

BROOME COUNTY

STORMWATER MANAGEMENT PROGRAM PLAN

Revised/Updated: March 2018

Broome County is a member of the
Broome-Tioga Stormwater Coalition



www.broometiogastormwater.com

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Introduction:

This Stormwater Management Program (SWMP) Plan has been developed to comply with Part IV.A of the New York State Department of Environmental Conservation General Permit for Stormwater Discharges from Municipal Separate Storm Sewers Systems, GP-0-08-002 (and supplemented/ revised by GP-0-10-002, and GP-0-15-003), for Broome County, which is classified as a **Traditional Non-Land Use Control MS4**. The purpose of this SWMPP is to provide policy and management guidance to the regulated Broome County MS4 Departments and facilities to maintain and/or improve water quality. The Broome County MS4 is a member of the Broome-Tioga Stormwater Coalition (BTSC), which exists by way of an intermunicipal agreement between its 15 participating members enacted through municipal resolution by each participating member. (A copy of the intermunicipal agreement is included in Appendix A.)

Part IV-A (“Stormwater Management Program (SWMP) Requirements”) of GP-0-15-003 states:

Covered entities must develop, implement, and enforce a SWMP designed to reduce the discharge of pollutants from small MS4s to the maximum extent practicable (“MEP”) in order to protect water quality and to satisfy the appropriate water quality requirements of the ELC (Environmental Conservation Law) and the CWA (Clean Water Act).

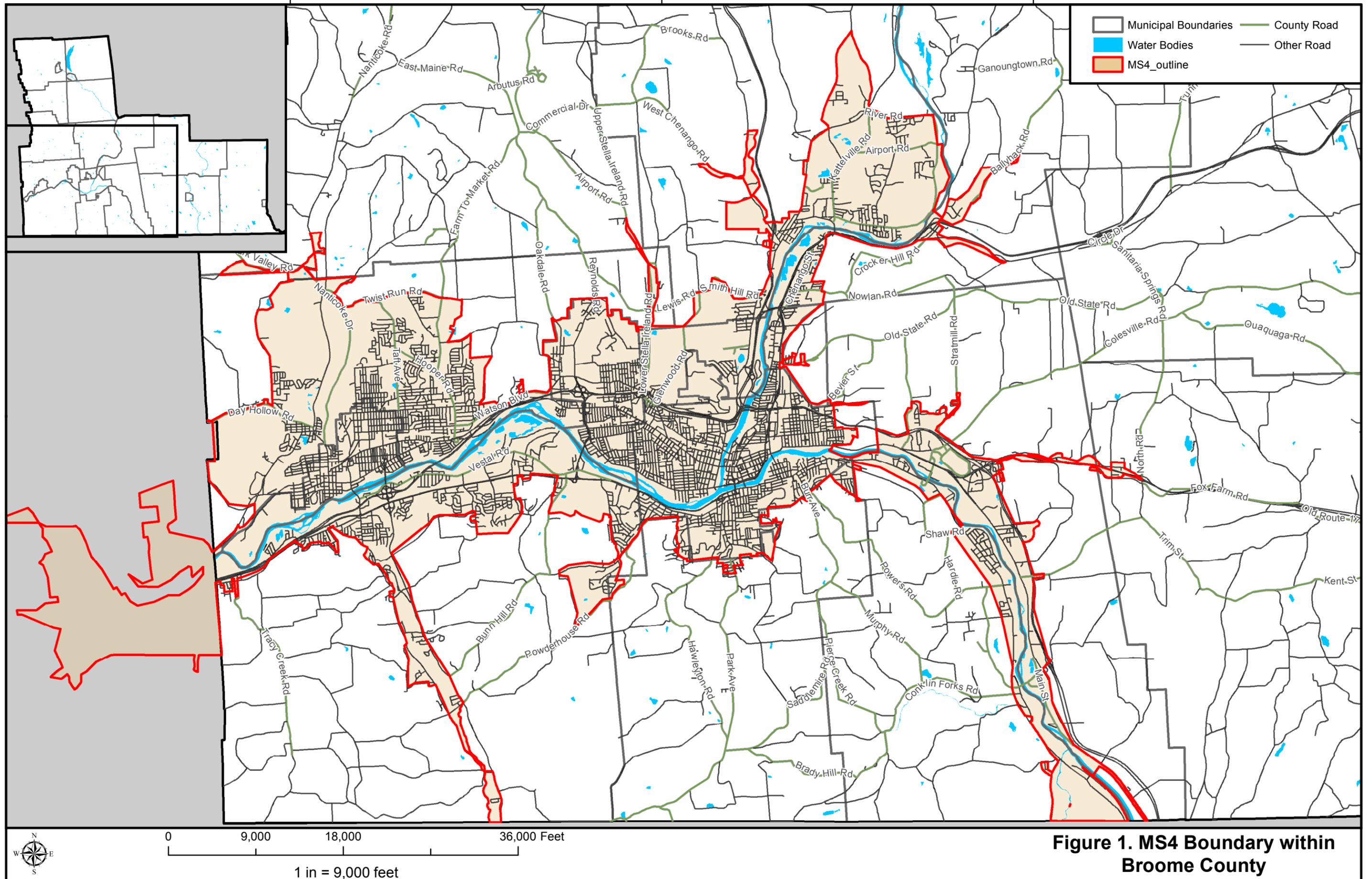
This SWMP Plan is based on Federal Stormwater Phase II rule, issued in 1999, which requires municipal separate storm sewers system (MS4) owners and operators, in the U.S. Census-defined urbanized areas as well as in additionally designated areas, to develop a Stormwater Management Program. There are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

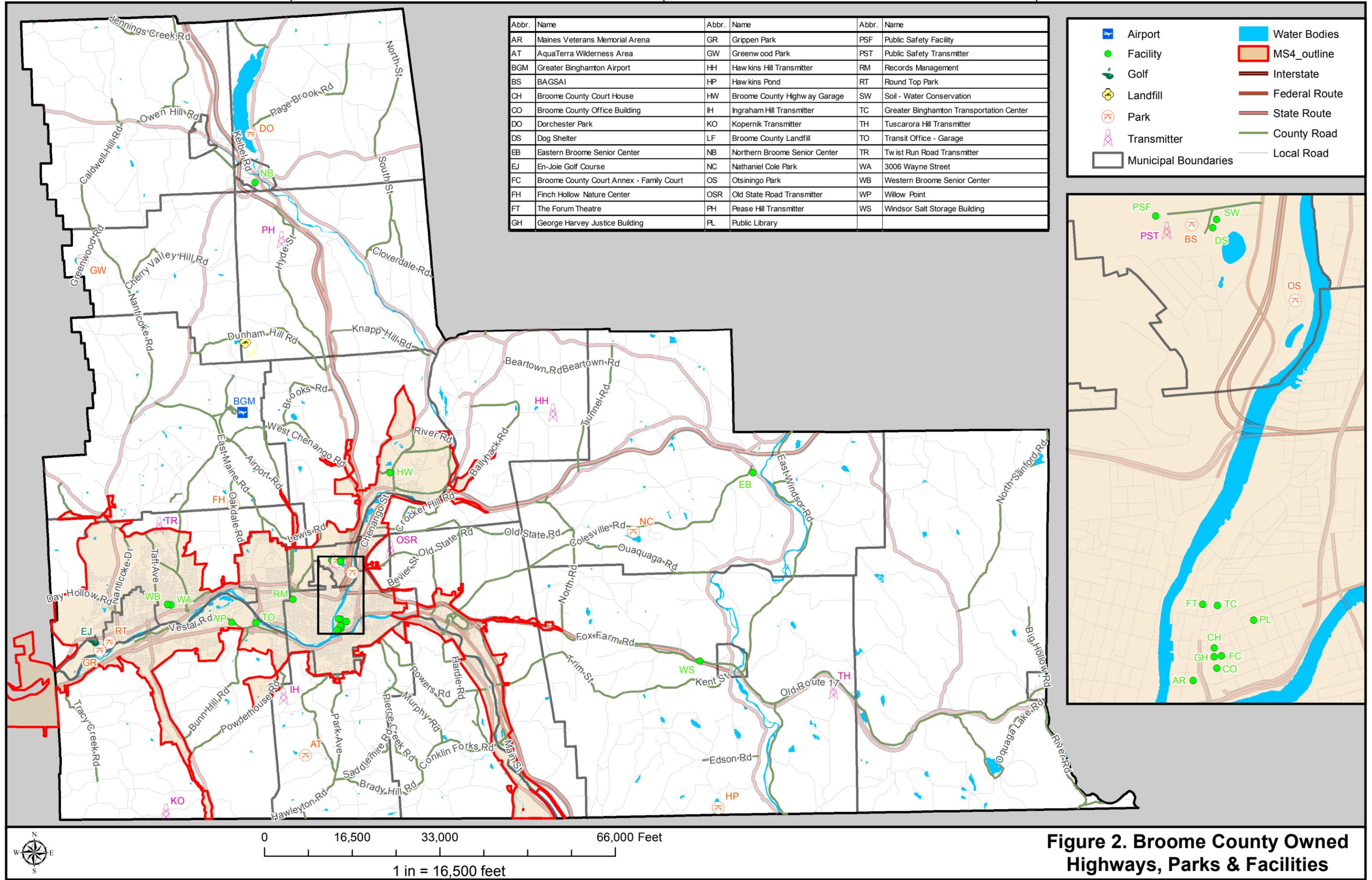
1. Public Education and Outreach
2. Public Involvement and Participation
3. Illicit Discharge Detection and Elimination
4. Construction Site Runoff Control
5. Post-Construction Stormwater Management
6. Pollution Prevention / Good Housekeeping for Municipal Operations

This document describes each MCM and the Best Management Practices (BMP’s) that have been implemented by Broome County to maintain compliance with the current NYSDEC General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s). Responsibilities to achieve and sustain compliance are clearly defined for each BMP. Portions of the responsibilities are provided through collective efforts of the Broome-Tioga Stormwater Coalition (BTSC), and these will be explained and highlighted in the following document. The remaining work is the responsibility of Broome County staff as indicated.

This SWMP Plan should be reviewed on an annual basis and updated as necessary to incorporate the latest technologies and information to maintain compliance with the current NYSDEC General Permit, as well as to account for progress made towards stated goals.

