

Tioga County MS4 Storm Sewers

477 Route 96, Owego, NY 13827

Stormwater Management Program Plan

For compliance with NYS GP 0-25-001

Minimum Control Measure 1: Public Education and Outreach on Stormwater Impacts

Description of Minimum Control Measure

The Public Education and Outreach MCM consists of Best Management Practices (BMP) that focus on the development of educational materials, demonstration activities and training sessions designed to inform the public about the impacts that stormwater discharges have on local water bodies. The Public Education and Outreach program and BMPs, in combination, are expected to reach all of the constituents within the municipal separate storm sewer system (MS4) permitted boundary.

General Permit Requirements

At a minimum, *all* covered entities must identify point of contacts (POC), waterbodies of concern, geographic areas of concern, and target audiences.

Pollutants of Concern: Stormwater runoff from impervious and developed surfaces carries large amounts of various pollutants to the surface waters of the United States. Among these pollutants are nutrients, silt and sediment, pathogens, oil/grease, metals, and debris/litter. Phosphorus, nitrogen, and pathogens are of particularly high concern to the water bodies in the Binghamton Urbanized Area.

Nutrients: Phosphorus and Nitrogen

Phosphorus is the primary nutrient of concern locally. High phosphorus levels lead to excess weed and algae growth in lakes and streams. This growth clogs waterways and blocks sunlight. When algae die, they sink to the bottom and decompose in a process that removes oxygen from the water. Most fish and other aquatic life are unable to survive in water containing low dissolved oxygen levels. Sources of nutrients include fertilizer, human and animal waste, and detergents. Leaves, grass clippings, and other plant materials that fall or are deposited on urban land also carry nutrients that are released during decomposition. Within six (6) months of the EDC, the MS4 Operator must make available information on how the impairment is being addressed by implementation of the MS4 Operator's local law or legal mechanism with content equivalent to the model local law (Part IV.E.1 and Part IV.E.2.). MS4 Operators must document the completion of this requirement in the SWMP Plan.

Silt and sediment

Silt and sediment are a result of soil erosion from construction sites, lawns, agriculture, and landscaping activities. Heavy deposits of silt in sensitive areas such as wetlands and streams can damage aquatic habitat and cause turbidity. Sediment also can carry toxic chemicals that deplete oxygen in water bodies, and can clog water infrastructure.

Pathogens (bacteria, viruses)

Bacteria, viruses and other microorganisms include infectious agents and disease producing organisms normally associated with human and animal (both pet and wildlife) wastes, leakage from sewers and seepage from septic tanks. These organisms can cause disease in humans and animals when present in drinking water and water bodies. Because pathogens can harm aquatic and human health, their presence can render lakes and streams unsafe for drinking, swimming, fishing, and other forms of water recreation. Biological contaminants originate from organic matter, animal waste and litter. They may enter the stormwater drainage system through illicit discharges and cross-connections or sanitary and combined sewer overflows.

Metals (e.g. arsenic, lead, mercury, copper, cadmium, zinc)

Metals in water can be toxic to aquatic life, humans and animals. Metals generally originate from vehicle exhaust, weathered paint, metal plating, tires, discarded auto parts, and motor oil. Heavy metals bioaccumulate, meaning that they become more concentrated and toxic the higher in the food chain they progress.

Thermal stress (sunlight)

Direct exposure of urban streams to sunlight (such as in areas where shade is lacking) may elevate stream temperatures. These temperatures can exceed fish tolerance limits, reducing survival and lowering resistance to disease. Thermal energy also originates from street, parking lot and roof surfaces that have been heated by sunlight. This energy is conveyed through the drainage system to streams by surface flow during storm events, resulting in similar stress to aquatic life.

Floatable/litter

Floating trash in water may be contaminated with toxic chemicals and bacteria and can cause death to aquatic animals and birds. Aesthetics are also negatively impacted. Floatables are the result of overproducing single use items and an increase in packaging as well as winds and careless handling of materials.

Oxygen demanding organics

Natural or synthetic organic materials (including human and animal waste, decaying plants and animals, discarded litter, and food waste) can enter surface waters either dissolved or suspended in stormwater runoff. Natural decomposition of the material can deplete dissolved oxygen supplies in the waters. When dissolved oxygen is reduced below a critical threshold level, fish and other aquatic organisms can perish.

Chlorides

Large quantities of deicing or anti-skid compounds are applied by municipalities and transportation departments during the winter months; commonly these substances consist of chloride salts (although sand may also be used). These chemicals are washed into storm drains and streams during snowmelt; they are toxic in large quantities and can contaminate drinking water.

Other toxic substances

Toxic substances may enter surface waters either dissolved in runoff or attached to sediment or organic materials. The principal concerns in surface water are their entry into the food chain, toxic effect on fish, wildlife and microorganisms, habitat degradation, and potential degradation of public water supplies. Oil and grease in storm drains can be toxic even in small amounts; they can generally be traced to automotive leaks and spills or improper disposal of used oil and automotive products into storm drains. Residential sources of toxic substances include vehicle fluids (oil, gasoline and antifreeze), paint, pesticides, solvents, batteries, hazardous wastes, street litter, soap from car washing, and swimming pool discharges. Activities of commercial businesses may generate soap from equipment washing, waste process water and hazardous liquids that are either directly discharged to the storm sewer system or enter via surface runoff. Toxic substances can also originate from construction sites and may include wash water from concrete mixers, used oil and solvents, and vehicle fuels and pesticides.

Methodology for Compliance with Permit Requirements

Accomplishments from previous permits:

- The Broome-Tioga Stormwater Coalition Public Education and Participation Committee has developed and implemented a public outreach campaign including creating a new education

logo, television advertisements (played the first time during Super Bowl XLVIII), and a dedicated website with the new logo/campaign design – www.waterfromrain.org.

- New printed material using the new educational design/theme has also been created and distributed at various community events.
- BTSC members have demonstrated the Enviroscape stormwater demonstration model at 3 annual events each year.
- Tioga County developed, hosted and conducted land-use training on the Local Benefits of Stormwater to local officials such as governing board members, planning or zoning board members and code enforcement officers.
- Tioga County and Town of Owego produced a Rural Living Brochure with a stormwater emphasis, especially what to be aware of when living by streams.
- The Broome-Tioga Stormwater Coalition purchased 10,000 permanent drain markers for its 15 municipality members. Tioga County installed them on 35 storm drains, and Town of Owego installed them on 800 storm drains.

