of Input the MS4 would Seek from the Individuals or Groups to Support Development and Implementation of the Program

Environmental groups identified as having an interest in the WNYSC's Stormwater Management Program will be enlisted to assist with its implementation through participation in the WNYSC's public education and public involvement workgroup. These groups will be encouraged to:

- o Attend monthly Coalition meetings.
- o Assist with developing public education materials and public involvement activities.
- o Publicize and staff community cleanup events.
- o Assist with public education activities.
- o Review the Draft Annual Report of the WNYSC and MS4s.

Responsibility

Stormwater Management Officer

- Continue to utilize municipal CACs by contacting them at least annually to assist with their local MS4 Stormwater Program activities.

WNYSC

- Continue to seek participation from and include representatives from the EMCs, Buffalo Niagara Riverkeepers, CCE, and ECWQC in the WNYSC's Stormwater Management Program activities by contacting them at least annually.

SECTION 3 - ILLICIT DISCHARGE DETECTION & ELIMINATION

3.1 Description of Minimum Control Measure

The Illicit Discharge Detection and Elimination minimum control measure consists of Best Management Practices (BMPs) that focus on the detection and elimination of illicit discharges into the MS4. The BMPs describe outfall mapping and updating procedures; the legal authority mechanism that will be used to effectively prohibit illicit discharges; enforcement procedures and actions to ensure that the regulatory mechanism is implemented; the dry weather screening program and procedures for tracing and locating the source of an illicit discharge; procedures for locating priority areas; and procedures for removing the source of the illicit discharge.

3.2 General Permit Requirements

An MS4 must, at a minimum:

- Develop, implement and enforce a program to detect and eliminate illicit discharges into the MS4.
- Develop and maintain a map, showing the location of all outfalls and the names and location of all waters of the United States that receive discharges from those outfalls.
- To the extent allowable under State or local law effectively prohibit, through ordinance or other regulatory mechanism, illicit discharges into the storm sewer system and implement appropriate enforcement procedures and actions.
- Develop and implement a program to detect and address non-stormwater discharges, including illegal dumping, to the system.
- Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.

The following discharges are exempt from discharge prohibitions established by local law unless the NYSDEC or the Municipality determines them to be a significant contributor of pollutants:

- Waterline flushing
- Landscape irrigation
- Diverted stream flows
- Rising ground waters
- Uncontaminated ground water infiltration
- Uncontaminated pumped ground water
- Discharges from potable water sources
- Foundation and footing drains
- Air conditioning condensate
- Irrigation water
- Springs
- Water from crawl space and basement sump pumps
- Lawn watering runoff
- Water from individual residential car washing
- Flows from riparian habitats and wetlands
- Dechlorinated swimming pool and water reservoir discharges
- Residual street wash water
- Discharges or flows from fire fighting activities
- Any SPDES permitted discharge

3.3 Methodology for Compliance with Permit Requirements

The WNYSC has had all the outfalls for the participating MS4s mapped by a consultant. Each MS4 was provided a digital map showing the location of each outfall as well as a table describing the pertinent properties associated with each outfall. New York State has also developed a model ordinance for adoption by each MS4. The MS4s are responsible for implementing the Illicit Discharge Detection and Elimination Program according to the adopted ordinance.

3.4 Best Management Practices

3.4.1 Outfall Mapping/Outfall Information Management

- Maintain a map of storm sewer outfalls within the regulated boundaries of the MS4. The map should identify each outfall with a unique identifier, and link the outfall to a table of outfall properties that records pertinent properties of each outfall.
- Update information to the base outfall map during routine maintenance visits, scheduled outfall inspections, and responses to complaints. Outfall mapping is managed regionally by ECDEP's GIS Department. Therefore, information collected on outfalls must be transmitted to ECDEP's Pollution Prevention Coordinator, Thomas Hersey.

Responsibility

Stormwater Management Officer

- Annually submit accrued outfall mapping update forms to the Pollution Prevention Coordinator, Thomas Hersey by the annual deadline he establishes.

WNYSC

- Annually update the outfall map as necessary with additional outfalls that have been added to the system.

3.4.2 Outfall Surveillance

Implement a plan to detect illicit discharges by conducting routine visual inspections of every mapped outfall. The plan sets criteria for the inspection process.

- If possible, define the drainage areas about each outfall. Having the drainage areas defined is helpful in tracking down illicit discharge sources (refer to BMP 3.4.3). This task can only be accomplished if grants or other funding become available to accomplish this task.
- Maintain a schedule for outfall inspections. At a minimum, all outfalls must be inspected once over the course of a five year cycle. An initial outfall mapping project was conducted by the Western New York Stormwater Coalition in 2006.
- Maintain a prioritized list of outfalls for inspection, ranked on a 5-tier priority basis as follows:
  - Priority 1: (Highest Priority): Outfalls in which previous inspections indicated evidence of illicit discharge such as dry weather discharge, color, odor, etc. OR Outfalls in areas where repeated complaints were received.
  - Priority 2: Outfalls in heavy industrial or commercial areas or construction sites OR Outfalls in environmentally sensitive areas OR Outfalls to areas of impaired waters in which ambient water quality sampling indicated high levels of particular contaminants.

- o Priority 3: Outfalls in which previous inspections indicated structural deficiencies.
- o Priority 4: Outfalls in older areas of the municipality.
- o Priority 5: (Lowest Priority): None of the above.

Responsibility
Stormwater Management Officer
- Annually ensure that outfalls are being inspected and that inspections are documented.
- Annually submit accrued outfall mapping update forms for all outfalls that have been altered since mapping was established to the Regional Mapping Manager at the annual deadline established by the Regional Mapping Manager.

Inspection Forms in Appendix (on CD)
- Minimum Data Entry Requirements for Outfall Inspection/Monitoring
- Outfall Reconnaissance Inventory/Sample Collection Field Sheet
- Visual Inspection of Outfalls Physical Conditions
- Guidelines for Visual Inspections of Stormwater Outfalls

3.4.3 Pollutant Source Tracking Procedures

Investigate and confirm the source of pollutants when water quality issues arise due to public complaints or by scheduled inspection of outfalls.

- Customize the WNYSC's sampling procedure and program to track down sources of pollution to meet the Town's needs.
- Implement enforcement action per the Local Law to prohibit illicit discharges, activities and connections to separate storm sewer system (refer to BMP 3.4.4).

Buffalo State College is conducting a study in 2007 (not yet complete) to develop specific guidance and forms as a resource for municipalities for the purpose of tracking down pollution and sources at outfalls. The results of the study will be appended to this Stormwater Management Plan when complete.

Responsibility
Stormwater Management Officer

Additional Information / Resources In Appendix (on CD)
- Tracking Discharges to a Source.
- Sample Protocol Considerations.
- Specific Considerations for Industrial Sources of Inappropriate Pollutant Entries to the Storm Drainage System.

3.4.4 Ordinance or Local Law to Prohibit Illicit Discharges, Activities and Connections to Separate Storm Sewer System

Implement the Town's ordinance which prohibits illicit discharges, and includes enforcement procedures and actions where needed.

- Identify categories of non-stormwater discharges that are significant contributors of pollutants to the stormwater system (refer to list in Section 3.2).
- Identify measures to prohibit illicit discharges.

- Identify enforcement action for contributors of illicit discharges, including those caught dumping illegally. Enforcement action includes notification procedures, time constraints on violators to remediate problem, fines or other forms of retribution, and identification of appropriate authorities to carry out enforcement action.

Responsibility

Stormwater Management Officer & Municipal Board

- At least annually, review the ordinance and adjust as necessary to maintain compliance with NYS standards and requirements.
- At least annually review the enforcement action procedures and revise as needed.

3.4.5 Addressing Categories of Non-Stormwater Discharges

The items in the list in Section 3.2 are exempt from discharge prohibitions established by local law unless the NYSDEC or the municipality has determined them to be substantial contributors of pollutants. Such exempt discharges shall be made in accordance with an appropriate plan for reducing pollutants.

Responsibility

Stormwater Management Officer

- Annually update non-stormwater discharge list as necessary such that no exempt stormwater discharge is a substantial contribution of pollutants.