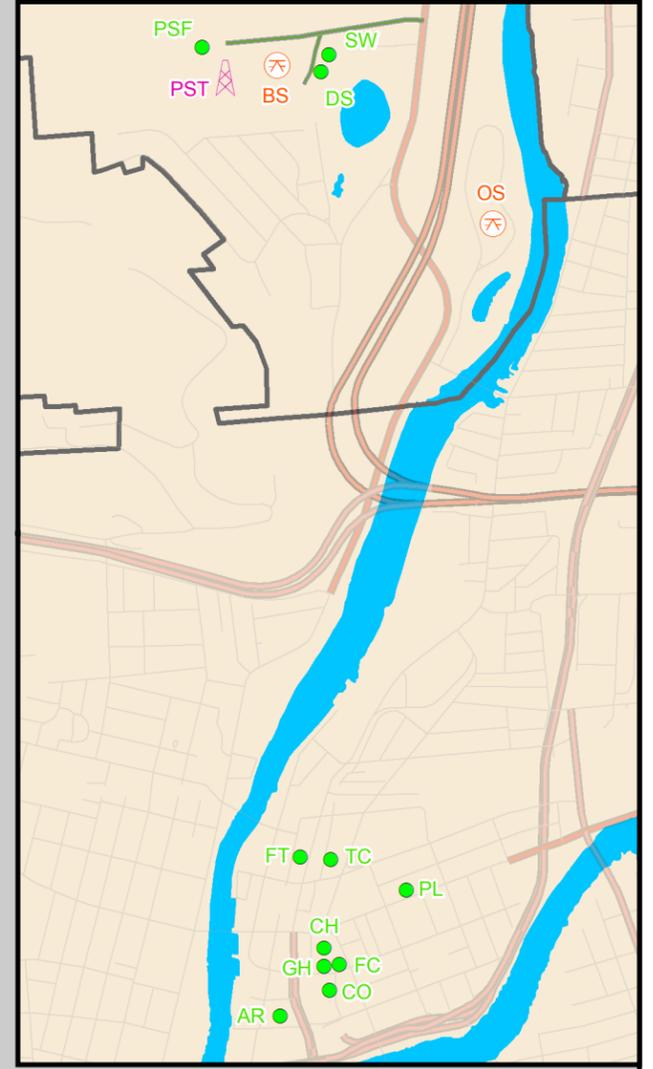
Maps illustrating the designated MS4 boundaries within Broome County (Figure 1) and County roads and facilities (Figure 2) are included on the following two pages.





Abbr.	Name	Abbr.	Name	Abbr.	Name
AR	Maines Veterans Memorial Arena	GR	Grippen Park	PSF	Public Safety Facility
AT	AquaTerra Wilderness Area	GW	Greenwood Park	PST	Public Safety Transmitter
BGM	Greater Binghamton Airport	HH	Hawkins Hill Transmitter	RM	Records Management
BS	BAGSAI	HP	Hawkins Pond	RT	Round Top Park
CH	Broome County Court House	HW	Broome County Highway Garage	SW	Soil - Water Conservation
CO	Broome County Office Building	IH	Ingraham Hill Transmitter	TC	Greater Binghamton Transportation Center
DO	Dorchester Park	KO	Kopernik Transmitter	TH	Tuscarora Hill Transmitter
DS	Dog Shelter	LF	Broome County Landfill	TO	Transit Office - Garage
EB	Eastern Broome Senior Center	NB	Northern Broome Senior Center	TR	Twist Run Road Transmitter
EJ	En-Joie Golf Course	NC	Nathaniel Cole Park	WA	3006 Wayne Street
FC	Broome County Court Annex - Family Court	OS	Otsiningo Park	WB	Western Broome Senior Center
FH	Finch Hollow Nature Center	OSR	Old State Road Transmitter	WP	Willow Point
FT	The Forum Theatre	PH	Pease Hill Transmitter	WS	Windsor Salt Storage Building
GH	George Harvey Justice Building	PL	Public Library		

- Airport
- Facility
- Golf
- Landfill
- Park
- Transmitter
- Municipal Boundaries
- Water Bodies
- MS4_outline
- Interstate
- Federal Route
- State Route
- County Road
- Local Road



0 16,500 33,000 66,000 Feet
 1 in = 16,500 feet

Figure 2. Broome County Owned Highways, Parks & Facilities

<p style="text-align: center;">Minimum Control Measure 1: Public Education and Outreach on Stormwater Impacts</p>
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1.1 Description of Minimum Control Measure

The Public Education and Outreach Minimum Control Measure (MCM) consists of 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. The educational material should contain specific actions to direct the public, either individually or collectively as a group, as to how they can participate in reducing pollutants and their impact on the environment. MCM-1 differs from MCM-2 in that this MCM focuses on fostering public awareness of stormwater pollution problems in the hopes of behavior changes. The Public Education and Outreach program and BMPs in combination are expected to reach all of the constituents within the MS4's permitted boundary. Specifically, for a Traditional Non-Land Use Control MS4, Broome's County's "public" is considered to be the employees / user population, visitors, and contractors working on County projects.

1.2 General Permit Requirements

At a minimum, Broome County must develop, implement and enforce a program that:

- A. Identifies pollutants of concern (POCs), water bodies of concern, geographic areas of concern, and target audiences.
- B. Develops and implements an ongoing public education and outreach program designed to describe:
 - 1. the impacts of stormwater discharges on water bodies;
 - 2. POCs and their sources;
 - 3. steps that contributors of these pollutants can take to reduce pollutants in stormwater runoff;
 - 4. steps that contributors of non-stormwater discharges can take to reduce pollutants.

Note: Non-stormwater discharges of concern to Broome County include items such as landscape irrigation and watering runoff from parks and facilities, foundation and footing drains from County buildings, sump pump water from facility basements, diverted stream flows from construction projects, and any SPDES permitted discharges.

As noted in the general permit, educational materials for traditional non-land use MS4s may be made available at locations including, but not limited to; service area, lobbies or other locations where information is made available to employees; at staff trainings; on the County website; with paychecks; and in employee break rooms.

- C. Develops and records measureable goals, and periodically assesses and modifies them as needed.

- D. Selects and implements appropriate education and outreach activities and measureable goals to ensure the reduction of all POCs in stormwater discharges to the Maximum Extent Practicable (MEP).

1.3 Identification of POCs, water bodies of concern, and geographic areas of concern:

The predominant area of Broome County is within the Susquehanna River Basin, and thus is also a part of the Chesapeake Bay Watershed. All areas within the MS4 boundaries drain into this river and watershed system. According to the NYSDEC report entitled "Susquehanna River Basin Waterbody Inventory and Priority Waterbodies List" (2009) pollutants of concern in various sections of this river basin and watershed include metals (lead, mercury, copper and cadmium), nutrients (nitrogen and phosphorus), silt and sediment, and thermal changes. To lesser extents pathogens (bacteria and viruses) and oxygen demand have also been noted as potential concerns in sections of the watershed. These POCs have been reported in sections of the Susquehanna River, Chenango River, Tioughnioga River, Whitney Point Reservoir, and other smaller tributaries into these major water bodies. Although metals are typically the result of atmospheric deposition; other POCs listed result from surface runoff generated from agriculture, construction activities, stream bank erosion, and concentrated urban development (runoff from roads and impervious surfaces).

Other POC's that are often found in urban runoff either dissolved or attached to sediment or organic materials are toxic substances such as vehicle fluids (oil, gas and antifreeze), paint, solvents, soap from car and equipment washing, process waste water, batteries, hazardous household chemicals and wastes, street litter, swimming pool discharges, and wash-water from concrete mixers. These toxic substances can come from a myriad of sources; residential, commercial/industrial, and/or construction.

Specifically, within Broome County, five water bodies have been identified as "impaired segments" in the General Permit appendices with pollutants of concern as listed as follows:

- | | | |
|----|-------------------------------------|-------------------|
| 1. | Susquehanna River – Lower Main Stem | (POC: pathogens) |
| 2. | Park Creek & tributaries | (POC: pathogens) |
| 3. | Whitney Point Lake / Reservoir | (POC: phosphorus) |
| 4. | Beaver Lake | (POC: phosphorus) |
| 5. | White Birch Lake | (POC: phosphorus) |

The map included in Figure #3 (page MCM 1-3) illustrates the location of these impacted water bodies in relation to the overall MS4 boundaries. As shown in this figure only a portion of the Park Creek watershed is located within the actual MS4 boundaries. The entire part of the Susquehanna River within Broome County is within the "lower stem" section, and is also encompassed within the MS4 boundary. The other three identified "impaired segments" are outside the identified MS4 boundary.

Since most of Broome County, including 100% of the MS4 area is within the Susquehanna River drainage basin (which drains into and through the "lower stem" section of the river reach) and therefore also a part of the Chesapeake Bay Watershed, our geographic area of concern is identified as the entire region of Broome County within this critical watershed area.

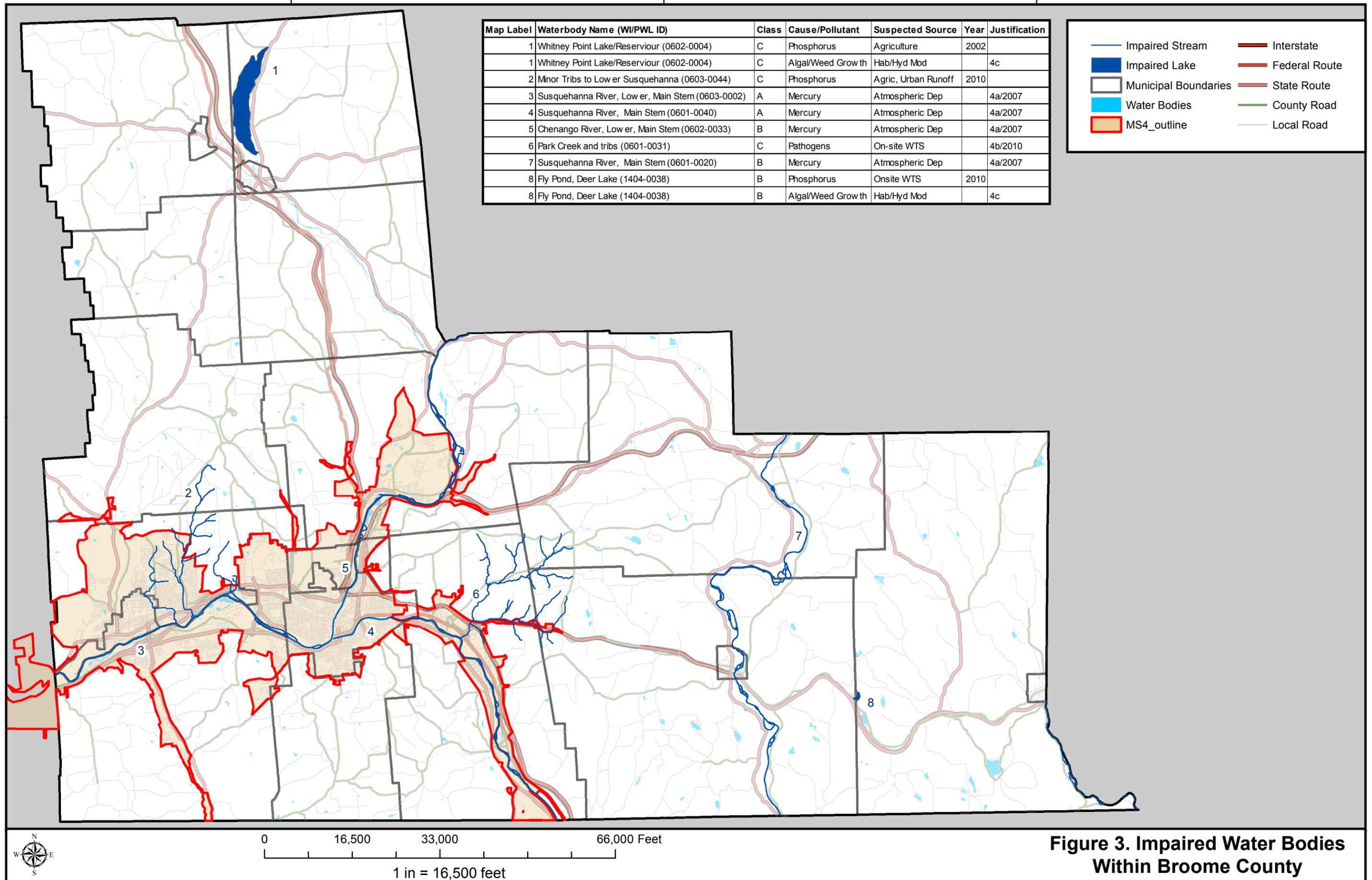


Figure 3. Impaired Water Bodies Within Broome County

1.4 Identification of Target Audiences

There are two specific “target audiences” which will be addressed within the Broome County SWMP. The first of these is a much wider audience addressed by the Broome-Tioga Stormwater Coalition which includes the general public as a whole such as residents, business owners, industries, school groups, civic organizations, etc. This part of the public outreach will be discussed and described in Sections 1.6.1 and 1.6.2.