Goals

- Tioga County will demonstrate the Enviroscape Stormwater Model to 2 classrooms, plus 2 community events within the MS4 each year.
- Tioga County will develop and schedule a series of television and radio PSA's targeted to homeowners on ways to reduce pollution to the stormwater system by season.
- Existing Tioga County and Town of Owego stormwater web pages shall be linked to the Broome-Tioga Stormwater Coalition website and waterfromrain website.
- Stormwater principles will be integrated into all land use training for local municipal officials to the maximum extent practicable.

Minimum Required Reporting

At a minimum, the covered entity shall report on items below:

- list education / outreach *activities* performed and provide any results (number of people attended, amount of materials distributed, etc.);
- report on effectiveness of program, *BMP* and *measurable goal* assessment; and
- maintain records of all training activities

Tioga County MS4 Storm Sewers is covered for Municipal Separate Storm Sewer discharges under the NY State SPDES permit program. MS4s are regulated by GP-0-25-001 and are required to prepare a stormwater management plan and program to meet the requirements and benchmarks of this permit.

Description of local laws

The Tioga MS4 Storm Sewers has the following local laws in effect related to Stormwater Discharges:

- Local Law 5 of 2007 (Town of Owego)
- Intermunicipal Agreement (3/2006, Town of Owego)

Personnel

The Stormwater Program Coordinator is:

Name	Gary Hammond, P.E.
Title	Public Works Commissioner
Contact information	607-687-0302

Duties and responsibilities to implement components of the stormwater program are not limited to the Stormwater Program Officer, they require the contribution and expertise of many municipal staff across departments.

Department	Title	Contact Information	Role in Stormwater Program
Public Works	Deputy Commissioner	607-687-0302	Assistant Coordinator

Additionally, communication and coordination will take place both in person and via email.

Additional organizations that assist with implementing the Stormwater Program include the Broome-Tioga Stormwater Coalition (The Coalition) which exists through the enactment of a Memorandum of Agreement (MOU) between 15 MS4s in the Binghamton Urbanized Area as listed above. The Coalition manages MCM 1 Education and outreach activities for coalition members, assists with MCM 2, and maintains the GIS inventory of stormwater assets.

Minimum Control Measure 2: Public Involvement and Participation

Description of Minimum Measure

The Public Involvement and Participation MCM consists of a set of BMPs that are focused on getting members of the local community involved in the MS4's municipal stormwater management program. Compliance with State and local public notice requirements will be maintained whenever public participation is sought or required. The BMPs include a number of practices designed to seek public input on the SWMP and Annual Report accomplishments in addition to describing specific activities that encourage public participation. The target audiences for the public involvement program are key individuals and groups that may have an interest in the particular BMPs as well as the general public located within the permitted boundary.

The public will have an opportunity to be involved in developing, reviewing, and/or implementing the SWMP through contacting the Tioga County Public Works Department directly. Notice of this opportunity will be distributed online.

The following staff person will serve as point of contact for public concerns regarding stormwater management and compliance issues. This contact information has been published on the Tioga County website.

Table 1. Stormwater Issues Public Contact

Name	Gary Hammond, P.E.
Title	Public Works Commissioner
Phone	607-687-0302
e-mail	hammondg@tiogacountyny.gov

Public comments received on the SWMP plan and intended responses will be documented, annually, in an appendix to this plan. When public input is received, the Tioga MS4 Storm Sewers will update the SWMP plan, when appropriate, within thirty (30) days.

The annual report will be posted for public review and comment online at broometiogastormwater.com and tiogacountyny.gov. Copies of the report will also be available for public review at the Southern Tier 8 Regional Board: 49 Court Street, Suite 222, Binghamton NY 13901 and 477 Rt. 96, Owego, NY 13827.

Presentation of the draft annual report will be given during the quarterly Broome Tioga Stormwater Coalition meeting where the public will have the ability to ask questions and make comments on the draft annual report.

General Permit Requirements

At a minimum, *all* covered entities must comply with State and local public notice requirements when implementing a public involvement or participation program including the following:

- Provide the opportunity for the public to participate in the development, implementation, review and revision of the SWMP.
- Provide local stormwater public contact.
- Conduct annual report.
- Record, periodically assess and modify as needed measurable goals.
- Select and implement appropriate public involvement or participation activities to ensure the reduction of all the POC's stormwater discharges to the MEP.

Methodology for Compliance with Permit Requirements

Past accomplishments:

- The Broome-Tioga Stormwater Coalition complies with the State Open Meetings Law when planning annual report presentation public meetings. The meeting notice is distributed as a press release within the required timeframe and is also posted along with the annual report on the Tioga County, Town of Owego and Broome-Tioga Stormwater Coalition's website.
- E-mail contact is always listed on meeting and annual report notices to provide comment. Comments can also be made via e-mail on the BTSC website.
- The BTSC and the BTSC Public Education and Participation Committee will set and release their meeting schedule at the beginning of every year to the media as well as post on the BTSC website.
- The Broome-Tioga Stormwater Coalition gives proper notice for the annual report presentation public meetings. The annual report meeting is always open to the public. The meeting notice is distributed as a press release providing the required timeframe and is also posted along with the annual report on both Tioga County's and Broome-Tioga Stormwater Coalition's website. The annual report is also posted on Tioga County's website. Contact information is provided within the press release to make comments or comments can be submitted directly from the BTSC website.
- A Notice of Availability is created and distributed to the media and posted on the noted websites every year which includes all the required information about the annual report, annual report presentation public meeting, and how and when to comment.
- The Tioga County SWMP will also be permanently posted on the Tioga County website, Stormwater webpage and on the Town of Owego Planning and Zoning webpage. It will be

replaced as it is modified. Archival versions will be on file in the Tioga County Economic Development & Planning Office and the Town of Owego Planning and Zoning Office.