SECTION 4 - CONSTRUCTION SITE RUNOFF CONTROL

4.1 Description of Minimum Control Measure

The Construction Site Runoff minimum control measure consists of Best Management Practices (BMPs) that focus on the reduction of pollutants in any stormwater runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Reduction of stormwater discharges from construction activity disturbing less than one acre will be considered if it is part of a larger common plan of development or sale that would disturb one acre or more. The BMPs describe the legal authority mechanism that will be used to require erosion and sediment controls; enforcement procedures and actions to ensure compliance; requirements for construction site operators to implement appropriate erosion and sediment control BMPs; requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter and sanitary waste at the construction site; procedures for site plan review which incorporate the consideration of potential water quality impacts; procedures for receipt and consideration of information submitted by the public; and procedures for site inspection and enforcement of control measures.

The stormwater regulations for Construction Site Runoff Control apply to both privately-owned and managed projects, and MS4-owned and managed projects. Therefore, the BMPs described in this section have application to both types of projects.

4.2 General Permit Requirements

An MS4 must, at a minimum:

Develop, implement, and enforce a program to reduce pollutants in any stormwater runoff to the MS4 from construction activities that result in a land disturbance of greater than or equal to one acre. Control of stormwater discharges from construction activity disturbing less than one acre must be included in the program if:

- That construction activity is part of a larger common plan of development or sale that would disturb one acre or more or
- If controlling such activities in a particular watershed is required by the NYSDEC.

At a minimum, a program must provide equivalent protection to the NYS SPDES General Permit for Stormwater Discharges from Construction Activities and must include the development and implementation of:

- An ordinance or other regulatory mechanism to require erosion and sediment controls
- Requirements for construction site operators to implement erosion and sediment control management practices
- Sanctions to ensure compliance to the extent allowable by State or local law
- Requirements for construction site operators to control waste such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary waste at the construction site that may cause adverse impacts to water quality
- Procedures for site plan review that incorporate consideration of potential water quality impacts and review of individual preconstruction site plans to ensure consistency with local sediment and erosion control requirements
- Procedures for receipt and consideration of information submitted by the public
- Procedures for site inspections and enforcement of control measures including steps to identify priority sites for inspection and enforcement based on the nature of the construction activity, topography, and the characteristics of soils and receiving water

- Education and training measures for construction site operators about the requirement to develop and implement a Stormwater Pollution Prevention Plan (SWPPP) and any other requirements they must meet for construction sites within the MS4's jurisdiction

4.3 Methodology for Compliance with Permit Requirements

The New York State DEC provided a sample Local Law for Stormwater Management and Erosion and Sediment Control for adoption by each participating MS4. This ordinance authorizes the MS4 to enforce a program that reduces pollutant runoff from construction sites.

Each MS4 is responsible for reviewing SWPPPs, inspecting construction sites, and enforcing the permit requirement on developers that do not comply with the regulations.

The WNYSC will continue to provide training to developers, contractors, and design engineers in order to inform them of the regulations. Training was also provided by the WNYSC to participating MS4 personnel that will be responsible for inspecting the construction sites and enforcing the permit requirements. Each MS4 will be responsible for continuing the training of their staff.

4.4 Best Management Practices

4.4.1 Local Law for Stormwater Management and Erosion and Sediment Control

This ordinance establishes minimum stormwater management requirements and controls to protect the general health, safety, and welfare of the public.

This ordinance addresses issues relating to:
- Erosion and Sediment Control
- Stormwater Design Requirements
- Construction Requirements
- Fees for municipal services relating to SWPPP reviews, inspections, and maintenance.

Responsibility
Stormwater Management Officer & Municipal Board
- Revise fee schedule as needed.
- Adjust ordinance as necessary to maintain compliance with NYS standards and requirements.

4.4.2 Design Requirements

Practices related to review of project planning and design criteria must comply with local, state and/or federal construction stormwater regulations. Project planning and design requirements should be communicated to the design and construction communities.

Responsibility
Stormwater Management Officer & Municipal Board
- Annually review design and permitting guidelines and revise as necessary.

Additional Information / Resources in Appendix (on CD)
- General Permit for Construction Activity (GP-02-01).
- SWPPP and Stormwater Permit Process Flowchart.

- Notice of Intent for Stormwater Discharges Associated with Construction Activity, GP-02-01.
- Notice of Termination for Stormwater Discharges Associated with Construction Activity, GP-02-01.
- FAQs about Technical Requirements of the SPDES General Permit for Stormwater Discharges from Construction Activities.
- FAQs about Permit Requirements of the SPDES General Permit for Stormwater Discharges from Construction Activities.

4.4.3 Construction Plan Review

- Maintain a list of criteria to be utilized by the municipality to verify construction plan compliance with local, state, and/or federal construction stormwater regulations.
- Maintain a list of approved structural and non-structural BMPs that meet the requirements of the stormwater regulations. This list will identify if the BMP needs to be used in combination with other BMPs in order to completely satisfy the regulation's requirements.
- Maintain internal tracking and plan review procedures to cover the following issues:
  - o Conformance to local stormwater regulations.
  - o Appropriate use of temporary erosion controls.
  - o Inclusion of any required local, state, and/or federal stormwater
  - o permit documents.
- Maintain a checklist of items that must be verified by the reviewer for each construction plan review. This checklist will be available to developers, contractors, engineers, and architects to assist them in preparing satisfactory plans.
- Provide training for municipal engineers, building department staff, and other municipal representatives that will be completing the construction plan reviews within each municipality.
- Educate the local construction community (contractors, developers, engineers, architects) on the construction plans review process.
- Implement the construction plans review procedures for local construction sites.
- Notify the owners of construction plans when deficiencies are found in the plans during the review process.
- Maintain records of plans reviewed and approved for construction under this program.

<u>Responsibility</u>

Stormwater Management Officer

- Train additional municipal staff as necessary and update per customized local code. Any changes to construction plan review procedures must be communicated to municipal staff.
- Revise checklist as necessary.

<u>Additional Information / Resources in Appendix (on CD)</u>

- Checklist for Stormwater Management Plan Review
- Site Plan and Subdivision Review Checklist
- List of approved structural and non-structural BMPs

4.4.4 Construction Inspection Procedures and Certification Program

- Develop inspection procedures necessary to inspect local construction sites to ensure compliance with local construction stormwater regulations.
- Educate the local construction community on local stormwater regulations related to construction activities.
- Conduct inspections of local construction sites that discharge stormwater to the MS4 to determine compliance with local construction stormwater regulations.
- Continue utilizing the list of items to incorporate in the inspection of local construction sites based on the final local construction stormwater regulations and including the following categories:
  - Use of temporary erosion controls.
  - Control of construction related wastes.
  - Operational and general prohibitions.
  - Site closure and stabilization requirements.
  - On-site documentation and records.
  - Enforcement actions and on-site communication issues.
- Maintain internal procedures for tracking new and on-going construction activities.
- Train MS4 inspection personnel on local construction stormwater regulations and inspection procedures.
- Inspect qualifying construction sites using appropriate inspection procedures and forms to ensure compliance with local stormwater regulations.
- Issue enforcement actions to owners and operators of local construction sites that are not in compliance with local construction stormwater regulations.
- Maintain records of construction site inspections, enforcement actions, and corrective actions performed by local construction site owners and operators.

<u>Responsibility</u>
Stormwater Management Officer
- Inspect qualifying construction sites using appropriate inspection procedures and forms to ensure compliance with local stormwater regulations.
- Issue enforcement actions to owners and operators of local construction sites that are not in compliance with local construction stormwater regulations.

<u>Additional Information/Resources in Appendix (on CD)</u>
Construction Inspection Checklists for structural stormwater practices

4.4.5 Project Status Monitoring and Reporting

As part of the enforcement code in the stormwater ordinance, records must be maintained to determine construction sites that are either in compliance or not in compliance with state and/or federal construction stormwater permits.

Municipalities are also required to report the number of construction projects that are permitted under state and/or federal construction stormwater regulations.