For Broome County as a traditional non-land use control MS4; however, our specific “target audience” that must be reached by public education efforts includes all county staff, but especially those who are responsible for operation and maintenance of county facilities and functions; such as Engineering, Highways, Parks, Building and Grounds, and Transit staff. Additionally, the County-specific target audience should include contractors who work on county-sponsored construction projects. This part of the public outreach effort will be discussed in Section 1.6.3.

1.5 Methodology for Compliance with Permit Requirements

Broome County has approached the compliance with this MCM both on a more global scale as a member of the Broome-Tioga Stormwater Coalition (BTSC), and on a smaller scale as an individual traditional non-land use control MS4 entity. The coalition BMPs used have included a media campaign (television and print advertisements), brochures, presentations, a webpage, and displays at community events. On an individual basis, Broome County has used many of these same BMPs for general public information through their Solid Waste Division; however, Broome County is also focused on education of staff and contractors who work on county projects and in areas that could impact stormwater quality within the MS4 boundaries. BMPs and goals established to address MCM-1 will be evaluated on an annual basis and updated or enhanced as necessary.

1.6 Best Management Practices Implemented, Underway, &/or Proposed

1.6.1 Broome-Tioga Stormwater Coalition Public Outreach

The Broome-Tioga Stormwater Coalition (BTSC) has created a website dedicated to stormwater issues within the combined MS4 area to post information, data, and reports for public access. This website address is www.broometiogastormwater.com. Broome County supports this effort by hosting the website on the County’s server. Planning staff maintains and updates the website as needed. BTSC has created a logo which is used on all educational material created and/or distributed by the coalition. Additional MCM-1 actions by the coalition include:

- A. BTSC has formed a Public Education and Participation Committee to address MCMs 1 and 2 for joint coalition members. This committee has published educational materials containing specific actions that the public can use to participate in reducing pollutants and their impacts to the environment. Materials developed by this group have been used at area schools and various public events, as well as for press releases and postings on the BTSC website. Part of the public outreach developed by this committee includes demonstration of the Enviroscape stormwater model at various public events.

- B. An assortment of brochures and other printed material have been made available for the public at municipal offices and websites, at trainings for contractors and local officials, and at restaurants throughout the MS4 region.
- C. Another goal that was set by the coalition was to develop a public service announcement (PSA) to illustrate to residents' practices that will least pollute surface stormwater. That initial goal has been modified to include a series of seasonal PSAs such as not raking grass clippings after mowing in the summer, not over salting driveways in the winter, containing raked leaves in the fall, and not fertilizing in the spring.
- D. In 2014 a marketing campaign was launched by the coalition called "Water from Rain" which included branding educational efforts and printed materials as well as development of visual media to expand outreach efforts to new individuals. A website supporting this effort was developed and is located at www.waterfromrain.org.

1.6.2 Broome County Public Outreach

General public education and outreach provided by Broome County is predominantly provided by the Division of Solid Waste Management (DSWM) and the Broome County Environmental Management Council (EMC). These agencies are partners of the Broome-Tioga Stormwater Coalition and provide services on behalf of the Coalition's MS4 communities.

Using local newspaper advertisement (printed ads, inserts, and leader board ads on their webpage), television advertisements, printed brochures and schedules, as well as specific section links on the County Solid Waste web site, the Solid Waste Management Division has targeted electronics recycling and household hazardous waste (HHW) collection and recycling throughout the County. This public outreach promotes special collections days and locations held by the County Solid Waste Division throughout the year, as well as proper handling and disposal of these wastes (including batteries). The Solid Waste Management Division keeps ongoing records of the type and amounts of HHW collected and shipped and/or recycled.

In addition to electronics and HHW, public education programs and brochures have been developed to address grass recycling, composting, and disposal of prescription drugs and household medical wastes. Information is provided for the public via television advertisement, and in written format at County facilities, on the County web site, and is presented at public education opportunities. The County offers yard waste composters for sale at discounted prices year-round to encourage backyard composting.

Finally, the Solid Waste Management Division provides tours of the County landfill to students and other interested groups highlighting the importance of recycling and collection of hazardous waste to the local environment and surface water resources.

An active and ongoing public outreach program has been developed and implemented by the Broome County Solid Waste Management Division and the future goals include continuing with the program as developed, and adding new resources as the needs arise.

The Broome County EMC is a citizen's advisory board on local environmental matters. They regularly host guest presentations that focus on a variety of topics, including those relevant to stormwater education. Special topics have included a discussion of water management issues associated with flooding and storm

events, the total maximum daily load (TMDL) for the Chesapeake Bay watershed, and sustainability and smart growth, among other topics. These meetings are open to the public and are advertised through local media prior to the event. They also provide an opportunity for any member of the public to bring their concerns about any environmental matters before the board, including those related to water quality management.

The EMC attends a variety of local events as public education opportunities. They distribute materials related to general information about stormwater management and pollution prevention, green infrastructure, and games and activities for elementary educators, among other issues. The EMC developed a brochure entitled “Managing Stormwater at Home” as guidance for homeowners who wish to incorporate green infrastructure onto their properties.

In addition to the EMC and DSWM, the County partners with the Broome County Soil and Water Conservation District (BC-SWCD). They help to educate the farming community through assistance in Agricultural Environmental Management program. They also educate school children by visiting their classrooms to talk about stormwater issues and attending local events where they utilize hand-on activities such as the Enviroscape model. BC-SWCD also purchased storm drain markers to be installed by each MS4 community. When installed they will serve as a reminder to the entire community that pollutants should not be dumped into the storm drain.

Events that DSWM, EMC and BC-SWCD attend include the following: Earth Day Southern Tier Earth Fest, Ross Park Zoo Earth Fest, Broome Community College and Binghamton University Earth Fests, Farm Days, and Waterman Center Earth Fest. The organizations also make efforts to provide educational information at public participation events (see MCM2) such as the Broome County Riverbank Clean-up and the Electronic and Household Hazardous Waste Collection events.

1.6.2.1 Business and Industry

As part of the review process associated with General Municipal Law 239 l, m & n, staff of the Broome County Planning Department review proposed actions that may have intermunicipal or county-wide impacts. Through this process County Planning evaluates the proposed uses associated with these actions. Planning staff make recommendations for best management practices for these businesses based on their anticipated operations. For example, a brochure was developed entitled “How To Develop a Spill Prevention Plan” as advice for businesses dealing with vehicles or other equipment. The document advises them on good housekeeping practices to prevent water quality impacts.

1.6.3 Broome County’s “Public” as a Traditional Non-Land Use MS4 Entity

As stated previously, Broome County’s specific public outreach will also be directed towards county staff who are responsible for operation and maintenance of county facilities and functions, as well as contractors who work on county-sponsored construction projects. With general public outreach and education programs established and running through the Broome-Tioga Stormwater Coalition and the Broome County Division of Solid Waste, this current and updated version of the stormwater management plan establishes goals for MCM-1 directed towards internal education and training, as well as transference of information. As noted in Section 1.2, educational materials for these audiences may be made available at locations including, but not limited to; service area, lobbies or other locations where information is made available to employees; at staff trainings; on the County website; with paychecks; and in employee break rooms.

Broome County staff receives notice of training opportunities through the stormwater coalition and staff utilizes these training opportunities as applicable. Additionally, Broome County currently has a designated County Safety Training Officer, who provides annual training to County staff on spill prevention control and countermeasure training.

1.7 Minimum Reporting Requirements

Because annual reporting of MCM-1 is handled by the Stormwater Coalition and Broome County's "target audience" is somewhat different than other MS4 entities, goals relating to MCM-1 will be specified and reported as part of the County specific annual report and incorporated into MCM's -3, -4, -5, and -6.

At a minimum, Broome County shall report on the following items:

- List education / outreach activities performed for the target audiences and provide any results (for example; number of people attended, amount of materials distributed, etc.).
- Report on effectiveness of established program and/or progress towards meeting new or revised measurable goals which will include items such as:
 - a. education of the target audience regarding the hazards associated with illegal discharges and improper disposal of wastes
 - b. construction site stormwater control training planned and/or completed for both County staff and contractors working on County projects.
 - c. employee pollution prevention / good housekeeping training planned and/or completed as it relates to County facilities and roadway maintenance.
- Maintain records of all internal training activities and participants.

Coalition specific activity elements are described and reported in the BTSC sections of the annual report and maintained on the BTSC web site. County specific activities are included in the individual sections of the annual report for MCM -3, -4, -5, and -6, and in records with the County Department of Public Works.

1.8 Measureable Program Goals:

Measureable goals for MCM-1 include the following (and are reported in MCM-3, -4, -5, and -6):

- A. Maintain the County stormwater webpage and track the number of website hits with the goals of an annual increase in site hits.
- B. Have 100% of County staff trained in applicable portions of the stormwater program. Specific training includes basic erosion and sediment control education, municipal good housekeeping and pollution prevention training, and equipment and/or strategies for stormwater management.
- C. Have distribution of stormwater awareness and IDDE material reach 100% of all County employees by increasing presence in public gathering locations and broadcast emails.

<p style="text-align: center;">Minimum Control Measure 2: Public Involvement and Participation</p>

2.1 Description of Minimum Control Measure

The Public Involvement and Participation measure 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. MCM-2 differs from MCM-1 in that the intent of this MCM is to actively solicit public participation and input, not just raise awareness. Compliance with State and local public notice requirements will be maintained whenever public participation is sought or required. The BMPs for MCM-2 include several 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.

For a traditional non-land use control MS4s such as Broome County, compliance with this MCM requires determining our public (staff, visitors & contractors), and then posting notifications as needed in areas viewable by the public such as common areas, bulletin boards, web sites, etc. It is important that notifications be made at multiple locations to reach all facilities and county entities. This needs to be accomplished in addition to the work that the Broome-Tioga Stormwater Coalition is implementing as a group to meet MCM-2.