Goals

- The BTSC Final Annual report remains on the specified websites for the entire reporting year for public inspection. When a new one is finalized for the next reporting year, previous annual reports are archived on the BTSC website and the annual report gets replaced on the Tioga County and Town of Owego websites.
- The BTSC will continue to hold a public meeting to solicit comment on the annual report and provide sufficient notice via a Notice of Availability.
- Tioga County and Town of Owego will work in partnership to initiate two Adopt-a-Watershed Groups that are within the MS4 Area and the Town of Owego. Various community groups will be recruited to participate such as the Hiawatha Yacht Club, Boys and Girls Scout troops, stream clean up groups, Rotary and Kiwanis Clubs, as well as municipal officials.
- Tioga County, Town of Owego and partners will continue to hold the following annual events for public participation: stream clean ups, tire collections, household hazardous waste collections and household electronics collections, and tree sales.
- Town of Owego will enlist various service working groups such as Tioga Works and Alternatives to Incarceration to install “Do Not Dump Drains to River” steel, bolt-on drain markers on 800 catchments basins during this 5-year permit.
- Tioga County and the Town of Owego will continue to encourage interested groups to conduct storm drain stenciling projects where needed to supplement those not having permanent markers.
- Tioga County and Town of Owego will post all MCM 1 educational material on County website
- Tioga County and Town of Owego will continue to post Public Stormwater Contact and Stormwater Program Manager contact information on their respective websites.
- Tioga County’s Public Stormwater Contact information is posted on the tiogacountyny.com website on the Economic Development and Planning webpage. This information will be moved to a dedicated stormwater webpage when it is created.

Minimum Required Reporting

- Annual report presentation information (date, time, attendees) or information about how the annual report was made available for comment;
- comments received and intended responses (as an attachment); and
- report on effectiveness of program, *BMP* and *measurable goal* assessment.

These elements are all covered in the BTSC/Tioga County MS4 Stormwater Annual Reports.

Minimum Control Measure 3: Illicit Discharge Detection and Elimination

Description of Minimum Measure

The Illicit Discharge Detection and Elimination MCM consists of 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.

Illicit Discharge Detection

Public reporting

The public can report instances of suspected illicit discharge directly to the County of Tioga Public Works at 607-687-0302. Reports will be documented in the SWMP. Each report must be completed within 30 days of the instance.

Table 2. Documentation of Illicit Discharge Reports from the Public.

Date of report	Location of illicit discharge	Nature of illicit discharge	Follow up action taken, including time taken to respond	Outcomes and enforcement actions taken.
N/A				

Monitoring Location Inventory and Prioritization:

By January 3rd, 2027, the Tioga MS4 Storm Sewers must develop and maintain an inventory of monitoring locations. This should be documented in the SWMP, as an appendix. Similarly, by January 2nd, 2027 these monitoring locations must be prioritized.

Monitoring Locations Inspection and Sampling Program:

Procedures for inspecting and sampling monitoring locations must be completed and documented in this SWMP by January 3rd, 2026.

Training:

All staff performing inspection and sampling procedures as prescribed by the Inspection and Sampling Program Plan must be trained in procedures prior to undertaking those duties and every 5 years after. If the operation and procedures are changed at any point, staff must be trained before implementing new procedures. The following staff have been trained, and this list is updated annually and/or as needed:

Table 3. Documentation of staff completing inspection and sampling procedure training.

Name	Title	Contact	Date completed
See Table 11			

Illicit discharge track-down

Procedures for inspecting and sampling monitoring locations must be completed and documented in this SWMP by January 3rd, 2026.

Training:

All staff performing illicit discharge track-down procedures as prescribed by the illicit discharge track down Plan must be trained in procedures prior to undertaking those duties and every 5 years after. If the operation and procedures are changed at any point, staff must be trained before implementing new procedures. The following staff have been trained, and this list is updated annually and/or as needed:

Table 4. Documentation of staff completing illicit discharge track down procedure training

Name	Title	Contact	Date completed
See Table 11			

Illicit discharge elimination

Procedures for inspecting and sampling monitoring locations must be completed and documented in this SWMP by January 3rd, 2026.

Training:

All staff performing illicit discharge elimination procedures as prescribed by the Illicit Discharge trackdown program must be trained in procedures prior to undertaking those duties and every 5 years after. If the operation and procedures are changed at any point, staff must be trained before implementing new procedures. The following staff have been trained, and this list is updated annually and/or as needed.

Table 5. Documentation of staff completing illicit discharge track down procedure training.

Name	Title	Contact	Date completed
See Table 11			

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.
- Field verify all outfall locations.
- Conduct an outfall reconnaissance inventory, addressing each outfall at least once every five years, with reasonable progress each year.
- Map new outfalls as they are constructed or newly discovered.

- 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.
- Address the categories of non-stormwater discharges or flows as necessary.
- Develop, record, periodically assess, and modify as needed, measurable goals.
- Select and implement appropriate IDDE BMPs and measurable goals to ensure the reduction of all POCs in stormwater discharges to the MS4.

Methodology for Compliance with Permit Requirements

Past accomplishments

- The Town of Owego has identified all 560 of their storm drains with drain markers.
- Tioga County has identified all 55 of their storm drains with drain markers.
- Tioga County has mapped and incorporated into their GIS systems conveyance pipes that connect all the storm drains.

Goals

Using the existing outfall mapping, the Town of Owego will conduct an outfall reconnaissance inventory during routine maintenance visits, addressing each outfall at least once every five years, with reasonable progress each year.

Maintain a prioritized list of outfalls for inspection, ranked on a five-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.
- Priority 3: Outfalls in which previous inspections indicated structural deficiencies.
- Priority 4: Outfalls in older areas of the municipality.
- Priority 5: (Lowest Priority): None of the above.
- The Town of Owego Stormwater Management Officer will ensure that outfalls are being inspected, the inspections are documented, and will submit accrued outfall mapping update forms for all outfalls that have been altered since mapping was established to the Tioga County GIS Manager.
- The Town of Owego will provide updated information to the base outfall map during routine maintenance visits, scheduled outfall inspections, and responses to complaints. Since outfall mapping is managed by the Tioga County GIS Department, information collected on outfalls will periodically be transmitted to the Tioga County GIS Manager.
- The Town of Owego Stormwater Management Officer will periodically review the ordinance and adjust as necessary to maintain compliance with NYS standards and requirements.
- The Town of Owego will develop a plan, by year 2, to detect illicit discharges by conducting routine visual inspections of every mapped outfall. The plan will set criteria for the inspection process.