Responsibility
Stormwater Management Officer

- Maintain compliance records for all construction sites requiring state and/or federal construction stormwater permits.
- Report on the number of construction projects permitted under state and/or federal construction stormwater regulations.

4.4.6 Public Review of Design Plans and Construction Projects

Provide notice to the public and an opportunity for them to review and comment on proposed design plans. Typically, this should correspond with the Planning Board or Town Board agendas for proposed projects.

Maintain procedures for the public to request information and relay concerns to the representative of the municipality.

- Maintain a form on the municipal website and at Town Hall to allow residents to comment on design plans.
- Maintain a form on the municipal website and at Town Hall that allows residents to relay concerns regarding a construction project.

Annually document the comments received from the public and any actions taken.

Responsibility
Stormwater Management Officer

4.4.7 Education and Training Measures for Construction Site Operators

Provide educational material and training opportunities to developers, contractors, engineers, and architects. The training will inform them of the local, state, and/or federal regulations regarding the construction and post-construction requirements within the stormwater regulations that will impact their developments.

Responsibility
WNYSC

SECTION 5 - POST-CONSTRUCTION STORMWATER MANAGEMENT

5.1 Description of Minimum Control Measure

The Post-Construction Stormwater Management minimum control measure consists of Best Management Practices (BMPs) that focus on the prevention or minimization of water quality impacts 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 stormwater runoff into the MS4. The BMPs describe structural and/or non-structural practices; the legal authority mechanism that will be used to address post-construction runoff from new development and redevelopment projects; and procedures to ensure long term operation and maintenance of BMPs.

5.2 General Permit Requirements

An MS4 must, at a minimum:

Develop and implement a program that includes a combination of structural and/or non-structural management practices appropriate for the community that will reduce the discharge of pollutants to the maximum extent practicable. The program must also develop and implement the following:

- Maintain an ordinance or other regulatory mechanism to address post-construction runoff from new development and re-development projects to the extent allowable under State or local law.
- Ensure adequate long-term operation and maintenance of management practices, including monitoring to determine whether the practices are reducing the discharge of pollutants to the maximum extent practicable.
- Develop, implement, and enforce a program to address stormwater runoff from new development and redevelopment projects that disturb greater than or equal to one acre. This includes projects of less than one acre that are part of a larger common plan of development or sale, or that have been designated by the NYSDEC to protect water quality, and to control water quantities that discharge into an MS4. The program must ensure that controls are in place that would protect water quality and reduce the discharge of pollutants to the maximum extent practicable. MS4s are encouraged to follow applicable guidance available from the NYSDEC or USEPA.
- Develop, implement, and provide adequate resources for a program to inspect development and re-development sites and to enforce and penalize violators.

5.3 Methodology for Compliance with Permit Requirements

The New York State DEC provided a sample ordinance that can be adopted by each participating MS4. This ordinance authorizes the MS4 to enforce a program that reduces pollutant runoff from newly developed and redeveloped sites. Each MS4 is responsible for inspecting the sites for proper operation and maintenance and enforcing the permit requirements for properties that are not in compliance. In this manner, the MS4 can ensure adequate long-term management practices for both public and private facilities.

5.4 Best Management Practices:

5.4.1 Local Law for Stormwater Management and Erosion and Sediment Control

This ordinance establishes minimum stormwater management requirements and controls to protect the general health, safety, and welfare of the public.

The stormwater ordinance addresses issues relating to:

- Erosion and Sediment Control.
- Stormwater Design Requirements.
- Construction Requirements.
- Fees for municipal services relating to SWPPP reviews, inspections, and maintenance.

Responsibility

Stormwater Management Officer & Municipal Board

- Revise the fee structure, enforcement, penalties and ordinance as needed.
- Adjust the stormwater ordinance as necessary to maintain compliance with NYS standards and requirements.

5.4.2 Inspection Program for Newly Developed and Redeveloped Sites

- Maintain an inspection program for newly developed and redeveloped sites for compliance with the post-construction regulations.
- Maintain a list of items to incorporate in the inspection of project sites based on the final post-construction runoff control regulations including consideration of the following:
  - Construction of controls according to approved development plans and specifications.
  - Adherence to any legal commitment to operate or maintain permanent stormwater quality structures.
  - Conformance to open space and landscaping requirements.
  - Conformance to local development standards.
- Maintain post-construction inspection forms and procedures.
- Maintain internal tracking procedures for tracking development projects that are under construction and/or have been completed.
- Train inspection personnel on local post-construction runoff regulations and final inspection procedures.
- Inspect qualifying project sites using adopted inspection forms and procedures to ensure conformance with local post-construction runoff regulations.
- Issue enforcement actions to owners or operators of local development projects that are not in compliance with local post-construction runoff regulations.
- Maintain records of development project site inspections, enforcement actions, and corrective actions performed by local development project owners.

Responsibility

Stormwater Management Officer

Additional Information/Resources in Appendix (on CD)

See Inspection forms and procedures under MCM 4.

5.4.3 Asset Management Program for Existing Storm Drainage Facilities

Consider the development and implementation of an asset management program for all public existing storm drainage systems. A program would include the following:

- Identify the location of each storm drainage facility including:
  - Open or closed.
  - Tributary drainage area.
  - Current Condition.
- Maintain a list of performance indicators that will enable a measurable evaluation of the system. Create thresholds for each indicator that if exceeded enables the inclusion of that system as a priority for maintenance, rehabilitation, or replacement.
- Continue using inspection forms and procedures for inspection of existing facilities.
- Maintain a weighting value for each performance indicator to allow a suitable comparison of the various storm facilities with the end result that each facility be given a numerical score and prioritized appropriately.
- Maintain a comprehensive list of approved maintenance, rehabilitation, and replacement practices.
- Use the prioritized list to determine approved projects for the next budget year.

This BMP can only be implemented if grant money or other funding becomes available to finance this initiative.

Responsibility

Stormwater Management Officer

- Identify the existing storm facilities.
- Develop the performance indicators, inspection forms, and procedures.
- Annually inspect a minimum of 20% of the storm facilities. Develop and maintain the prioritized list of necessary improvements.

SECTION 6 - POLLUTION PREVENTION / GOOD HOUSEKEEPING FOR MUNICIPAL OPERATIONS

6.1 Description of Minimum Control Measure

The Pollution Prevention / Good Housekeeping minimum control measure consists of Best Management Practices (BMPs) that focus on training and on the prevention or reduction of pollutant runoff from municipal operations. The BMPs describe the training program; specific municipal operations that are impacted by the proposed operation and maintenance programs (Standard Operating Procedures, or SOPs); maintenance activities, schedules, and long term inspection procedures for controls to reduce floatables and other pollutants; controls for reducing or eliminating the discharge of pollutants from streets, roads, highways, municipal parking lots, maintenance and storage yards, waste transfer stations, fleet or maintenance shops with outdoor storage areas, and salt/sand storage locations; and procedures for the proper disposal of waste removed from the MS4 and municipal operations, including dredge spoil, accumulated sediments, floatables and other debris.

6.2 General Permit Requirements

An MS4 must, at a minimum:

- Develop and implement an operation and maintenance program, as it pertains to their municipal operations, that is designed to reduce and prevent the discharge of pollutants to the maximum extent practicable from municipal activities within the regulated MS4 boundary, including but not limited to park and open space maintenance, fleet and building maintenance, new construction and land disturbances, stormwater system maintenance, roadway and right-of-way maintenance, marine operations, and hydrologic habitat modification. The operation and maintenance program must include a training component.

- Follow management practices identified in the *NYS Management Practices Catalogue for Nonpoint Source Pollution Prevention* (Catalogue) or other equivalent guidance materials. The Catalogue includes nine individual documents, and is available from the NYSDEC. Another NYSDEC publication, *Municipal Pollution Prevention and Good Housekeeping Program Assistance* (May, 2006) includes descriptions of many guidance documents available from the EPA, New York State, or other organizations.