2.2 General Permit Requirements

As a minimum, Broome County must develop, implement and enforce a program that:

- A. Complies with the State Open Meetings Law and local public notice requirements when implementing a public involvement and participation program.
- B. Provides the opportunity for the public to participate in the development, implementation, review and revision of the Stormwater Management Program Plan.
- C. Identifies a local point of contact for public concerns regarding stormwater management and compliance with the SPDES General Permit, and publish this contact with telephone number in public outreach information.
- D. Presents the draft annual report in a public information setting. Prior to submitting the final annual report to the Department by June 1st every year, present the draft annual report in a format that is open to the public where the public can ask questions and make comments. For a traditional non-land use control MS4 this condition can be met by making the report available for review on line and then notifying the "public" as to it's location and how to make comments.
- E. Develops, records, periodically assesses, and modifies as needed measureable goals.

- F. Selects and implements appropriate public involvement and participation activities and measureable goals to ensure the reduction of all the pollutants of concern (POCs) in stormwater discharges to the maximum extent practicable (MEP).

2.3 Methodology for Compliance with Permit Requirements

Each MS4 must involve the public in their stormwater program to meet the permit requirements. Certain aspects of these requirements can and have been achieved through the stormwater coalition, such as public review and the comment process for the shared annual report. There are other activities coordinated by the coalition which involve public participation by support or sponsor of watershed stewardship programs such as riverbank cleanup days and storm drain stenciling programs. However, there are also certain compliance activities that must be performed by Broome County as a traditional non-land use control MS4, such as providing a local stormwater point of contact and making this person's contact information available to the public.

2.4 Best Management Practices Implemented, Underway &/or Proposed

2.4.1 Broome-Tioga Stormwater Coalition Public Review of Annual Report

In order to meet the compliance requirements for MCM-2, the BTSC has implemented the following procedures in reference to public involvement and participation:

- A. For joint annual reports compiled by the Coalition, a public meeting is held for attendance by any and all public members within the Coalition. The meeting notice is distributed as a press release within the required timeframe, and is also posted along with the annual report on the Coalition website.
- B. E-mail contact information is always listed on meeting and annual report notices to provide a means of public comment. Comments can also be made via e-mail through the BTSC website.
- C. The BTSC schedules quarterly meetings as needed and meeting notices are distributed via email contact and on the Coalition website. In addition, the BTSC Public Education and Participation Committee set their schedule and advertise / post notices in the same way.
- D. A Notice of Availability is created and distributed to the media and posted on the Coalition website every year which includes all the required information about the annual report, annual report presentation public meeting, and how/when to comment.

2.4.2 Broome County Public Review of Annual Report

Although the County does not have public meetings and notifications separate from those of the Coalition for their annual report, all the listed Coalition activities and notices will also be posted and reported on the Broome County website. Stormwater reporting is included under both DPW-Engineering and Planning and Economic Development pages on the County website. These sites include the following information:

- A. The Broome County local point of contact

- B. Public meeting announcements and information
- C. Forum for questions and comments relative to annual reports and/or the County's SWMP.
- D. Copies of the County's annual reports and most current version of the SWMP.

2.4.3 Coalition and County Public Involvement & Participation Activities

Although not specifically described in the MCM-2 permit compliance requirements, there are a number of different activities used (or planned) by the BTSC and/or the County to get the general public involved and participating in stormwater protection measures throughout the MS4 area and beyond. Ongoing BMPs which specifically involve County participation include the following:

- A. The BTSC members work in partnership to hold several annual events and promote each other's events including stream bank clean-up days, tire collection days, household hazardous waste collections, and household electronics collections.
- B. Some of these events are sponsored specifically by the Broome County Solid Waste Division as noted in the MCM-1 section of this document. Dates for household hazardous waste and electronics collections are advertised and promoted throughout the year and are targeted during times of peak need such as during "spring cleaning".
- C. The Broome County Environmental Management Council (EMC) holds an Annual Riverbank Clean-up. County staff works with the EMC to provide local community groups and organizations with locations that have been identified as hotspots for discarded materials and are safe and accessible. Additionally, county staff works with local municipalities to ensure collected trash is picked up. Community members that participate in the program are educated on the importance of water quality and stormwater management. They are given information about how to deal with toxic substances or items that they may find during the event and are urged to be aware of any potential water quality issues that they may come across.
- D. The Environment Management Council (EMC) and Broome County Soil & Water Conservation District have materials and information for organizations that wish to participate in storm drain stenciling. Instructions for those that are interested in this activity are available on the BTSC website and EMC webpage of the County website.

2.5 Minimum Reporting Requirements

Because annual reporting of MCM-2 is handled by the Stormwater Coalition, goals relating to MCM-2 will be specified and reported as part of the County specific annual report and incorporated into MCM's -3, -4, -5, and -6.

At a minimum, Broome County shall report on the following items:

- Annual report presentation information (including; date, time, and attendees), and/or information about how the annual report was made available for comment.

- Comments received, either at the public information meeting or through the websites, and intended responses. This will be done as an attachment to the annual report if applicable.
- A summary of public involvement activities (what, where, when and the number of participants).
- Report on the effectiveness of the public outreach program, BMPs and the measureable goal assessment.

2.6 Measureable Program Goals

Measureable goals for MCM-2 include the following (and items not listed as being done by the coalition are reported in MCM-3, -4, -5, and -6 for the County):

- A. Make the annual report available to the public for review and hold a public meeting to present the report (done by the coalition and included on the County's website).
- B. Keep a record of the number of comments received regarding the annual report and the published SWMP.
- C. Record and monitor the number of complaints submitted through the reporting hotline or email.
- E. Continue to keep a record of the amount of material being collected and the number of volunteers/groups that participate in annual stream cleanup and collection events (done by the coalition).

Minimum Control Measure 3: Illicit Discharge Detection and Elimination

3.1 Description of Minimum Control Measure

The Illicit Discharge Detection and Elimination (IDDE) Minimum Control Measure consists of BMPs that focus on the detection and elimination of illicit discharges located within the MS4 boundaries. This includes any sources of non-stormwater flow reaching the separated storm sewer conveyance system. The BMPs describe outfall mapping and update procedures; the regulatory mechanism that will be used to effectively address illicit discharges; enforcement procedures and actions to ensure that the regulatory mechanism is implemented; the dry weather screening program including procedures for tracking down and locating the source of any illicit discharges; procedures for identifying and locating priority areas; and procedures for removing the source of the illicit discharge.

3.2 General Permit Requirements

As a minimum, Broome County must develop, implement and enforce a program that:

- A. Detects and eliminates illicit discharges into the MS4 from County-owned facilities and infrastructure, as well as detects illicit discharges into the MS4 from non-County sources and eliminates these discharges or notifies the appropriate municipality for follow-up.
- B. Develops and maintains a map of all outfalls within Broome County's jurisdiction in the urbanized area showing:
 - the location of all outfalls and the names and locations of all surface waters of the State that receive discharges from those outfalls,
 - the preliminary boundaries of the County's storm sewersheds using GIS or other tools, even if they extend outside the urbanized area to facilitate track-down of illicit discharges,
 - the County's storm sewer system for storm sewer lines surveyed during an illicit discharge track-down or when grant funds are made available.
- C. Field verifies outfall locations.
- D. Conducts an outfall reconnaissance inventory, as described in the EPA publication entitled "Illicit Discharge Detection and Elimination: A Guidance Manual for Program Development and Technical Assessment" addressing every outfall within the County's jurisdiction in the urbanized area at least once every 5 years with reasonable progress each year.
- E. Maps new outfalls as they are constructed or discovered within the County's jurisdiction in the urbanized area and additionally designated areas.
- F. Prohibits / addresses, through allowable regulatory mechanisms, illicit discharges into the MS4 and implements appropriate enforcement procedures and actions as applicable for a traditional non-land use control MS4.

- G. Develops and implements a program to detect and address non-stormwater discharges, including illegal dumping, to the MS4. This program must include:
 - the procedures for identifying priority areas of concern for the IDDE program (geographic, audiences, or otherwise);
 - the description of priority areas of concern, available equipment, staff, funding, etc.;
 - the procedures for identifying and locating illicit discharges; and
 - the procedures for documenting actions taken.
- H. Informs the public of the hazards associated with illegal discharges and the improper disposal of waste.
- I. Addresses the categories of non-stormwater discharges or flows listed in Part I.A.2 of the General Permit as necessary, and maintain records of notification.
- J. Develops, records, periodically assesses, and modifies (as needed) the measurable goals.
- K. Selects and implements appropriate IDDE BMPs and measurable goals to ensure the reduction of all POCs in the stormwater discharges from County facilities and infrastructure to the maximum extent practicable.

3.3 Methodology for Compliance with Permit Requirements

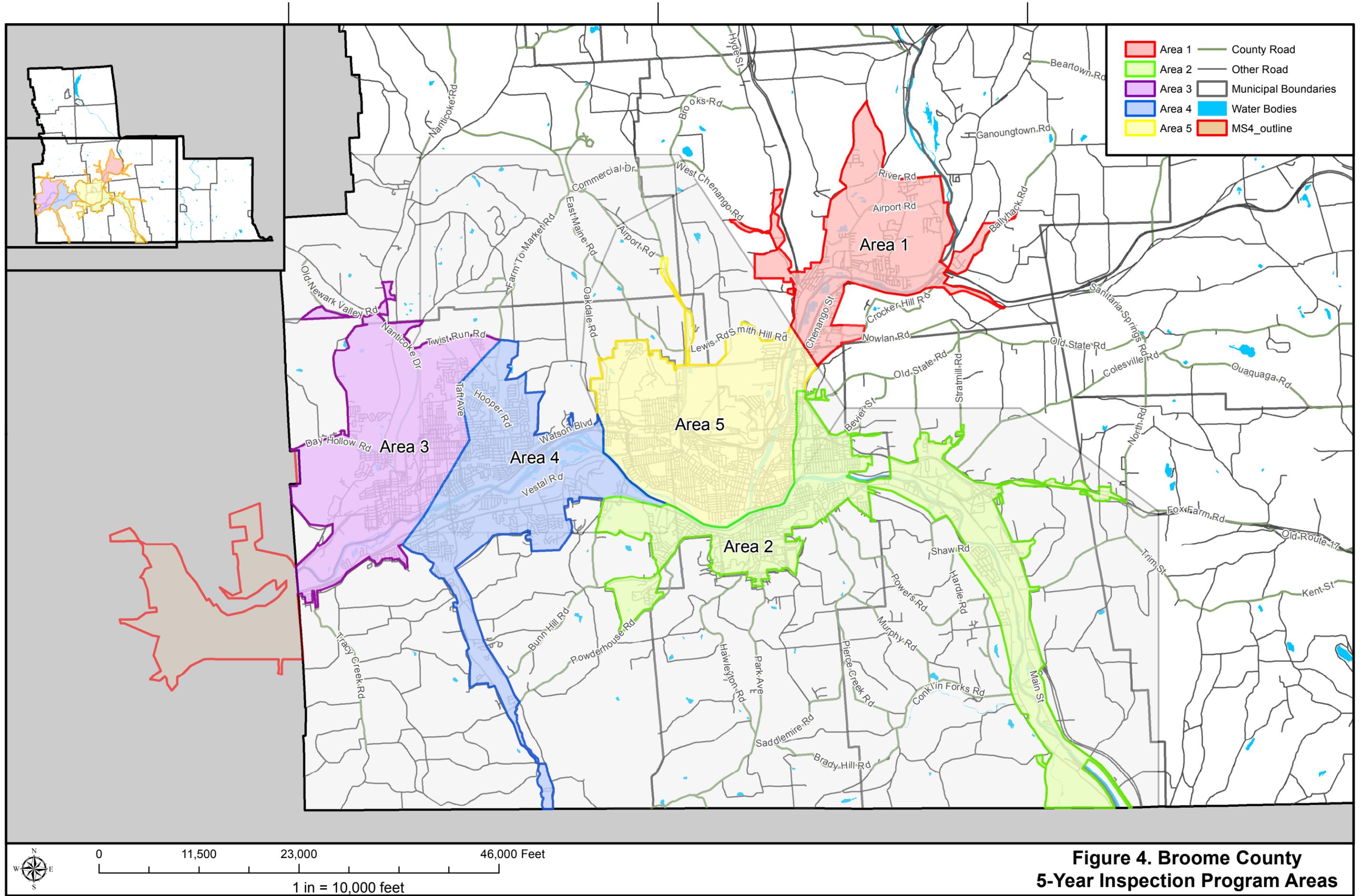
As a traditional non-land use MS4, Broome County’s approach for compliance to MCM-3 will be directed at the County public in general by providing public information and education as well as hotlines to report illegal dumping and illicit discharges. Additionally, stormwater outfalls under the jurisdiction of the County associated with facilities, properties, and roadways will be mapped and monitored. Illicit discharges identified either by outfall inspection or public notification will be reported to individual municipalities or will be traced to the source within County infrastructure and/or facilities in the County-controlled MS4 area. Illicit discharges identified within the County MS4 jurisdiction will be documented and eliminated.