- If possible, define the drainage areas for each outfall. Having the drainage areas defined is helpful in tracking down illicit discharge sources. This task can only be accomplished if grants or other funding become available to accomplish this task.
- Tioga County DPW has identified 30 storm drain markers that need replacing. This was completed in summer 2015.
- Tioga County DPW will inspect the 55 storm drains and 6 outfalls two times per year and record all contamination observations on log sheets.
- The Town of Owego Stormwater Management Officer will investigate and confirm the source of pollutants when water quality issues arise due to public complaints or by scheduled inspection of outfalls and implement enforcement action per the Local Law to prohibit illicit discharges, activities and connections to separate storm sewer system. This goal will be aided through utilization of a GIS application. BTSC has purchased handheld GPS mapping units to assist in plotting the entire storm sewer shed.
- The Town of Owego Stormwater Management Officer will annually update the non-stormwater discharge list as necessary such that no exempt stormwater discharge is a substantial contribution 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 firefighting activities
 - Any SPDES permitted discharge
- Town of Owego will inspect and clean 280 catch basins per year on a rotating basis.
- Through the minimum reporting requirements, the Town of Owego will document its progress in implementation of BMPs and measurable goals.

Minimum Required Reporting

- Number and percent of outfalls mapped;
- Number of illicit discharges detected and eliminated;
- Percent of outfalls for which an outfall reconnaissance inventory has been performed;
- Status of system mapping;
- Activities in and results from informing public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste;

- Regulatory mechanism status – certification that law is equivalent to the State’s model IDDE law (if not already completed and submitted with an earlier annual report); and
- Report on effectiveness of program, BMP and measurable goal assessment.

Minimum Control Measure 4: Construction Site Stormwater Runoff Control:

The Construction Site Stormwater Runoff MCM consists of BMPs that focus on the reduction of pollutants 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 activities 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 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 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 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 privately-owned and management projects, and MS4-owned and managed projects. Therefore, the goals described in this section have application to both types of projects.

Public Complaints

Tioga MS4 Storm Sewers has established the following phone or email contact for members of the public to report stormwater-related complaints from construction sites. Each complaint will be documented and appropriately investigated. For each complaint received, a report must be made and retained. This form is included as Attachment 1.

Table 6. Public Stormwater construction complaint contact information

Name	Gary Hammond, P.E.
Title	Public Works Commissioner
Phone	607-687-0302
e-mail	hammondg@tiogacountyny.gov

Construction Oversight Program

Within 1 year, a program must be developed, and procedures documented in this plan. The MS4 Operator must develop a Construction Oversight Program that documents:

1. When the construction site *stormwater* control program applies
2. What types of *construction activity* require a SWPPP
3. The procedures for submission of SWPPPs
4. SWPPP review requirements
5. Pre-construction oversight requirements

6. Construction site inspection requirements and documentation procedures
7. Construction site close-out requirements
8. Enforcement process/expectations for compliance
9. Other procedures associated with the control of *stormwater* runoff from applicable *construction activities*
10. Implementation

Table 7. Documentation of Construction Site inspections

Date	Site	Inspector	Violations	Enforcement action	Follow up
N/A					

Staff responsible for implementing this plan must be trained before beginning work and every 5 years thereafter. Table 7 records staff who have received this training.

Table 8. Documentation of Staff who completed Construction Oversight Training

Name	Title	Contact	Date completed
N/A			

The MS4 Operator must document procedures to ensure that those involved in construction activities (contractors, subcontractors, qualified to inspect, SWPPP reviewers) have received 4 hours of training in proper erosion and sediment control principles.

Construction Site Inventory and Inspection Tracking

As part of maintaining proper oversight of projects, Tioga MS4 Storm Sewers maintains an inventory of applicable construction projects. This inventory will be maintained throughout the year and be updated in the SWMP document annually. The inventory includes the following information (see attachment 3 for inventory table):

1. Location of the Construction site
2. Owner/ operator contact information
3. Receiving watery body name and class
4. Receiving waterbody WI/PWL segment ID
5. Prioritization
6. Construction Project SPDES ID number
7. SWPPP approval date
8. Inspection history, dates, and ratings

Construction Site Prioritization

Within one year of the EDC, the MS4 Operator must prioritize all construction sites which are included in the construction site inventory. Within 30 days of becoming active, MS4 operators must prioritize the construction site and update the construction site prioritization in the inventory annually and document it in the SWMP. Prioritizations are listed in the inventory, attachment 3.

SWPPP Review

Table 9. Staff who have completed DEC approved 4 hr. Course

Name	Title	Contact Information	Date completed
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N/A			
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Construction Inspection

Pre-Construction Meeting

Tioga MS4 Storm Sewers will ensure a pre-construction meeting is conducted prior to the commencement of construction activities. The Tioga MS4 Storm Sewers will review the MS4's construction oversight program and expectations for compliance with the constructor.

Refer to Attachment 2 for the pre-construction meeting worksheet.

Construction Site Inspections

The Tioga MS4 Storm Sewers will ensure individuals responsible for construction site inspections receive 4 hours of Department-endorsed training in proper erosion and sediment control principles within 3 years of the EDC and every 3 years thereafter.

Table 9. Staff who have completed DEC approved 4 hr. Course and perform Construction Site Inspections:

Name	Title	Contact Information	Date completed
N/A			

The Tioga MS4 Storm Sewers will annually inspect all sites with construction activity identified in the inventory, during active construction after the pre-construction meeting, or sooner if deficiencies are noted that require attention. If corrective actions are taken, the Tioga MS4 Storm Sewers will perform follow-up construction site inspections to confirm within the timeframes established by the CGP and the Tioga MS4 Storm Sewer's ERP.

The Tioga MS4 Storm Sewers will document all inspections using the Construction Site Inspection Form found in Appendix D of the General Permit.

Polluted stormwater runoff from construction sites often flows to MS4s and ultimately is discharged into local rivers and streams. Of the pollutants listed in the box to the right, sediment is usually the main pollutant of concern. Sources of sedimentation include agriculture, urban runoff, construction, and forestry. Sediment runoff rates from construction sites however are typically 10 to 20 times greater than those of agricultural lands, and 1,000 to 2,000 times greater than those of forest lands. During a short period of time, construction sites can contribute more sediment to streams that can be deposited naturally during several decades. The resulting siltation, and the contribution of other pollutants from construction sites, can cause physical, chemical, and biological harm to our waters.