6.3 Methodology for Compliance with Permit Requirements

The Western New York Stormwater Coalition (WNYSC) has developed a guidance document, *Pollution Prevention/Good Housekeeping for Municipal Operations: A Guidance Document of Best Management Practices and Inspection Checklists,* for use by each participating MS4. This document, included in the Appendix, illustrates the BMPs to reduce and prevent discharge of pollutants to the maximum extent practicable from municipal activities. Also, the WNYSC will provide training to the municipal personnel of participating MS4s. These personnel will be responsible for implementing the BMPs into their everyday activities.

The scope of permit requirements is limited to the regulated MS4 area. According to the *Designation Criteria for Identifying Regulated Municipal Separate Storm Sewer Systems (MS4s)*, (NYSDEC, January 2003), only the area of the municipality that is in the regulated MS4 area is covered under Phase II requirements. For the Town of Evans, the regulated MS4 area extends inland from the shore of Lake Erie, as shown on Figure 1. Little Sister Creek is the only 303d listed stream in the Town and the regulated MS4 area.

Town of Evans MS4 Area

Figure 1

Legend

Regulated MS4 Area

0 0.5 1 2 Miles

N

WENDEL DUCHSCHERER ARCHITECTS & ENGINEERS

WD Project # 258931
Map Created: July, 2007

*The information on this document is based on data gathered from the following data sources and should not be used for design or construction. -Data Sources: NYS Clearinghouse & NYS DEC

6.4 Best Management Practices

6.4.1 Municipal Training Program

Provide training to each member of the municipality whose work may potentially impact stormwater. For the Town of Evans this includes the Highway, Building and Grounds, Parks, and Water departments. Several members of the Town, trained through the WNYSC, will be responsible for training the remaining members of their municipality, as necessary.

Standard Operating Procedures

- Annually provide refresher training for employees.
- Provide training to new employees when hired.

Responsibility

Stormwater Management Officer

Refresher training, and training for new employees.

Documentation Form

The Municipal Training Program Documentation Form following this section is provided to record training of employees.

6.4.2 Landscaping and Lawn Care

Reduce the discharge of landscaping and lawn care waste from permittee owned facilities through better mowing and landscaping maintenance practices. Report annually on the activities conducted under this program.

Standard Operating Procedures

- Maintain an inventory of landscaping and lawn care areas that are owned by the permittee within the MS4 regulated area.
- Evaluate current landscaping and lawn care activities in order to identify opportunities to reduce the discharge of the following:
  - Fertilizers
  - Leaf litter and tree trimmings
  - Litter and floatable materials
  - Equipment fluids
- Ensure that proper litter collection is scheduled prior to any mowing activities.
- Train employees in the proper application of lawn care products.
- Use all herbicides, pesticides, and fertilizers in accordance with manufacturers' instructions for application rates and quantities.
- Purchase only enough lawn care products necessary for one year – store properly to avoid waste generation (spills, leaks).
- Use slow release or naturally derived (organic) fertilizers.
- Evaluate methods for containing and/or composting trimmings and grass clippings.
- Develop zero input/low input lawns that require minimal or no herbicide/pesticide application.
- Consider alternative landscape techniques (i.e. naturescaping – landscaping with native plants to reduce water, energy, and chemical usage; xeriscaping – landscaping with native and drought resistant plants to reduce irrigation needs).
- Plant trees away from sewer lines or other underground utilities.
- Use drip irrigation techniques for landscaping.

- Establish monitoring program to promptly identify problems with vegetation.
- Establish a maintenance program to accomplish the following:
  - Minimize/eliminate fertilizer application.
  - Leave grass clippings on lawn.
  - Water lawns no more than 1 inch per week.
  - Mow with sharpened blades set at or higher than 3 inches.
  - Water plants before 10 AM.
- Post signage that dissuades the public from leaving excrement from their pets on public property.
- Rinse grass from lawn care equipment on permeable (grassed) areas.

Responsibility

Parks Department Crew Chief

Annually review monitoring and maintenance program and revise as necessary.

Inspection Form

The Lawn Care Inspection Form following this section is provided to document lawn maintenance to prevent erosion and contamination of stormwater.

6.4.3 Vehicle/Equipment Maintenance

Maintain municipal owned vehicles according to manufacturer's specifications and identify and eliminate significant vehicle fluid leaks.

Standard Operating Procedures

- Conduct routine maintenance on all vehicles according to manufacturer's specifications.
  - During routine maintenance of permittee owned vehicles, inspect vehicles for the presence of fluid leaks.
  - Schedule repairs for vehicles determined to have significant fluid leaks.
  - Maintain vehicle maintenance records and document fluid leak repair activities.
- Conduct maintenance indoors whenever possible.
- For maintenance performed outside, guard against spillage of materials that could discharge to storm receivers.
- If possible, seal floor drains that discharge directly to the environment. If not possible, obtain wastewater discharge permits from regulatory agency.
- Initiate single purpose use of vehicle bays – dedicate one (or more) bays that have no (or sealed) floor drains for repairs/maintenance.
- Clean up spilled materials immediately, using “dry” methods.
- Install pretreatment systems (oil/water separators) where necessary in sewer lines to capture contaminants (oil, grit), and maintain as needed.
- Never leave vehicles unattended while refueling.
- Identify appropriate recycling/disposal options for wastes.
- Use non-hazardous cleaners. Use non-chlorinated solvents instead of chlorinated solvents.
- Use steam cleaning / pressure washing instead of solvents for parts cleaning.
- Store batteries in leak proof, compatible (i.e. non-reactive) containers.

Responsibility

Superintendent of Highways, Parks Department Crew Chief, Water Department Crew Chief

- Maintain an inventory of municipal owned vehicles.
- Require municipal vehicle operators to conduct daily inspections of vehicles to check for fluid leaks.
- Review vehicle inspection and maintenance records to evaluate conformance to vehicle manufacturer service specifications and local stormwater program requirements.

Inspection Form

The Vehicle/Equipment Maintenance and Inspection Form following this section is provided to document inspections for and repair of fluid leaks, and manufacturer's specified routine maintenance.

6.4.4 Vehicle/Equipment Washing

Wash municipal owned vehicles and equipment to prevent discharge of pollutants to the municipal storm sewer system or local water bodies.

Standard Operating Procedures

- Maintain an inventory of permittee owned vehicles and equipment.
- Inspect floor drain systems regularly – use only those that discharge to a sanitary sewer or those that are permitted by the regulatory agency. Identify the need for cleaning of catch basins, oil/water separators.
- Initiate single purpose use of vehicle bays - dedicate only one bay for washing (with floor drain system).
- Perform cleaning with pressurized cold water, without the use of soaps, if wastewater will flow to a storm sewer system.
- Use minimal amounts of biodegradable soap only if wastewaters will discharge to a sanitary sewer system.
- Rinse with hoses that are equipped with automatic shutoff devices and spray nozzles.
- Steam clean (without soap) where wastes can be captured for proper disposal (i.e. oil/water separator).
- Map storm drain locations accurately to avoid illegal discharges.

Responsibility

Superintendent of Highways, Parks Department Crew Chief, Water Department Crew Chief

6.4.5 Building Maintenance

Conduct building maintenance activities such that they do not impact the stormwater systems and local water bodies.

Standard Operating Procedures

- Maintain a list of the maintenance activities required inside and outside of each municipal building, and identify which activities have an impact on stormwater.
- Implement mitigation measures for each activity that impacts stormwater.

Responsibility
Building and Grounds Superintendent
Annually review the mitigation measures for each activity and revise as necessary.

6.4.6 Hazardous and Waste Materials Management

Prevent the discharge of hazardous and waste materials from impacting municipal stormwater systems and local waterbodies.