3.4 Best Management Practices Implemented, Underway and/or Proposed

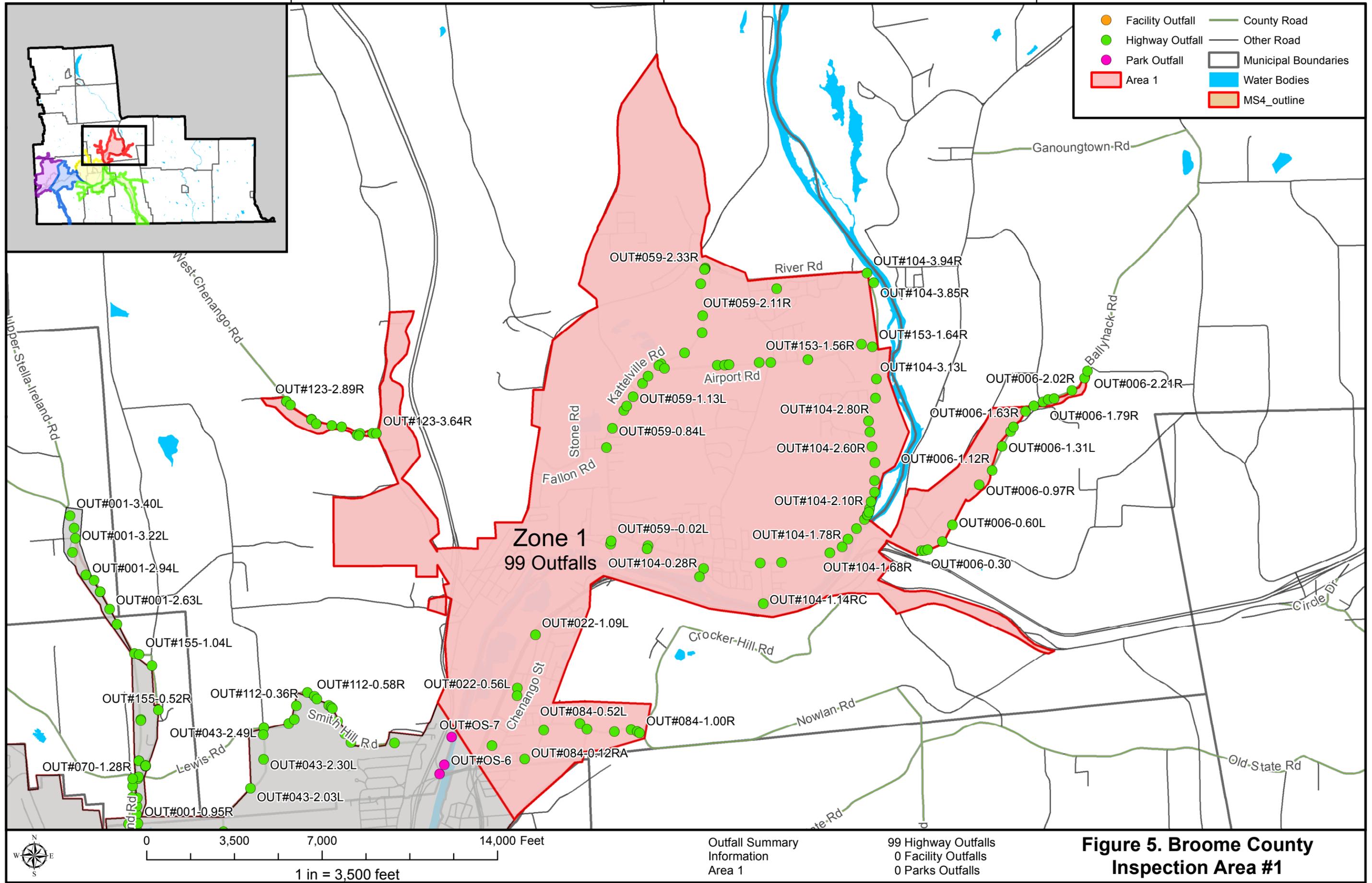
3.4.1 Outfall Mapping, Verification, and Inspection

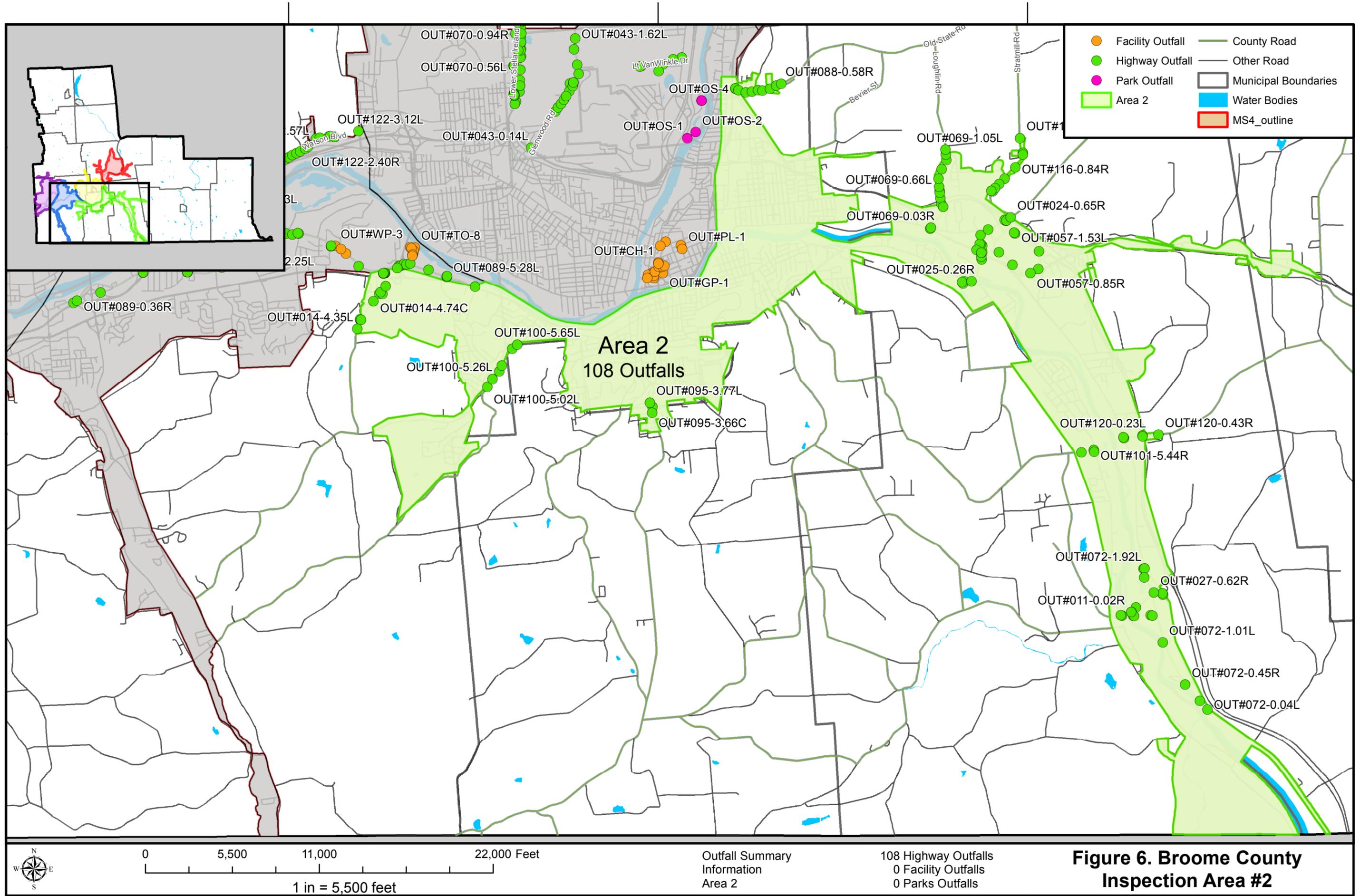
Outfall mapping within the County MS4 jurisdictional area has been mapped and is shown in Figures #4 through #9. Figure #4 illustrates the inspection regions (Areas 1-5), and Figures #5-#9 include outfall maps of each individual area designated on Figure 4. These figures include only the outfall mapping that is under Broome County control. By definition, these outfalls include:

“... any point where a municipally owned and operated separate storm sewer system discharges to either surface waters of the State or to another MS4. Outfalls include discharges from pipes, ditches, swales, and other points of concentrated flow. However, areas of non-concentrated (sheet) flow ... are not considered outfalls and should not be identified as such ...”