Pollutants Commonly Discharged From Construction Sites

- Sediment
- Solid and Sanitary Wastes
- Phosphorous (fertilizer)
- Nitrogen (fertilizers)
- Pesticides
- Oil and Grease
- Concrete truck washout
- Construction Chemicals
- Construction Debris

General Permit Requirements

The Phase II Final Rule requires an operator of a regulated small MS4 to develop, implement, and enforce a program to reduce pollutants in stormwater runoff to their MS4. The MS4 operator is required at a minimum to:

- Have an ordinance or other regulatory mechanism equivalent to the NYS SPEDES General Permit for Stormwater Discharges from Construction Sites, requiring the implementation of proper erosion and sediment controls, and controls for other wastes, on applicable construction sites.
- Address stormwater runoff from construction activities that result in a land disturbance of greater than or equal to one acre, and those construction activities that are part of a larger common plan of development or sale that would disturb one acre or more.
- Include a law, ordinance to require a SWPPP for each applicable land disturbing activity that includes erosion and sediment controls that meet the State's most current technical standards.
- Have procedures for site plan review of SWPPPs that consider potential water quality impacts and consistency with State and local sediment and erosion control requirements. MS4 must also have trained individuals performing the reviews, all sites of one acre or greater must be reviewed and an MS4 Acceptance Form must be completed.
- Have procedures of site inspection and enforcement of control measures.
- Have sanctions to ensure compliance (established in ordinance or other regulatory mechanism).
- Establish procedures for the receipt and consideration of information submitted by the public (i.e. complaints).
- Describe procedures for site inspections and enforcement of erosion and sediment control measures including steps to identify priority sites for inspection and enforcement based on the nature of construction activity, topography, and the characteristics of the receiving waters.
- Educate construction site owner/operators, design engineers, municipal staff and other individuals to whom these regulations apply about the municipality's stormwater construction requirements.
- Ensure that construction site operators have received erosion and sediment control training before they do work within the MS4 and maintain records of that training.
- Establish and maintain an inventory of active construction sites, including the location of the site, owner/operator contact information.
- Develop, record, periodically assess and modify as needed measurable goals.
- Determine the appropriate BMPs and measurable goals for this minimum control measure to ensure the reduction of all Pollutants of Concern (POCs) in stormwater discharges to the Maximum Extent Practicable. Suggested BMPs (i.e. the program actions/activities) and measurable goals are presented below.

Methodology for Compliance with Permit Requirements

Each participating MS4 of the BTSC had adopted the NYS Sample Local Law for Stormwater Management and Erosion and Sediment Control. This ordinance authorizes the MS4 to enforce a program that reduces pollutant runoff from construction sites. Each MS4 will be responsible for:

- Reviewing SWPPPs
- Inspecting Construction Sites
- Enforcing permit requirements on developers/owners/operators that do not comply with regulations. The BTSC will also provide training to developers, contractors, and design engineers in order to inform them of the regulations. Training will also be provided by the BTSC to each participating MS4 personnel that will be responsible for inspecting the construction sites and enforcing permit requirements.

Accomplishments from previous permits:

- Town of Owego has adopted a local stormwater ordinance town wide that establishes minimum stormwater management requirements. The ordinance addresses issues relating to the following:
 - Erosion & sediment control;
 - Stormwater management design requirements;
 - Construction requirements; and
 - Fee structure for municipality services relating to SWPPP reviews, inspections and maintenance.
- A checklist developed by NYSDEC Division of Water Region 7 is utilized by the Tioga County Soil and Water Conservation District to complete reviews of SWPPPs and is available to contractors, developers, engineers or the owner of the project.
- Town of Owego has contracted services with Tioga County SWCD and a Consultant to review SWPPPs. The Town decides on which contractor will conduct the review of the SWPPP and then will sign the SWPPP Acceptance Form based upon their recommendations.
- The Town of Owego has developed & implemented construction internal tracking and plan review procedures for all new and on-going construction projects that disturb greater than 1 acre of land.
- The Town of Owego contracts with a CPESC for all MCM 4 construction activities who uses NYS DEC site inspection forms.

Goals

Construction Plan Review Goals:

- Amend the stormwater ordinance as necessary to maintain the NYS stormwater standards and requirements as defined by the current or any future permits pertaining to stormwater management activities.
- Develop and implement procedures for the public to request information, and to relay concerns to the representative of the municipality.
- Provide training for any municipal representatives that will be completing the construction plan reviews for the municipality, including planning and zoning boards.
- Conduct SWPPP review for all sites within the Town of Owego where disturbance is one acre or greater to ensure consistency with State and local sediment and erosion control requirements and complete SWPPP Acceptance Form.
- Educate the local construction community on the construction plans review process.
- Provide notice to the public that a project will be open for review and comment. For example: the Planning Board and Town Board agendas for proposed projects list the projects to be discussed and are posted the Friday prior to the meeting.
- Notify owners/operators of local construction sites who are in violation of the standards as defined by the General Construction Permit.
- Maintain records of plans reviewed and approved under this program.

Construction Inspection Procedures and Certification Program Goals:

- Conduct and report on inspection procedures and educational efforts to familiarize municipal staff and the local construction community with local stormwater regulations relating to construction activities.

- All construction site operators must verify at least one employee on site has received the required four hours of erosion and sediment control training within the last 3 years before they do work within the Town of Owego. The Town should obtain proof.
- Take action against owners and/or operators of local construction sites that are in violation of local construction stormwater regulations using the enforcement regulation outlined in the adopted local laws.
- Maintain records of construction site inspections, enforcement actions, and corrective actions performed by local construction site owners and operators.
- Educate municipal staff and the local construction community with regards to local inspection procedures.
- Ensure that all appropriate municipal staff and members of the local construction community have been trained.
- Inspect and maintain records of all construction sites where one acre of land or more is being disturbed using appropriate inspection procedures and forms to ensure compliance with local stormwater regulations.

Minimum Required Reporting

At a minimum, the permittee shall report on the items below:

- Number of SWPPPS reviewed
- Number and Type of Enforcement Action
- Percent of active construction sites inspected once
- Percent of active construction sites inspected more than once
- Number of Construction sites authorized for disturbance activities of one acre or more
- Report of effectiveness of program, BMP and measurable goal assessment

Construction Site Close-out

The Tioga MS4 Storm Sewers will ensure a final construction site inspection is conducted and documented in the SWMP Plan, using the Construction Site Inspection Report Form. The Notice of Termination will be signed by the Tioga MS4 Storm Sewers to indicate project completion.