- Hazardous wastes include:
  - Lube oils
  - Coatings and their components (paints, thinners, etc.)
  - Anti freeze
  - Cleaning agents
  - Fuels (gas, diesel, kerosene)

Standard Operating Procedures

- Maintain an inventory of existing hazardous and waste materials and their storage locations.
- Plan for proper storage of hazardous and waste materials that are not currently stored properly.
- Implement plan for proper storage of all hazardous and waste materials.
- Repair or replace any leaking/defective containers, and replace labels as necessary.
- Maintain caps and/or covers on containers.
- Maintain aisle space for inspection of products/wastes.
- Ensure that all materials are stored in closed, labeled containers – if stored outside, drums should be placed on pallets, away from storm receivers – inside storage areas should be located away from floor drains.
- Eliminate floor drain systems that discharge to storm drains, if possible.
- Use a pretreatment system to remove contaminants prior to discharge.
- Reduce stock of materials “on hand” – use “first in/first out” management technique.
- Use the least toxic material (i.e. non hazardous) to perform the work.
- Install/use secondary containment devices where appropriate.
- Eliminate wastes by reincorporating coating/solvent mixtures into the original coating material for reuse.
- Recycle materials if possible, or ensure proper disposal of wastes.
- Annually inspect material storage areas (inside and outside).
- Annually inspect cleaning of oil/water separators by qualified contractor.
- Annually inspect stormwater discharge locations (for contaminants, soil staining, plugged discharge lines).

Responsibility
Superintendent of Highways, Parks Department Crew Chief

Inspection Form
The Hazardous Materials Management Form following this section is provided to document inspections for hazardous and waste materials storage.

6.4.7 Operational By Products/Wastes

Prevent the potential for leaching of toxic and biological contaminants from dump areas from reaching the municipal stormwater system or local waterbodies.

Standard Operating Procedures

- Post “no dumping” signs where needed.
- Illuminate area if possible.
- Prevent access – erect barriers where needed.
- Identify the by-products/wastes that should be recycled (i.e. paper, cardboard) or can be legally disposed of on municipal lands (i.e. deer carcasses) by referencing NYSDEC regulations (6NYCRR PART 360).
- Store mulch and leaves on high ground to mitigate contact with stormwater.
- Clean up and dispose of “illegally dumped” materials, trash/debris in accordance with environmental regulations.
- Cut and remove vegetation from dump areas.
- Regularly schedule inspections for areas of maintenance concerns.
- Coordinate with police for unscheduled patrolling of dump areas.

Responsibility
Superintendent of Highways

6.4.8 Roadway and Bridge Maintenance

Assess roadway and bridge maintenance activities and modify procedures to reduce stormwater quality impacts.

Standard Operating Procedures

- Pave in dry weather only.
- Stage road operations and maintenance activity (patching, potholes) to reduce spillage. Cover catch basins and manholes during this activity.
- Clean up fluid leaks or spills from paving equipment/materials immediately.
- Restrict the use of herbicides/pesticide application to roadside vegetation.
- Use porous asphalt for shoulder work.
- Sweep and vacuum paved roads and shoulders as necessary to remove debris and particulate matter.
- Maintain roadside vegetation; select vegetation with a high tolerance to road salt.
- Identify “alternative” maintenance practices that would reduce the discharge of road-materials during construction or maintenance activities (e.g. repairing leaking/defective containers or equipment on paving equipment).
- Revise roadway maintenance specifications according to identified alternative practices.
- Maintain records of road maintenance activities and the use of alternative maintenance practices.
- Incorporate preventive maintenance in planning for regular operations & maintenance activities.
- Control particulate wastes from bridge sandblasting operations.
- Clean out bridge scuppers and catch basins regularly.
- Direct water from bridge scuppers to vegetated areas.
- Mechanically remove (i.e. sweep) debris from bridge deck and structure prior to washing
- Install catch basins in place of bridge scuppers.

- Use tarps, booms, and vacuums during painting or blasting activities to control/capture particulate matter.

Responsibility
Superintendent of Highways
- Inspect roads and bridges for implementation of applicable BMPs.
- Evaluate roadway maintenance program annually and revise roadway maintenance specifications according to identified alternative practices.

Inspection Form
The Roadway Maintenance and Inspection Form following this section is provided to document paving and other operations.

6.4.9 Road Salt Storage and Application

Provide proper storage and application of road salt to reduce the impact of salt on plants, aquatic life, and the local waterbodies.

Standard Operating Procedures
- Train operators on environmental hazards of over-salting roads.
- Identify areas particularly susceptible to contamination in the MS4 area.
- Use covered facility for salt storage (prevents lumping and run-off loss), sized properly for seasonal needs.
- Store salt on highest ground elevation to mitigate contact with stormwater.
- Calibrate salt spreaders as necessary.
- Consider alternative deicing materials (i.e. calcium chloride, magnesium chloride).
- If possible, use a wetting agent with salt to minimize “bouncing” during application.
- Unload salt deliveries directly into storage facility, or if not possible, move inside immediately.
- Inspect salt storage shed for leaks, other problems. Repair as needed.
- Inspect salt piles for proper coverage, and/or tarps for leaks or tears. Replace tarps as needed.
- Inspect salt application equipment.
- Inspect salt regularly for lumping or water contamination.
- Inspect surface areas for evidence of runoff – salt stains on ground near and around the salt shelter, loading area, or downslope.
- Inspect for excessive amounts of salt on roads.
- Inspect equipment to verify proper operation. Service trucks and calibrate spreaders regularly to ensure accurate, efficient distribution of salt.

Responsibility
Superintendent of Highways

Inspection Form
The Road Salt Storage and Application Inspection Form following this section is provided to document inspections for roads and salt storage areas, and calibration of salt spreaders.

6.4.10 Catch Basin and Storm Drain System Cleaning

Reduce sediment and floatable material discharges by routinely cleaning municipal catch basins and stormwater inlet structures.

Standard Operating Procedures

- Identify areas where catch basins, surface inlets, and/or storm sewer manholes should be periodically cleaned to reduce discharge of floatable materials, sediment, and other materials.
- Prioritize storm drain systems and catch basins (e.g. catch basins on steep grades may need more frequent cleaning).
- Develop a schedule for inspection and cleaning of inlet structures, catch basins, and manholes.
- Inspect catch basins, (below grade) storm sewer systems, and open ditches for need of maintenance or cleaning.
  - Clean catch basins when depth of deposits is > 1/3 to bottom of pipe.
  - Storm event inspection – identify pollution problems (i.e. sediments).
  - Post storm event inspection – identify problems (i.e. blockage).
- Evaluate the catch basin cleaning schedule on an annual basis.
  - Increase frequency of cleaning as necessary.
- Catch basins and floor drain systems inside of buildings should be either:
  - Sealed to prevent discharge
  - Permitted by NYSDEC
  - Discharged to sanitary sewers
- Repair/replace storm drain receiver and catch basin receiver grates as necessary.
- Maintain slope of drainage ditches.
- Maintain vegetation in drainage ditches by cutting (to capture sediment).
- Remove obstacles/ debris from drainage ditches.
- After excavation /ditch scraping, reseed ditch.

Responsibility
Superintendent of Highways

Inspection Form
The Storm Drain System Inspection Form following this section is provided to document maintenance operations including inspections and cleaning of catch basins and ditches.

6.4.11 New Construction and Land Disturbance

Comply with the Town's construction and post-construction minimum control measures.

Standard Operating Procedures

- Provide education material and training opportunities to the municipal work crews to inform them of the local, state, and/or federal regulations that will impact their projects.
- Plan the construction and/or land clearing activities so that soil is not exposed for long periods of time.
  - Minimize compaction of soils.
  - Minimize impervious cover.
  - Maximize opportunities for infiltration.
- Install sediment control devices before disturbing soil.
- Limit grading to small areas.
- Stabilize site to protect against sediment runoff.
- Protect against sediment flowing into storm drains.
- Maintain native vegetation (especially near waterways).

- Install sediment barriers on slopes or divert stormwater.
- Inspect erosion and sediment controls (ES&C) devices.
- Inspect ES&C devices during storm or snow melt events.

Responsibility
Superintendent of Highways

Inspection Form
The Land Disturbance Inspection Form following this section is provided to document inspections of erosion and sediment control devices.

6.4.12 Hydrologic Habitat Modification

Develop requirements for the municipal work crews to abide by during hydrologic habitat modification such as stream and ditch cleaning, and wetland disturbance. Provide training to the local municipal work crews regarding the requirements associated with any habitat modification.