**Figure 4. Broome County
5-Year Inspection Program Areas**





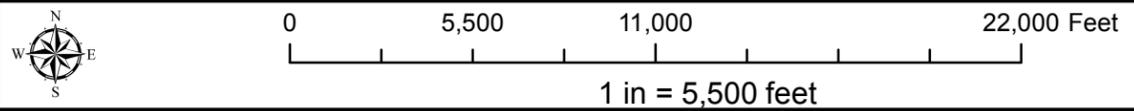
- Facility Outfall
- Highway Outfall
- Park Outfall
- Area 2
- County Road
- Other Road
- Municipal Boundaries
- Water Bodies
- MS4_outline

Area 2
108 Outfalls

Outfall Summary
Information
Area 2

108 Highway Outfalls
0 Facility Outfalls
0 Parks Outfalls

**Figure 6. Broome County
Inspection Area #2**



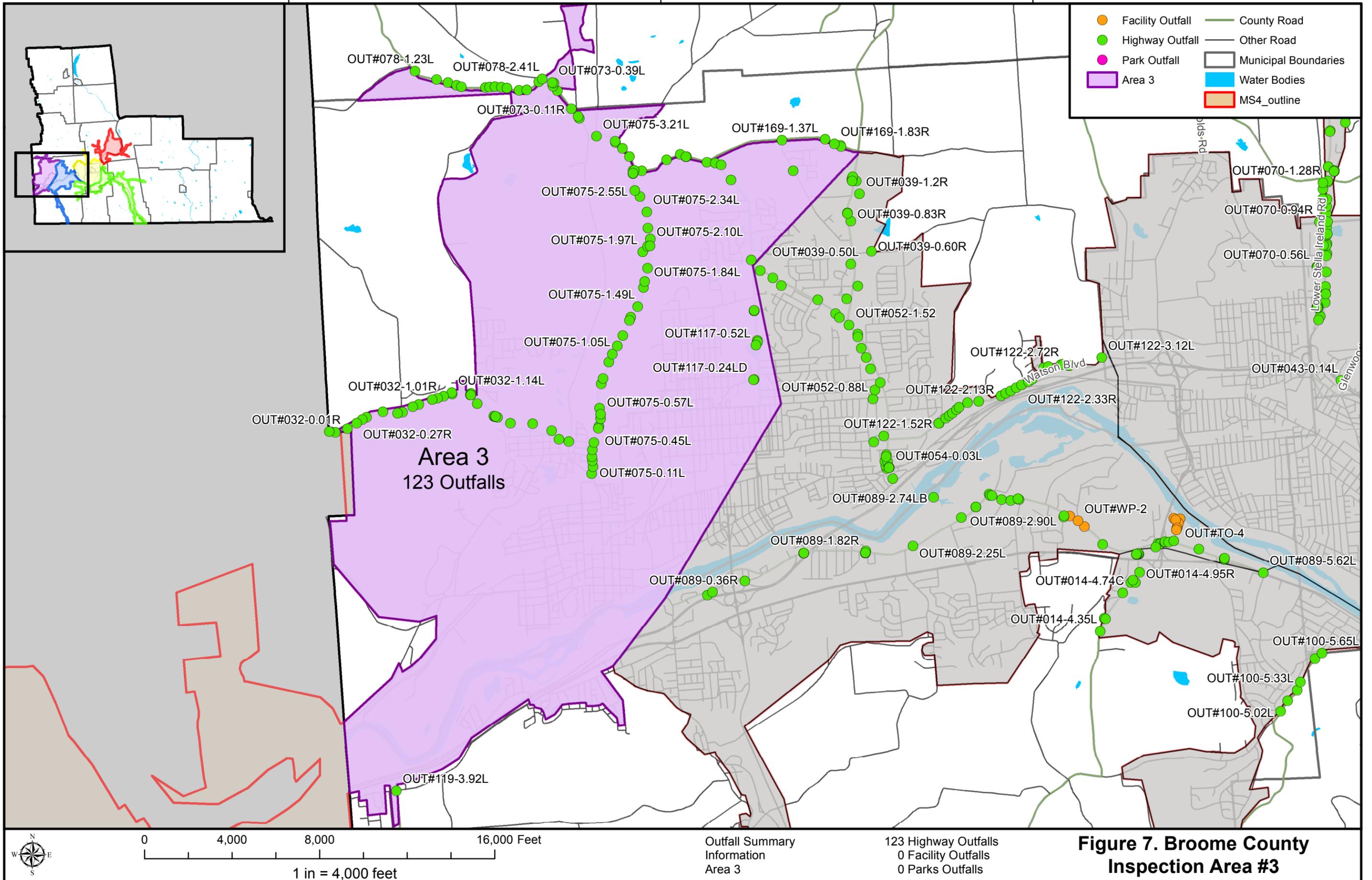


Figure 7. Broome County Inspection Area #3

Outfall Summary
Information
Area 3
123 Highway Outfalls
0 Facility Outfalls
0 Parks Outfalls

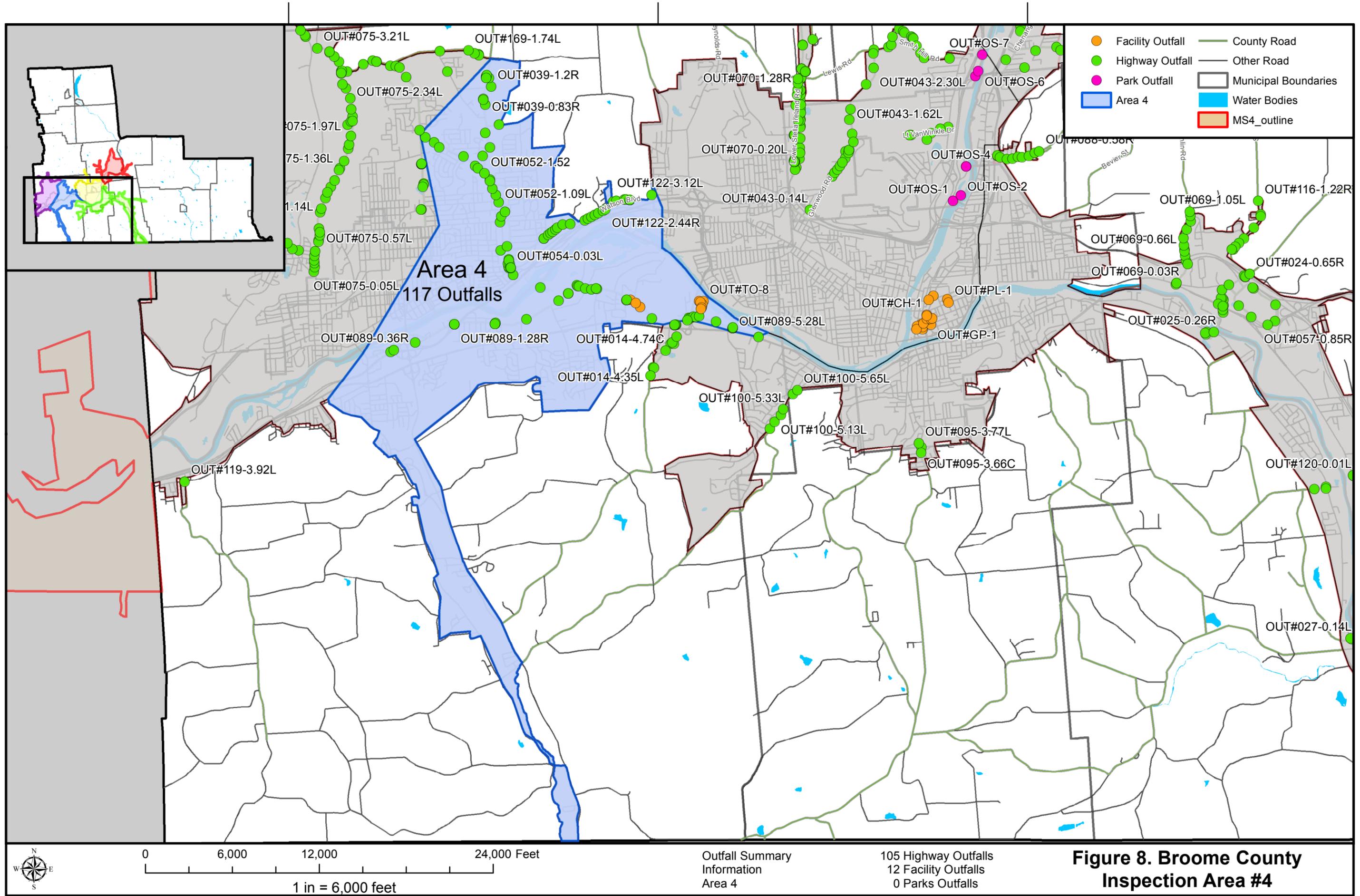
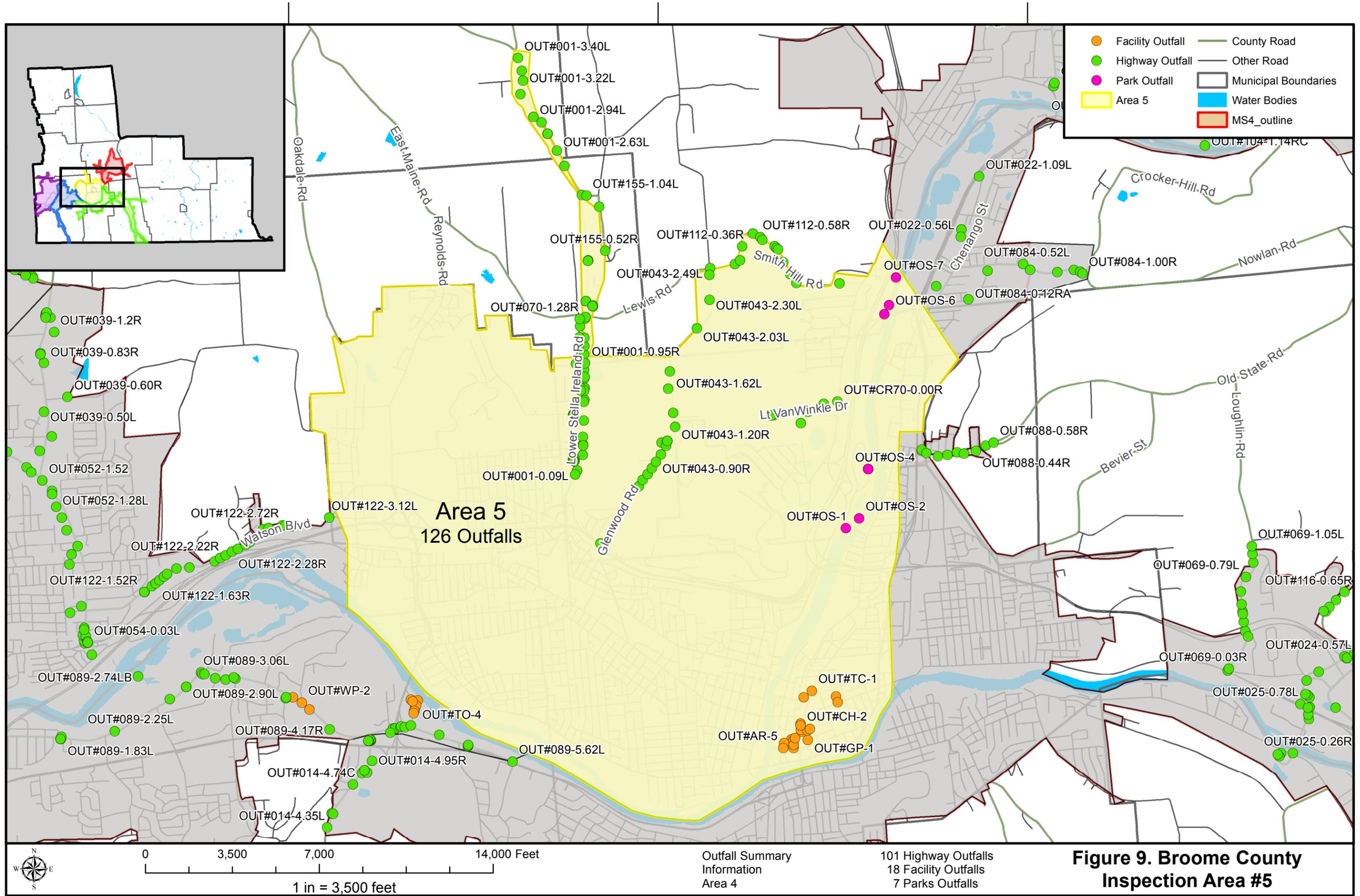
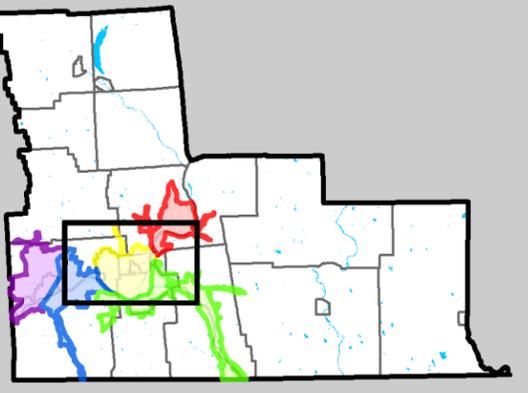