Minimum Control Measure 5: Post Construction Stormwater Management

Post construction stormwater management in areas undergoing new development or redevelopment is necessary because of runoff from these areas has been shown to significantly affect receiving waterbodies. Many studies indicate that prior planning and design for the minimization of pollutants in post-construction stormwater discharges is the most cost-effective approach to stormwater quality management.

There are generally two forms of substantial impacts of post-construction runoff. The first is caused by an increase in the type and quantity of pollutants in stormwater runoff. As runoff flows over areas altered by development it picks up harmful sediment and chemicals such as oil and grease, pesticides, heavy metals, and nutrients. These pollutants often become suspended in runoff and are carried to receiving waters, such as lakes, ponds and streams. Once deposited, these pollutants can enter the food chain through small aquatic life, eventually entering the tissues of fish and humans. The second kind of post-construction runoff impact occurs by increasing the quantity of water delivered to the

waterbody during storms. Increased impervious surfaces (i.e. Parking lots, driveways, and rooftops) interrupt the natural cycle of gradual percolation of water through vegetation and soil. Instead, water is collected from surfaces such as asphalt and concrete and routed to drainage systems where large volumes of runoff quickly flow to the nearest receiving water. The effects of this process include streambank erosion and downstream flooding, which often lead to a loss of aquatic life and damage to property.

Description of Minimum Control Measure

The Post Construction Stormwater Management MCM consists of goals that focus on the prevention or minimization of water quality impacts from both new and re-development projects that disturb one acre or more. This includes projects less than one acre that are part of a larger common plan of development, or sale that discharge into the MS4. The BMPs describe structural and/or nonstructural 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.

The Tioga MS4 Storm Sewers SMP program addresses stormwater runoff to the MS4 from a publicly owned/operated and privately owned/operated post-construction SMP that either is a post-construction SMP that has been installed as part of any CGP covered construction site or individual SPDES permit (since March 10, 2003) and/or all new post-construction SMPs constructed as part of the construction site stormwater runoff control program.

Table 10. Documentation of SMP Training

Name	Title	Contact Information	Date completed
<i>See Table 11</i>			

Post-Construction SMP Inventory and Inspection Tracking:

Tioga MS4 Storm Sewers will maintain the inventory from previous iterations of the SPDES general permit for post-construction SMPs installed after March 10th, 2003 and develop the inventory for post-construction SMPs installed after March 10, 2003 as they are approved or discovered, and/or after the owner/operator for the construction activity has filled out the Notice of Termination and update the inventory annually.

Within 5 years of the EDC, the MS4 Operator will provide the inventory spreadsheet on post-construction SMPs (Attachment 4).

General Permit Requirements

The Phase II Final Rule requires an operator of a regulated small MS4 to develop, implement, and enforce a program to reduce pollutants in stormwater runoff to their MS4. The MS4 operator is required at a minimum to:

- Provide equivalent protection to the NYS SPDES General Permit for Stormwater Dischargers from Construction Activities.
- Address post-construction runoff to their MS4 from new development and redevelopment projects that result in the land disturbance activities of greater than or equal to one acre or part of a larger common plan of development.

- Have an ordinance or other regulatory mechanism requiring the implementation of post-construction runoff controls to the extent allowable under State, or Local law and meets the State's most current technical standards.
- Develop and implement strategies which include a combination of structural and/or non-structural best management practices, this includes considering Low Impact Development (LID), Better Site Design (BSD) and other Green Infrastructure, as well as smart growth principles, natural resource protection, impervious area reduction, riparian buffers or set back distances for protection of environmentally sensitive areas such as streams, wetlands and erodible soils when developing watershed plans, municipal comprehensive plans, land use regulations, etc.
- Have procedures for site plan review of SWPPPs that consider potential water quality impacts and consistency with State and local sediment and erosion control requirements; MS4 must also have trained individuals performing the reviews, all sites of one acre or greater must be reviewed and an MS4 Acceptance Form must be completed.
- Ensure adequate long-term operation and maintenance of post-construction stormwater management practices within the covered entities jurisdiction. The inventory includes location of practice, type of practice, maintenance needed per practice, SWPPP, dates and type of maintenance performed.
- Provide adequate resources for a program to inspect development and re-development sites by trained staff and to enforce and penalize violators.
- Record, annually assess and modify as needed measurable goals.
- Determine the appropriate best management practices and measurable goals for this minimum control measure.

Goals

- Amend the stormwater ordinance as necessary to maintain the NYS stormwater standards and requirements as defined by the current or any future permits pertaining to stormwater management activities. (The fee structure should be referenced in Local Law but should be done in a way to update without having to revise the Local Law as a whole).
- Amend stormwater ordinance, as necessary, to maintain compliance with NYS stormwater standards and requirements as defined by the current or any future permits pertaining to stormwater management activities.

Inspection Program for Newly and Re-Developed Sites:

- Train inspection personnel and/or members of the local construction community on local post-construction runoff regulations and final inspection procedures.
- Issue enforcement measures to owners and/or operators of local development projects that are in violation of local post-construction runoff regulations.
- Develop and maintain an inventory of projects under local post-construction runoff regulations in accordance with the General Permit.

Minimum Required Reporting

At a minimum, the permittee shall report on the items below:

- Number of SWPPPS reviewed
- Number and Type of Enforcement Action
- Number and Type of Post Construction Stormwater Management Practices inventoried;

- Number and Type of Post Construction Stormwater Management Practices inspected
- Number and Type of Post Construction Stormwater Management Practices maintained;
- Regulatory mechanism status – certification that regulatory mechanism is equivalent to one of the “NYSDEC Sample Local Laws for Stormwater Management and Erosion and Sediment Control”
- Report on effectiveness of program, BMP and Measurable Goal Assessment.

These elements are covered under the BTSC/Town of Owego MS4 Annual Stormwater Reports.

Post construction Inspection and Maintenance Program:

Complete the post construction SMP inspection and maintenance table (see Attachment 4) and catalogue all construction sites once finished.

Minimum Control Measure 6: Pollution Prevention and Good Housekeeping

Description of Minimum Control Measure

The Pollution Prevention / Good Housekeeping (PP/GH) minimum control measure consists of Best Management Practices (BMPs) that focus on training and 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.

Municipality Facilities

By January 2nd, 2027, BMPs must be incorporated into the municipal facility program and municipal operations this should be completed according to the BMPs. The Facility program must specify the facility procedures and training procedures.