Standard Operating Procedures
- Identify any potential habitat modification to the NYSDEC and USACOE through their Joint Application for Permit Program.
- Comply with all requirements of the NYSDEC and USACOE permits for work within freshwater wetlands and streams.
- Comply with the construction and post-construction requirements within the stormwater regulations.

Responsibility
Superintendent of Highways
Provide the NYSDEC and USACOE with the required information in the Joint Application for Permit to obtain their approval prior to proceeding.
WNYSC
Annually provide additional training as necessary to the municipal work crews.

6.4.13 *Street Cleaning and Maintenance*

Develop requirements for the sweeping of streets and roadways in order to reduce the amount of sediment and associated pollutants discharged to the MS4 from roadways.

Standard Operating Procedures
- Identify the type of roadways that should be swept to remove sediment and other pollutants.
- Curbed roads should be swept to remove debris that could otherwise migrate to catch basins.
- Roads treated with salt/ sand/ stone mixture during the winter should be swept in the spring to remove sediment.
- Schedule and implement street sweeping of identified roadways.
- Perform operations such as paving in dry weather only.
- Maintain records of streets that have been cleaned.
- Adjust sweeping schedules according to program needs.
- Prior to road reconstruction, consider/evaluate the use of “shouldered roads” instead of “curbed roads”.
- Maintain roadside vegetation; select plants/trees that can withstand the action of road salt. Direct runoff to these areas.

Responsibility
Superintendent of Highways

Inspection Form
The Roadway Maintenance and Inspection Form following this section is provided to document roadway sweeping/cleaning operations.

6.4.14 *Marina Operations*

Provide for proper operation and maintenance of marinas in order to mitigate the contamination of the stormwater system and local waterbodies.
Standard Operating Procedures

- Minimize the impact of the following items:
  - Liquids associated with boat maintenance products (oils, fuels, antifreeze, wood preservatives, etc.) and particulate matter (i.e. boat bottom paint from hull sanding)
  - Boat sewage
  - Sedimentation from barren soils.
- Implement the following:
  - Construct and maintain pump out stations (for sanitary wastes).
  - Stabilize shoreline.
  - Designate locations for boat maintenance away from the water.
  - Minimize impervious areas – install vegetated buffer strips (i.e. grass, shrubs).
  - Provide spill clean up kits at fueling stations, replace as needed.
  - Provide covered trash receptacles.
  - Educate (posters, signage) boaters and other marina users of potential problems.
  - Identify areas of runoff that lack vegetation.
  - Regularly check fueling areas, maintenance areas for spills, other potential sources of pollution.
  - Regularly check (and empty as necessary) sewage pump out stations, trash cans.

Responsibility
Parks Department Crew Chief

6.4.15 Pest Control

Reduce the discharge of pesticides from permittee owned facilities as they may harm aquatic life and may contaminate local water bodies and sediment.

Standard Operating Procedures

- Identify pests within municipality. Determine if levels are acceptable or if action needs to be taken to control them.
  - Assess each location for opportunities to implement alternative practices and to retrofit structures in order for non-pesticide methods of maintenance to become effective.
  - Develop a prioritized list of areas where retrofits and alternative pest control practices would reduce overall pesticide and herbicide application volumes.

- Maintain an inventory of areas designated for herbicide and pesticide application including the following:
  - Area of application
  - Type of pesticide or herbicide applied
  - Purpose of application
  - Pesticide and herbicide application schedule.
- Comply with local, state, and federal regulations associated with pesticide and herbicide application, e.g. licensing regulations.
- Purchase only enough pesticides necessary for one year – store properly to avoid waste generation (spills, leaks, product deterioration).
- Minimize/eliminate pesticide application, use lowest toxicity pesticides.
- Track the volume and type of pesticide or herbicide applied at each location.
- Do not apply pesticides immediately prior to or during rain events.
- Ensure that employees are properly trained and certified in pesticide application techniques and safety.
- Develop zero input or low input lawns.
- Eliminate food, water, and shelter for pests
- Adopt integrated pest management (IPM) techniques.
- Adopt alternatives to pesticides options (use physical, mechanical, or biological controls).
- Inspect pest traps (bait boxes) regularly. Remove and properly dispose of dead pests.
- Block/eliminate access to buildings/structures for pests.
- Remove pests (insects).
- Follow NYSDEC regulations (6NYCRR Part 325).

Responsibility
Parks Department Crew Chief

Inspection Form
The Pest Control Materials Management Form following this section is provided to document the application of herbicides and pesticides to prevent the contamination of stormwater.

6.4.16 Septic System Management

Prevent improperly treated wastewaters from Town-owned septic systems from impacting municipal stormwater systems and local waterbodies.

Standard Operating Procedures
- Divert stormwater runoff (i.e. from roof drains) away from septic system.
- Divert groundwater (sump pump) discharges away from septic system.
- Locate swimming pools away from the septic system (at least 20’ from the septic tank, at least 35’ from the closest edge of the leach field or sand filter system)
- Prevent problems caused by vegetation - growth of woody plants on the System.
- Prevent hydraulic overloading - “Spread out” the use of devices which use large volumes of water across the entire day. Repair leaky fixtures.
- Minimize water usage by using flow restrictors on potable water distribution devices (i.e. shower heads, water faucets)
- Develop an inventory of existing municipal sewage treatment systems.
- Prevent heavy equipment from driving on top of the system components.

- Assess each septic system on an annual basis for the following conditions:
  - "back up" of wastewater in sewer lines
  - sewage odors
  - leach field/sand filter - wetness/ponding on surface
  - overflow of wastes from system components
  - heavy vegetation (woody plants) growth on system components
- Determine the interval for pumping out each municipal septic tank.

Responsibility
Superintendent of Highways, Parks Department Crew Chief, Water Department Crew Chief

Inspection Form
The Septic System Inspection Form following this section is provided to document inspection and maintenance of municipal septic systems.

6.4.17 *Alternative Discharge Options for Chlorinated Water*

Prevent the discharge of chlorinated water from impacting municipal stormwater systems and local waterbodies.

Standard Operating Procedures
- Train municipal staff on the process for dechlorinating pool water.
- Dechlorinate pool water before any discharge, whether over land or to the sanitary sewer, or allow the "disinfectant" to dissipate with sunlight, use, over-wintering, etc. prior to discharge.
- Check chlorine residuals in municipal pools prior to discharge if any chlorine might be present.
- Discharge pool water to the sanitary sewer rather than storm sewer if dechlorination is not verified.
- Obtain permission from the municipal POTW prior to discharging any chlorinated pool waters to a sanitary sewer system.
- Do not discharge chlorinated water into the sanitary sewer system during periods of high flow.
- Backwash water should be discharged to the sanitary sewer, if available – if not available, discharge water over vegetated areas, not to surface waters.
- Maintain proper levels of chlorine residuals in pools.

Responsibility
Parks Department Crew Chief

Town of Evans
Highway Department

Municipal Training Program Documentation Form

Purpose: To document employee training to prevent contamination of stormwater.

Date	Employee Name	Training

Town of Evans
Parks Department

Lawn Care Inspection Form

Purpose: To document early detection of turf problems, and re-vegetation to prevent erosion and contamination of stormwater.

Date	Location	Problem Detected/Work Performed

Town of Evans
Highway Department

Vehicle/Equipment Maintenance Inspection Form

Purpose: To document maintenance operations to prevent contamination of stormwater. Include inspections for fluid leaks, repair of fluid leaks, calibration of salt spreaders, and routine inspections per manufacturer's specifications.

Date	Equipment	Work Performed

Town of Evans
Highway Department

Hazardous Materials Management Form

Purpose: To document inspection and repair of inside and outside storage areas, above ground storage tanks and drums/other containers to prevent contamination of stormwater.

Date	Location	Inspection Results/Work Performed

Town of Evans
Highway Department

Roadway Maintenance Inspection Form

Purpose: To document paving and sweeping/cleaning operations to prevent contamination of stormwater.

Date	**Location (Streets, house nos.)**	**Work Performed**	**Quantities** - Length of road

Town of Evans
Highway Department

Road Salt Storage and Application Inspection Form

Purpose: To document inspection of roads, salt storage, and loading areas; and calibration of salt spreaders to prevent contamination of stormwater.