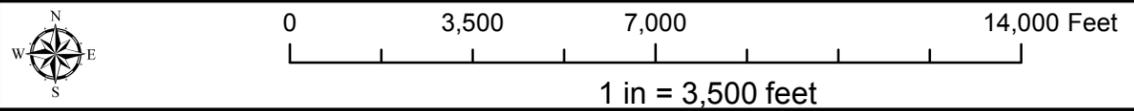
Figure 8. Broome County Inspection Area #4



- Facility Outfall
- Highway Outfall
- Park Outfall
- Area 5
- County Road
- Other Road
- Municipal Boundaries
- Water Bodies
- MS4_outline



Area 5
126 Outfalls



Outfall Summary
Information
Area 4

101 Highway Outfalls
18 Facility Outfalls
7 Parks Outfalls

**Figure 9. Broome County
Inspection Area #5**

Although outfall mapping has been completed within the Broome County MS4 boundaries, these mapped outfalls are reviewed and confirmed on an ongoing basis during the annual reconnaissance surveys. To date **573** outfalls have been identified under control of the Broome County MS4 program. Each year as part of the established outfall reconnaissance survey, 20% of the mapped outfalls are inspected. The intent of this program is to evaluate every outfall at least once during every 5-year period. Each outfall has been assigned a unique identifier which is included in the County GIS system and used for field inspection and record keeping.

In addition to the annual outfall inspections conducted by DPW-engineering staff, ongoing work as part of this BMP includes the following:

- A. Ongoing mapping of any new outfalls along County roadways and at County facilities. Part of this effort includes completion of surveyed base plans of County parks and County facilities which identify stormwater features and outflows off the property.
- B. Installation of drain markers at catch basin locations as applicable and replacement of these as required. Depending on the type of CB, some of these markers are simply stenciled markers.
- C. Continued identification and mapping of drainage systems and sewersheds as they run through and across County right-of-ways and properties.

3.4.2 Regulatory Mechanism to Prohibit and Detect/Eliminate Illicit Discharges:

Broome County has investigated the adequacy and/or suitability of existing regulatory controls available to the County to prohibit and detect/eliminate illicit discharges into the County owned and maintained stormwater conveyance system. It was determined that the following existing County Codes: Sanitary, Solid Waste – Dumps and Dumping, and Parks and Recreation Areas address illicit dumping to some extent, but are not sufficient to enable the County to adequately prohibit and eliminate illicit discharge into the MS4. As a result, Broome County is in the process of enacting additional legislation to address the gaps in the current rules and regulation.

3.4.3 Program to Detect and Eliminate Non-Stormwater Discharges:

The County program to detect and eliminate illicit discharges into the County owned MS4 is a combined effort involving the following County departments: DPW - Engineering Division, DPW - Highway Division, DPW - Parks and Recreation Department, DPW - Buildings and Grounds Division, DPW – Solid Waste Division, County Health Department, and the Environment Management Council. The Engineering Division has become the central clearing house for issues related to IDDE, with the Health Department handling issues related to sanitary code (septic system discharge). Because Broome County is a traditional non-land use MS4 the focus of our program related to addressing illicit discharge is primarily focused on non-stormwater discharges at our parks and facilities, which can then be addressed and/or handled internally. A more detailed procedure is included in our “Outfall Field Screening Manual”.

3.4.4 Illicit Discharges – General Public Information:

One of the most important aspects of the Illicit Discharge portion of MCM-3 is raising public awareness and understanding of the hazards associated with illicit and/or illegal discharges and why elimination of them is critical to the protection of our natural water resources. Part of this public education is an understanding of the role that everyone can play in identifying and eliminating these potential sources of pollutants. From a County standpoint, this also includes educating our staff; our equipment operators,

our transit drivers, our custodial workers, and our park technicians about the potential sources of illicit discharge and how to identify and avoid them. This emphasis on public education and participation is cross referenced in the goals identified in MCM-1 and MCM-2, as well as good housekeeping guidelines discussed with MCM-6. New educational material continues to be developed to provide information and direction relative to eliminating and reducing pollution, including illicit discharges.

3.4.5 Exempt Non-Stormwater Discharges (Part I.A.2):

Exempt non-stormwater discharges listed and identified in Part I.A.2 of the General Permit have been included in the County IDDE program and public education and outreach efforts. Special attention has been paid to minimize these types of non-stormwater discharges from all County facilities, parks, and/or departments which may be currently discharging exempt non-stormwater flows. Ongoing efforts related to this program goal include detailed site inspections performed by technical staff for self-assessment reports of all County properties to provide consistent reviews that program goals are being achieved (this is cross referenced with efforts noted in MCM-6).

3.5.6 Illicit Discharge – Hotlines and Follow-Up

The stormwater coalition and County have developed a notification system to help identify illicit discharges and illegal dumping through public hotlines and Internet contact as follows:

- A. Hotline through the County Health Department to report illicit discharges. Currently this hotline mainly takes reports related to septic system discharges / issues.
Hotline Number is: 607-778-2887
- B. Hotline through the County DPW Security Department to report illicit dumping.
Hotline Number is: 607-778-DUMP
- C. Availability of a fillable “Report a Complaint” form on the Broome County website available to all residents, which is emailed directly to the County program contact person.

Illicit discharge information that comes into the county through the hotlines or web notification is handled in one of three ways. If the reported discharge is related to septic system discharges, then the County Health Department addresses this per County code. If the reported discharge is not within the County’s jurisdictional MS4, then the complaint is immediately forwarded to the local municipality having jurisdiction for follow-up. If the reported discharge is within the County MS4 or identified at one of the mapped County outfalls, then a DPW staff member from Engineering will investigate the complaint as follows:

- A. If an illicit discharge is located within a County right-of-way, it will be traced back to its source and either addressed internally or directed to the municipality having jurisdiction if the source is outside County jurisdictional MS4.
- B. If an illicit discharge is located at a County facility, park, or other property, the source will be located and addressed with the facility manager as soon as practicable. Every effort will be made to eliminate the source of the illicit discharge immediately upon identification. If the source of the illicit discharge is a “good housekeeping” issue, additional staff education will be implemented and/or the good housekeeping document will be amended if needed.

3.5 Minimum Reporting Requirements

At a minimum, Broome County shall report on the following items:

- The number and percent of outfalls mapped.
- The number of illicit discharges detected and eliminated.
- The percent of outfalls for which an outfall reconnaissance inventory has been performed.
- The status of the system mapping.
- Activities to and results from informing the public of hazards associated with illegal discharges and improper disposal of waste.
- Certification that the regulatory mechanism enacted to prohibit illicit discharges is equivalent to the State's model IDDE local law.
- Report on effectiveness of the program including best management practices and an assessment of measureable goals.

3.6 Measureable Program Goals

Measureable goals for MCM-3 include the following:

- A. To verify that 100% of County-owned outfalls have been mapped, documented, and inventoried; including those at County-owned facilities (MCM-3A).
- B. To complete an outfall reconnaissance inventory of 20% of mapped County-owned outfalls every year to meet the target of 100% in 5 years. And, to record and track any issues detected including the location and action taken (MCM-3B).
- C. To enact appropriate legislation to address any deficiencies in the current County Code to address and handle illicit discharge detection and elimination (MCM-3C).
- D. To install (or reinstall) markers on 100% of the County-owned storm drain CB's and DI's within the MS4 area; to be completed each year within the areas of dry-weather inspections (MCM-3D).
- E. To establish a dedicated IDDE reporting system which is advertised, and to create a centralized tracking and reporting of IDDE complaints with information related to follow-up (MCM-3E).
- F. To educate and inform 100% of Broome County employees and staff about IDDE's; what they are, how to report them, and how to address them (MCM-3F).
- G. To inform and educate businesses and industries about the negative environmental impacts of illegal dumping as well as chemical and hazardous waste spills, and to encourage the use of BMP's to prevent and control illicit discharges through the County 239 review process (MCM-3G).

<p style="text-align: center;">Minimum Control Measure 4: Construction Stormwater Management</p>

4.1 Description of Minimum Control Measure

The Construction Stormwater Management, Minimum Control Measure 4 consists of BMPs that focus on the reduction of pollutants to the MS4 from construction activities that result in land disturbance of greater than or equal to one acre. The 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 more than the one-acre threshold. Although runoff from construction sites may contain any number of pollutants, by far the main pollutant of concern is sediment. Sediment runoff rates from construction sites are typically 10-20 times greater than those from agricultural land, and as much as 1000-2000 times greater than those from forested lands. The BMPs for this MCM describe the development of a regulatory mechanism that provides authority to require erosion and sediment controls at County owned and/or controlled sites and projects; 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 wastes such as discarded building materials, concrete truck washout, chemicals, litter and sanitary wastes at the construction site; procedures for receipt and consideration of information submitted by the public; and procedures for site inspection and enforcement of control measures.

As a traditional non-land use MS4, the ability of Broome County to regulate construction site runoff control and stormwater management applies only to projects conducted for the County at County-owned sites. Individual municipalities within the County address construction site stormwater control for privately-owned and managed projects. County involvement with these projects is through the 239 review process, but is in an advisory capacity only.