By January 2nd, 2026, an inventory of all municipal facilities must be completed. See attachment 5 for the related table to fulfill this requirement.

By January 2nd, 2029 a facility specific SWPP must be complete for each high priority facility.

Municipal Operations

Training of municipal staff will include Raincheck Stormwater Pollution Prevention for MS4's. The names and contact details of staff who have received training in municipal operations procedures are documented in the following table. This will be updated annually.

Table 11. Documentation of Staff completing municipal operations procedures training.

Name	Title	Contact	Topic	Date Completed
Todd Shumway	Motor Equipment Operator	607-687-0302	Stormwater Pollution Prevention	3/8/2022
Polly Jones	Motor Equipment Operator	607-687-0302	Stormwater Pollution Prevention	3/8/2022
Tyler Shepardson	Motor Equipment Operator	607-687-0302	Stormwater Pollution Prevention	3/8/2022
John Bennett	Motor Equipment Operator	607-687-0302	Stormwater Pollution Prevention	3/8/2022
Garret Akins	Heavy Equipment Operator	607-687-0302	Stormwater Pollution Prevention	3/8/2022
Jeff Shepardson	Automotive Stock Clerk	607-687-0302	Stormwater Pollution Prevention	3/8/2022
Will Zepkowski	Mechanic Working Supervisor	607-687-0302	Stormwater Pollution Prevention	3/8/2022
Derek Grier	Mechanic Working Supervisor	607-687-0302	Stormwater Pollution Prevention	3/8/2022
Joe Accarito	Heavy Equipment Operator	607-687-0302	Stormwater Pollution Prevention	3/8/2022
Brian Waterman	Heavy Equipment Operator	607-687-0302	Stormwater Pollution Prevention	3/8/2022
Michael Rossi	Heavy Equipment Operator	607-687-0302	Stormwater Pollution Prevention	3/8/2022
Kyle Gregrow	Heavy Equipment Operator	607-687-0302	Stormwater Pollution Prevention	3/8/2022
John Feltey	Heavy Equipment Operator Site Leader	607-687-0302	Stormwater Pollution Prevention	3/8/2022
Larry Brink	Working Supervisor	607-687-0302	Stormwater Pollution Prevention	3/8/2022
Medard Korbar	Technical Facility Supervisor	607-687-0302	Stormwater Pollution Prevention	3/8/2022

Joshua Morley	Maintenance Mechanic	607-687-0302	Stormwater Pollution Prevention	3/8/2022
James Vandemark	Maintenance Mechanic	607-687-0302	Stormwater Pollution Prevention	3/8/2022
Tom Murray	Maintenance Mechanic	607-687-0302	Stormwater Pollution Prevention	3/8/2022
Mike Bidwell	Working Supervisor	607-687-0302	Stormwater Pollution Prevention	3/8/2022
Keith French	Maintenance Mechanic	607-687-0302	Stormwater Pollution Prevention	3/8/2022

General Permit Requirements

An MS4 *must*, at a minimum:

- Develop and implement a pollution prevention/good housekeeping plan for municipal operations and facilities that:
 - Addresses municipal operations and facilities
 - Includes a self-assessment of all municipal operations
 - Determines management practices that will be developed and implemented
 - Prioritize pollution prevention and good housekeeping efforts
 - Addresses pollution prevention and good housekeeping priorities
 - Includes an employee training program and ensures staff receives training
 - Requires third party entities to make required certification
 - Monitoring and record keeping by municipal operations in accordance with MSGP
 - Incorporate cost effective runoff reduction techniques and green infrastructure
- Develop measurable goals.
- Select and implement appropriate BMPs and measurable goals to ensure the reduction of POCs in stormwater discharges to the MS4.
- Adopt techniques to reduce use of fertilizers, pesticides, and herbicides.

Methodology for Compliance with Permit Requirements

Past Accomplishments:

- The Town of Owego has established a “You Bring and You Take Out” all trash in Hickories Park. There are no longer trash receptacles there. This has resulted in much less trash and other litter being left behind by park patrons.
- Tioga County has conducted an EPA Facility self-audit of its highway facility in Catatonk, NY and implemented all the recommendations within 60 days of the violations report.
- Tioga County Highway facility has no drains leading directly to the environment and has installed a pre-treatment system to capture contaminants (oil, grit) in sewer lines.
- No fertilizers are used by Tioga County or Town of Owego in the maintenance of Hickories Park or county-owned greenspace.
- Pet waste stations are monitored and emptied several times each week at Hickories Park in the Town of Owego.
- There are no fuel tanks on site at any Town of Owego facilities.
- Petroleum tanks at the Tioga County highway facility are covered and have properly sized secondary containment systems.

- All used oils are disposed of in a waste oil burner which is used as a heat source in winter months.
- All used oil filters are disposed of in a leak proof container and are picked up as needed a year by a private service (Safety Kleen).
- All gasoline-powered vehicles and equipment owned by the Town of Owego are fueled at a local private terminal located off-site.
- The current Town of Owego street sweeping policy is that all town roads are swept and all catch basins are cleaned once a year. Street sweeping in the Town begins as soon as possible in the spring.
- During snowstorms, all areas within the Town of Owego MS4 receive a high concentration of salt (80-85%) to prevent excessive silt and sediment from entering the storm drain system.
- Where applicable, the Town of Owego Parks and Highway Departments, and Tioga County Department of Public Works have developed and are using housekeeping inspection forms for the following items - Lawn Care, Pest Controls, Road Salt Storage and Application, Roadway Maintenance, Septic System, Hazardous Waste Management, Storm Drain and Vehicle/Equipment Maintenance.
- The Tioga County Soil & Water Conservation District has and will facilitate training to the municipal personnel of participating MS4s. These personnel will be responsible for implementing the BMPs in their everyday activities.

Goals

Training

- Provide training to each member of the municipality whose work may potentially impact stormwater. For Tioga County this includes the Highway and Buildings & Grounds personnel. For the Town of Owego this includes the Highway, Parks, and Water departments. Several members of the Town, trained through the Tioga County Soil & Water Conservation District, will be responsible for training the remaining members of their municipality, as necessary.
- The Stormwater Management Officer will annually provide refresher training for employees and provide training to new employees when hired.