Date	Item Inspected	Inspection Results/Work Performed

Town of Evans
Highway Department

Storm Drain System Inspection Form

Purpose: To document catch basin and storm manhole inspection and cleaning, ditch inspection and cleaning/regrading/seeding, storm sewer cleaning and repair, sediment basin inspection and cleaning, and outfall inspection operations to prevent contamination of stormwater.

Date	Location (Streets, house nos.)	Work Performed	**Quantities** - Length of pipe or ditch; number of CBs; or weight or volume of material

Town of Evans
Highway Department

Land Disturbance Inspection Form

Purpose: To document inspection of erosion and sediment control devices to prevent contamination of stormwater.

Date	Item Inspected	Inspection Results

Town of Evans
Highway Department

Septic System Inspection Form

Purpose: To document maintenance operations to prevent contamination of stormwater. Include inspections of septic system and pumping out of septic tanks.

Date	Work Performed

Town of Evans
Highway Department

Pest Control Materials Management Form

Purpose: To document application of herbicides and pesticides to prevent the contamination of stormwater.

Date	Location	Material Applied	Purpose of Application	Next Scheduled Application

MEASURABLE GOALS SUMMARY

MCM 1: Public Education and Outreach on Stormwater Impacts

Best Management Practice	WNYSC / ECDEP	MS4
Stormwater Pollution Prevention Brochures	Brochures supplied to each municipality. Provide additional brochures to local MS4s upon request. Relevant brochures delivered to targeted businesses and general public. Household Guide supplied to all schools and public libraries. Provide additional brochures to businesses, schools, and the general public upon request.	Brochures on display and available to the public at Town Hall. Inventory existing stock of brochures and replenish as needed.
Public Education Posters	Posters developed by the WNY Stormwater Coalition are delivered to each MS4, all public libraries, and schools in Erie and Niagara Counties. New posters are delivered on an as needed basis. Make posters available on the web page with option to request full size from WNYSC.	Posters placed in conspicuous locations within each municipal building. Posters are checked for damage and outdated information Outdated or damaged posters are replaced with new posters as they become available from the WNYSC.
Webpage	Maintain the stormwater quality website on the internet for public access. Maintain link on individual MS4's website to WNYSC website. Update the webpage as necessary.	Maintain links from MS4 website to WNYSC website. Update and maintain the webpage as necessary.
K-12 Education Packages	Maintain a list of age appropriate subjects for inclusion in classroom educational material. Continue distributing classroom education material in accordance with identified schedule. Update education materials and maintain records of the material distributed to each local school.	None
Public Education Display for Community Events	Maintain the display developed by the WNYSC. Prepare a reservation system for requesting display. ECDEP to maintain reservation system. Record the number of times the display is distributed to the local municipalities.	Display to be used at two community events each year within the municipality.
Public Information Press Package	Maintain the Public Information Press Package. Document the distribution and content of each press package. Target at least three press releases per year to account for the WNYSC meetings (April & October) and public review of draft Annual Report. Distribute printed, video and audio public service announcements to local news agencies and the MS4s	Customize the Public Information Press Package sample press releases regarding the invitation for the public review of the draft Annual Report and the community cleanup events. Document the distribution and content of each press release. The total number of press releases per year will vary. Target at least two per year to account for public review of the draft Annual Report and community cleanup events.

MEASURABLE GOALS SUMMARY

MCM 2: Public Participation / Involvement

Best Management Practice	WNYSC / ECDEP	MS4
Identify Contact Person for Stormwater Program	None	Update the designated person as Stormwater Management Officer as necessary.
Public Participation in Western New York Stormwater Coalition (WNYSC) Meeting	As scheduled by the WNYSC (at least twice per year), notify residents of their invitation to participate in WNYSC planning meetings.	None
Public Meetings in Targeted Erie and Niagara County Watersheds to Foster Public Involvement	As scheduled by the WNYSC (at least twice per year), publish a notice in the local paper for each public meeting held by the WNYSC, notifying the public of their invitation to participate.	None
Incorporate Feedback Mechanism into Webpage	Maintain a form on the stormwater website that interested residents can download to document their input/comments on the municipality's stormwater management program. Provide a means that comments can be e-mailed directly to the municipal Stormwater Management Officer or the WNYSC. Document input/comments received, and actions taken.	Document input and comments received, and actions taken.
Public Review of Annual Report	None	Publish a notice that notifies residents of their opportunity to review the
Public Review of Stormwater Management Plan	None	Provide an opportunity for the public to comment on the effectiveness of the Stormwater Management Plan, and offer suggestions for
Community Cleanup Event	Publish a notice in the local paper and on the stormwater website that notifies residents of their opportunity to participate in the Erie and Niagara Counties' Household Hazardous Waste Collection events. Have information on local cleanup opportunities available at the office of the ECDEP or local Stormwater Management Officer, along Schedule at least one stream or roadway cleanup per year.	Publish a notice in the local paper and on the stormwater website that notifies residents of their opportunity to participate in the Erie and Niagara Counties' Household Hazardous Waste Collection events. Have information on local cleanup opportunities available at the office of the ECDEP or local Stormwater Management Officer, along with an Schedule at least one stream or roadway cleanup per year.
Identify key individuals and groups who are interested in/or affected by the permitting program	Outreach to Erie County EMC, Buffalo Niagara Riverkeepers, CCE, and ECWQC regarding the activities of the WNYSC and how the groups may assist with the Stormwater Management Program.	Outreach to MS4 CACs, possibly via their County-level EMC participation, regarding the activities of the WNYSC and how the groups may assist with their local MS4 Stormwater Management Program.
Identify types of input the MS4 would seek from the individuals or groups to support development and implementation of the program	Enlist support/participation of representatives from the Erie County EMC, Buffalo Niagara Riverkeepers, CCE, and ECWQC in WNYSC workgroup activities and implementation of the Stormwater Management Program.	Utilize support/participation of the municipal CACs in efforts related to implementation of their local Stormwater Management Program.

MEASURABLE GOALS SUMMARY

MCM 3: Illicit Discharge Detection and Elimination

Best Management Practice	WNYSC / ECDEP	MS4
Updating Outfall Mapping/Outfall Information Management	Utilize a paper or electronic form for updating information on an existing outfall, or adding new outfalls. Form must be approved by Regional Mapping Manager. Follow the protocol by which new outfall information from Update the outfall map as necessary with additional outfalls that have been added to the system.	Submit accrued outfall mapping update forms to ECDEP's Pollution Prevention Coordinator, Thomas Hersey at the annual deadline he establishes.
Outfall Surveillance	Maintain an inspection form to be used as part of the regular	Maintain a schedule for outfall inspections. At a minimum, all outfalls Submit accrued outfall mapping update forms for all outfalls that have been altered since mapping was established, to Thomas Hersey, the ECDEP's Pollution Prevention Coordinator at the annual deadline he
Pollutant Source Tracking Procedures	Maintain a sampling procedure to confirm presence of illicit discharges. Maintain a program to track down sources of pollution.	Customize the sampling procedure and program to track down sources of pollution to meet municipality's needs. Implement enforcement action per the stormwater management ordinance.
Ordinance or Local Law to Prohibit Illicit Discharges, Activities or Connections to Separate Storm Sewer System	None	Adjust stormwater ordinance as necessary to maintain compliance with NYS standards and requirements. Revise stormwater management ordinance enforcement action procedures as needed.
Addressing Categories of Non-Stormwater Discharges	None	Maintain list of non-stormwater discharges allowed to the MS4 Update non-stormwater discharge list as necessary such that no exempt stormwater discharge is a substantial contribution of pollutants.

MEASURABLE GOALS SUMMARY

MCM 4: Construction Site Runoff Control

Best Management Practice	WNYSC / ECDEP	MS4
Local Law for Stormwater Management and Erosion and Sediment Control	None	Revise fee schedule as needed Adjust stormwater ordinance as necessary to maintain compliance with NYS standards and requirements Provide notification to the local construction community on updates of the stormwater management ordinance.
Design Requirements	None	Revise design and permitting guidelines as necessary.
Construction Plan Review	None	Train additional municipal staff as necessary and update per customized local code. Any changes to construction plan review procedures must be communicated to municipal staff. Revise the construction plan review checklist as necessary.
Construction Inspection Procedures and Certification Program	None	Inspect qualifying construction sites using appropriate inspection procedures and forms to ensure compliance with local stormwater regulations. Issue enforcement actions to owners and operators of local construction sites that are not in compliance with local construction stormwater regulations.
Project Status Monitoring and Reporting	None	Maintain compliance records for all construction sites requiring state and/or federal construction stormwater permits. Report on the number of construction projects permitted under state and/or federal construction stormwater regulations.
Public Review of Design Plans and Construction Projects	None	Provide notice to the public for them to review and comment on proposed design plans. Typically, this should correspond with the Planning Board or Town Board agendas for proposed projects. Provide a form on the municipal website and at Town Hall to allow residents to comment on design plans. Provide a form on the municipal website and at Town Hall that allows residents to relay concerns regarding a construction project.
Education and Training Measures for Construction Site Operators	Provide training sessions as necessary regarding the construction and post-construction requirements within the stormwater regulations.	None

MEASURABLE GOALS SUMMARY

MCM 5: Post-Construction Stormwater Management

Local Law for Stormwater Management and Erosion and Sediment Control	None	Revise the fee structure, enforcement, penalties and ordinance as needed. Provide notification to the local construction community on updates to the stormwater management ordinance. Adjust the stormwater ordinance as necessary to maintain compliance with NYS standards and requirements
Inspection Program for Newly Developed and Redeveloped Sites	None	Develop a list of projects that qualify for inspection under local post-construction runoff regulations. Inspect qualifying development project sites using adopted inspection forms and procedures to ensure conformance with local post-construction runoff regulations. Issue enforcement actions to owners or operators of local development projects that are not in compliance with local post-construction runoff
Asset Management Program for Existing Storm Drainage Facilities	None	Maintain a list of the existing storm facilities. Maintain performance indicators, inspection forms, and procedures. Inspect a minimum of 20% of the storm facilities per year. Develop and

MEASURABLE GOALS SUMMARY

MCM 6: Pollution Prevention / Good Housekeeping for Municipal Operations

Best Management Practice	WNYSC / ECDEP	MS4
Municipal Training Program	None	Provide refresher training and training for new employees.
Landscaping and Lawn Care	None	Maintain an inventory of all permittee owned landscaping and lawn care areas. Establish a monitoring program to promptly identify problems with vegetation. Establish a maintenance program. Review monitoring and maintenance program and revise as necessary. Maintain signage or ordinance that dissuades the public from leaving excrement from their pets on public property.
Vehicle/Equipment Maintenance	None	Maintain an inventory of municipal owned vehicles. Conduct routine inspection on all municipal vehicles according to manufacturers' specifications, also inspecting vehicle for the presence of fluid leaks. Schedule repairs for vehicles determined to have fluid leaks. Require municipal vehicle operators to conduct daily inspections of vehicles to check for fluid leaks. Review vehicle inspection and maintenance records to evaluate conformance to vehicle manufacturer service specifications and local stormwater program requirements.
Vehicle/Equipment Washing	None	Maintain an inventory of permittee owned vehicles and equipment. Maintain an accurate map of storm drain locations to avoid illegal discharges. Inspect floor drain systems regularly – use only those that discharge to a sanitary sewer or that are permitted by the regulatory agency. Identify the need for cleaning of catch basins, oil/water separators. Perform steam cleaning or pressure washing where wastes can be captured for proper disposal.
Building Maintenance	None	Implement mitigation measures for maintenance activities that impact stormwater. Review the maintenance activity list and update as necessary. Annually review the mitigation measures for each activity and revise as necessary.
Hazardous and Waste Materials Management	None	Maintain an inventory of existing hazardous and waste materials and their storage locations. Implement plan for proper storage of all hazardous and waste materials. Verify that floor drains have been sealed (or redirected to sanitary sewer). Inspect material storage areas (inside and outside). Inspect cleaning of oil/water separators by qualified contractor. Inspect stormwater discharge locations (for contaminants, soil staining, plugged discharge lines). Repair or replace any leaking/defective containers, and replace labels as necessary. Maintain caps and/or covers on containers. Maintain aisle space for inspection of products/wastes.

MEASURABLE GOALS SUMMARY

MCM 6: Pollution Prevention / Good Housekeeping for Municipal Operations (continued)

Best Management Practice	WNYSC / ECDEP	MS4
Operational By Products/Wastes	None	Clean up and dispose of "illegally dumped" materials, trash/debris in accordance with environmental regulations. Cut and remove vegetation from dump areas. Regularly schedule inspections for areas of maintenance concerns Coordinate with police for unscheduled patrolling of dump areas.
Roadway and Bridge Maintenance	None	Inspect roads and bridges for implementation of applicable BMPs Implement practices that would reduce the discharge of road-materials during construction or maintenance activities. Evaluate roadway maintenance program and revise roadway maintenance specifications according to identified alternative practices.
Road Salt Storage and Application	None	Educate and train operators on hazards of over-salting to roads and environment Inspect salt storage shed for leaks, other problems. Repair as needed. Inspect salt piles for proper coverage, tarps for leaks or tears. Replace tarps as needed. Inspect salt application equipment. Inspect salt regularly for lumping or water contamination. Inspect surface areas for evidence of runoff – salt stains on ground near and around the salt shelter, loading area, or downslope. Inspect for excessive amounts of salt on roads. Inspect equipment to verify proper operation. Service trucks and calibrate spreaders regularly to ensure accurate, efficient distribution of salt.
Catch Basin and Storm Drain System Cleaning	None	Periodically clean catch basins, surface inlets, and/or storm sewer manholes to reduce discharge of floatable materials, sediment, and other materials according to the developed schedule. Evaluate the catch basin cleaning program to identify improvements and/or modifications.
New Construction and Land Disturbance	Provide education material and training opportunities to the municipal work crews as necessary. Provide a training session to municipal staff regarding the construction and post-construction requirements within the stormwater regulations, as necessary	Incorporate BMPs into the work activities of the work crews during land disturbance activities. Monitor work activities to verify compliance with land disturbance requirements.

MEASURABLE GOALS SUMMARY

MCM 6: Pollution Prevention / Good Housekeeping for Municipal Operations (continued)

Best Management Practice	WNYSC / ECDEP	MS4
Hydrologic Habitat Modification	Provide training as necessary to municipal staff regarding the requirements associated with hydrologic habitat modification, construction, and post-construction requirements within the stormwater regulations.	Provide the NYSDEC and USACOE with the required information in the Joint Application for Permit to obtain their approval prior to proceeding. Comply with all requirements of the NYSDEC and USACOE permits.
Street Cleaning and Maintenance	None	Adjust road sweeping schedules according to program needs.
Marina Operations	None	Provide capital improvements as necessary to implement the BMPs selected as most practical to implement. Provide operation and maintenance for each selected BMP
Pest Control	None	Comply with local, state, and federal regulations associated with pesticide and herbicide application. Implement alternative practices and retrofit structures in order to reduce overall pesticide and herbicide application volumes. Inspect pest traps (bait boxes) regularly. Remove and properly dispose of dead pests. Block/eliminate access to buildings/structures for pests. Remove pests (insects).
Septic System Management	None	Maintain an inventory of existing municipal sewage treatment systems. Inspect each septic system as scheduled. Determine the interval for pumping out each municipal septic tank
Alternative Discharge Options for Chlorinated Water	None	Train municipal staff on the process for dechlorinating pool water. Check chlorine residuals in municipal pools prior to discharge. Do not discharge chlorinated water into the sanitary sewer system during periods of high flow. Maintain proper levels of chlorine residuals in pools. Allow disinfectant to dissipate prior to discharge of pool waters. Obtain permission from the municipal POTW prior to discharging any chlorinated pool waters to a sanitary sewer system