Landscaping & Lawn Care

- Reduce the discharge of landscaping and lawn care waste from Town owned facilities through better mowing and landscaping maintenance practices.
- Maintain an inventory of landscaping and lawn care areas that are owned by the Town of Owego and Tioga County within the Town of Owego.
- Evaluate current landscaping and lawn care activities in order to identify opportunities to reduce the discharge of the following:
 - Leaf litter and tree trimmings
 - Litter and floatable materials
 - Equipment fluids
- Ensure that proper litter collection is scheduled prior to any mowing activities.
- Evaluate methods for containing and/or composting trimmings and grass clippings.
- 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 a maintenance program to accomplish the following:
 - 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.
- Rinse grass from lawn care equipment on permeable (grassed) areas.
- The Tioga County DPW Commissioner and the Town of Owego Parks Maintenance Supervisor will annually review their respective monitoring and maintenance programs and revise as necessary.

Vehicle/Equipment Maintenance

- Maintain vehicles owned by the Town of Owego and Tioga County according to manufacturer's specifications and identify and eliminate significant vehicle fluid leaks.
- Conduct routine maintenance on all vehicles according to manufacturer's specifications.
 - During routine maintenance of Town- and County-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.
- In Town of Owego facilities, 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.
- 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.
- Standard Operating Procedure:
 - 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.

Vehicle/Equipment Washing

- Tioga County and Town of Owego owned vehicles and equipment are washed in a manner to prevent discharge of pollutants to the municipal storm sewer system or local water bodies.
- Maintain an inventory of Town and County 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.

Building Maintenance

- Conduct building maintenance activities such that they do not impact the stormwater systems and local water bodies.
- Implement mitigation measures for each activity that impacts stormwater.
- Annually review the mitigation measures for each activity and revise as necessary.

Hazardous and Waste Materials Management

- Prevent the discharge of hazardous (lube oils, coatings and their components, anti-freeze, cleaning agents and fuels) and waste materials from impacting municipal stormwater systems and local waterbodies.
- **The Town of Owego Superintendent of Highways, Parks Maintenance Supervisor and Director of Utilities; and the Tioga County Buildings and Grounds Supervisor will:**
 - 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 or 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 where 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.
 - Recycle materials if possible or ensure proper disposal of waste.
 - 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).

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.
- **The Superintendent of Highways will:**
 - 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.

Roadway and Bridge Maintenance

- Assess roadway and bridge maintenance activities and modify procedures to reduce stormwater quality impacts.
- **The Superintendent of Highways will:**
 - 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.
 - Require contractors to 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.
 - Require contractors to use tarps, booms, and vacuums during painting or blasting activities to control/capture particulate matter.
 - Inspect roads and bridges for implementation of applicable BMPs.

- Evaluate roadway maintenance program annually and revise roadway maintenance specifications according to identified alternative practices.

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.
- **The Superintendent of Highways will:**
 - 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 down slope.
 - 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 Cleaning System

- Reduce sediment and floatable material discharges by routinely cleaning municipal catch basins and stormwater inlet structures.
- **The Town of Owego Superintendent of Highways will:**
 - 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.

New Construction and Land Disturbance

- Comply with the Town's construction and post-construction minimum control measures.
- **The Town of Owego Superintendent of Highways will:**
 - 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.

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.
- **The Town of Owego Superintendent of Highways will:**
 - Identify any potential habitat modification to the Tioga County Soil & Water Conservation District, 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.
 - Provide the NYSDEC and USACOE with the required information in the Joint Application for Permit to obtain their approval prior to proceeding.
 - Tioga County Soil & Water Conservation District will annually provide additional training as necessary to the municipal work crews.

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.
- **The Town of Owego Superintendent of Highways will:**
 - Identify the type of roadways that should be swept to remove sediment and other pollutants.
 - 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 and direct runoff to these areas.

Boating Operations

- Provide for proper operation and maintenance of boating access in order to mitigate the contamination of the stormwater system and local waterbodies.
- **The Town of Owego Parks Maintenance Supervisor will:**
 - 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)
 - Sedimentation from barren soils
 - Implement the following:
 - Stabilize shoreline.
 - Minimize impervious areas – install vegetated buffer strips (i.e. grass, shrubs).
 - 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.

Septic System Management

- Prevent improperly treated wastewaters from Town-owned septic systems from impacting municipal stormwater systems and local waterbodies.
- **The Town of Owego Parks Maintenance Supervisor will:**
 - Divert stormwater runoff (i.e. from roof drains) away from septic system.
 - Divert groundwater (sump pump) discharges away from septic 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.

Minimum Required Reporting

Program Development:

- Identification of municipal operations and facilities that will be considered for inclusion in the program
- Description of PP/GH program priorities
- Description of management practices and policies to be developed
- Identification of staff and equipment available
- Description of employee PP/GH training program, begin training, report on number of staff trained
- Description of development management practices

Program Implementation:

- Commence implementation reporting after three-year development permit. Implementation reporting can begin earlier if implementation begins during development period.
- Indicate the municipal operations and facilities that the pollution prevention and good housekeeping program assessed.
- Describe the management practices, policies and procedures that have been developed and report on the following items:
 - Acres of parking lot swept
 - Miles of street swept
 - Number of catch basins inspected and cleaned (where necessary)
 - Post-construction control stormwater management practices inspected and cleaned (where necessary)
- Staff training events and number of staff trained.
- Report on effectiveness of program.

Attachment 1

Construction Site Complaint Documentation Items (MCM 4)

Construction Site Complaint	
Date of Report	
Location of Site	
Nature of Complaint	
Follow up taken or needed	
Inspection Outcomes	
Enforcement Outcomes	

Attachment 2

Pre-Construction Meeting Worksheet (MCM 4)

Pre-Construction Meeting Worksheet	
Date of Meeting	
Construction Project Name/Location	
Name of Owner/Operator listed on the CGP NOI (if different from MS4 Operator)	
Name of MS4 Operator	Tioga County MS4 Storm Sewers
Name Contractor(s) responsible for implementing the SWPPP for the Construction activity	
Name of Qualified Inspector (if required for construction activity)	
Questions for Review	
Has the project received, or will it receive coverage under the CGP or an individual SPDES permit?	
Do contractors and subcontractors have at least one individual who has received 4 hours of department-endorsed training in proper erosion and sediment control principles?	
Has the MS4 Operator reviewed the construction oversight program and expectations for compliance with the contractors and subcontractors?	