4.2 General Permit Requirements

As a Minimum, Broome County must develop, implement and enforce a program that:

- A. Provides equivalent protection to the NYS SPDES General Permit for Stormwater discharges from County controlled construction activities.
- B. Addresses stormwater runoff from County construction activities that result in land disturbances of greater than or equal to one acre (and from construction activity disturbing less than one acre if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more).
- C. Incorporates mechanisms for construction runoff requirements from new County development and redevelopment projects to the extent allowable under State and local law that meet the State's most current technical standards.
- D. Allows for sanctions against contractors under contract to the County to ensure compliance to the extent allowable by State law.

- E. Describes procedures for receipt and follow-up on complaints or other information submitted by the public regarding construction site stormwater runoff from County owned and/or managed projects.
- F. Educates construction site operators, design and inspection engineers, county staff and other individuals to whom these regulations apply about the construction requirements for County projects, including procedures related to submission of SWPPP's, construction site inspections, and other procedures associated with control of construction stormwater.
- G. Ensures that construction site contractors (and inspection engineers) have received erosion and sediment control training, as defined in the SPDES general permit for construction, before they do work on County managed and/or owned projects.
- H. Establishes and maintains an inventory of active County construction sites, including the site location and contractor contact information.
- I. Develops, records, periodically assesses, and modifies (as needed) measurable goals.
- J. Selects and implements appropriate construction stormwater BMPs and measureable goals to ensure the reduction of all POCs in stormwater discharges to the maximum extent practicable.

4.3 Methodology for Compliance with Permit Requirements

As a traditional non-land use MS4, Broome County is unable to adopt a local law regulating Stormwater Pollution Prevention and Erosion and Sediment Control in accordance with the state local law because the County does not regulate land use. However, the County can establish a policy that will enforce a program which reduces pollutant runoff from construction sites associated with County owned and managed projects, including review of SWPPP's, inspection of construction sites, and enforcement of permit requirements on contractors that do not comply with the regulations. This policy will utilize the County's regulatory mechanism of contracts, bid specifications and requests for proposals to achieve standards of protection equivalent to the NYS SPDES General Permit for Stormwater. The Broome-Tioga Stormwater Coalition provides and sponsors NYSDEC erosion control training to developers, owners, design & inspection engineers, and contractors to meet this program goal. This training is also provided to county staff responsible for inspecting construction sites, enforcing permit requirements, and doing any type of construction and/or earth disturbance on County projects. For consistency, the requirements of this MCM have been extended to the boundaries of the entire County regardless of the actual MS4 boundary. 100% of Broome County projects have the same requirements under this program.

4.4 Best Management Practices Implemented, Underway and/or Proposed

4.4.1 Regulatory Mechanisms used by the County

Broome County utilizes bid and contract documents to meet MCM-4 permit requirements at County-controlled construction sites meeting the "greater than or equal to 1-acre of land disturbance" criteria. Most of the County's larger projects are designed by consultants so the following criteria are followed:

- A. Consultant contracts require engineering firms to develop a SWPPP as part of any project development, approval and permitting process in accordance with the most current NYS-DEC stormwater management practices and BMPs.
- B. Developed SWPPP's are reviewed by DPW trained engineering staff and become a part of the bid and contract documents for the project. The standard NYSDEC SWPPP review checklist is used for review purposes (see form in Appendix B).
- C. If a SWPPP is required for a County project, the SWPPP is incorporated into and made a part of the bid and contract documents, and the Contractor is required to provide a trained and certified erosion and sediment control person on site to monitor the SWPPP inspection and reporting requirements. Additionally, this person is required to be on site during all soil disturbance activities. Copies of personnel certifications are required by contract like other licensed trades.
- D. Consultant construction inspection staff as well as county staff associated with these construction projects are required to be either licensed professional engineers, or trained and certified in erosion and sediment control principals and practices.
- E. Bid and contract documents allow for inspection staff to stop work for non-compliance with contract SWPPP's.

Although most of the County's projects do not meet or exceed the 1-acre threshold for SWPPP requirements, the County encourages similar methods and use of erosion and sediment control BMP's for all construction work under County jurisdiction. Many of our maintenance and repair projects are near streams and other water bodies which require compliance with state and federal nationwide permits which have clear requirements for natural resource protection. In these cases, permit requirements are always made a part of every construction contract and stipulations of these permits are included in construction inspection requirements for both consultant and county staff.

4.4.2 Erosion and Sediment Control Training

The NYSDEC 4-hour Contractor Erosion and Sediment Control Training is sponsored by the Broome-Tioga Stormwater Coalition several times each year as needs dictate. This training is available to contractors and consulting staff; however, Broome County has established the following mandatory staff training guidelines:

- A. County engineering staff (non-PE's) who work with construction projects or other infrastructure maintenance projects are all required to take the erosion and sediment control training and keep their certifications current.
- B. County Highway Division superintendents and field crew leaders are all required to take the erosion and sediment control training and keep their certifications current.
- C. Other County Divisions and Departments that have staff who are required to monitor any type of stormwater SWPPP's at facilities and/or on construction sites are required to take the erosion and sediment control training and keep their certifications current.

4.4.3 Internal BMPs for County Repair and Maintenance Work:

As mentioned above, it is a goal of Broome County to utilize erosion and sediment control BMPs for all County repair and maintenance work. This includes everything from street sweeping and ditch maintenance to culvert replacement and road rehabilitation. Along these lines we have and utilize a catalog of standard erosion and sediment control details with both our internal construction crews as well as with our term contractor(s). As part of the ongoing effort to incorporate BMPs into our everyday maintenance and repair work, and in coordination with the ongoing efforts to develop comprehensive Pollution Prevention and Good Housekeeping Guidelines for all County facilities and departments, we have reviewed our standard procedures and amended them to incorporate changes necessary to achieve BMPs in this type of work.

4.4.4 Inventory and Tracking of Active County Construction Sites

A county project spreadsheet is maintained by the Broome County DPW – Engineering Division which tracks active County construction sites that fall under the criteria of MCM-4 (greater than or equal to 1-acre of disturbance). This spreadsheet includes project name, type of project, project location, start date, contractor name, and end date. Since the County does so few projects which are within the jurisdiction of MCM-4 (>1-acre of disturbance), this project tracking spreadsheet has been amended to include all active construction under the County's jurisdiction which include earth disturbance of any type.

4.4.5 Public Input – Addressing and Tracking

Calls and emails from the public related to construction site issues (typically erosion and/or sedimentation concerns) are directed to the Department of Public Works (either Highways or Engineering). The procedures established to address these concerns are as follows:

- A. If the project of concern is not a County project, then the local municipality will be notified immediately for follow-up.
- B. If the project of concern is a County project, a DPW staff member from Highways or Engineering will conduct a site inspection within 24-hours of the complaint and will then follow-up with the Contractor to address whatever issues / problems are discovered.
- C. A formal record is compiled by the Engineering Division including any public complaints lodged relative to construction site erosion or other issue which may impact the MS4 permitted area, the nature of the complaint, and how the complaints were addressed (and by whom).

4.4.6 239 Review Process for Advisory Input into Local Projects

As noted previously, Broome County's classification as a traditional non-land use MS4 limits our jurisdictional responsibility to regulate construction site runoff from any private or municipally owned projects. However, the County does review projects that meet the criteria set forth in General Municipal Law 239 l, m & n including those projects within 500-feet of County owned right-of-ways and/or properties/facilities. Projects are routed to DPW staff for review of stormwater measures and SWPPP's as applicable. Advisory comments are provided to local boards regarding stormwater BMPs and proposed erosion/sediment control measures on projects reviewed by DPW.

4.5 Minimum Reporting Requirements

At a minimum, Broome County shall report on the following items:

- Number and types of sanctions employed by the County.
- Status of the regulatory mechanism – to certify that mechanisms will assure compliance with NYS SPDES permit for stormwater discharges from construction activities.
- Percent of active County construction sites inspected once.
- Number of County construction sites authorized for disturbance activities of one or more acres.
- Report on the effectiveness of the program, BMPs, and measurable goals.

4.6 Measureable Program Goals

Measureable goals for MCM-4 include:

- A. To assure that 100% of County Contracts, both with consultants and with contractors include appropriate erosion control language - either requiring design considerations from consultants or construction considerations from contractors. This includes SWPPP's and other environmental permits included in the bid documents as part of the legal contract, and language which allows inspectors to stop work if projects are in non-compliance. (MCM-4A)
- B. To assure that 100% of County work with SWPPP's have a contractor with appropriately trained staff (NYSDEC Erosion Control Certified), that a copy of the certification be provided prior to start of work, and that this trained person be on site during all earth moving operations. (MCM-4B)
- C. To assure that 100% of inspectors on 100% of County projects are either P.E.'s, CPESC's or trained and certified in erosion and sediment control. (MCM-4C)
- D. To have 100% of County staff who are involved with earth moving and construction types of projects for the County complete the 4-hour erosion and sediment control training for contractors. This includes (at a minimum), County Highway Superintendents and Field Crew chiefs who are responsible for directing construction activities. (MCM-4D)
- E. To track and inspect 100% of County sponsored projects for erosion and sediment control compliance at least once, regardless of whether the project requires a SWPPP. (MCM-4E)
- F. To log and track 100% of complaints / reports coming into the County related to erosion and/or sedimentation issues, and tracking actions taken and/or follow-up. (MCM-4F)
- G. To utilize the 239-review process for site plan and development review to incorporate consideration of potential water quality impacts and to ensure consistency with erosion and sediment control criteria in general, and potential impacts to County owned properties and infrastructure specifically. (MCM-4G)

<p style="text-align: center;">Minimum Control Measure 5: Post-Construction Stormwater Management</p>
--

5.1 Description of Minimum Control Measure

The Post-Construction Stormwater Management Minimum Control Measure consist of BMPs 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 also includes projects of less than one acre that are part of a larger common plan of development that discharges stormwater into the MS4. The BMPs describe structural and/or non-structural practices, the internal regulatory mechanisms that will be used to address post-construction runoff from new and redeveloped County projects, and the internal procedures to assure long term operation and maintenance of implemented BMPs. MCM-5 also requires regulated MS4s to identify water quality problems and implement stormwater retrofits to address these problems.

5.2 General Permit Requirements

As a Minimum, Broome County must develop, implement, and enforce a program that:

- A. Provides equivalent protection to the NYS SPDES General Permit for Stormwater Discharges from County controlled construction activities.
- B. Addresses stormwater runoff from new and re-developed County construction activities that result in land disturbances of greater than or equal to one acre (and from construction activity disturbing less than one acre if that construction activity is part of a larger common plan of development or sale that would disturb one acre or more).
- C. Incorporates enforceable mechanisms for post-construction runoff controls from new and re-developed County projects to the extent allowable under State and local law that meet the State's most current technical standards.
- D. Includes a combination of structural and/or non-structural management practices that will reduce the discharge of pollutants to the maximum extent practicable (per standards defined in the most current version of the NYS Stormwater Management Design Manual). In the development of environmental plans (watershed plans, open space preservation plans, local laws, etc.), the County must incorporate principals of Low Impact Development (LID), Better Site Design (BSD), and other Green Infrastructure practices. In addition, the County must consider natural resource protection, reduction of impervious area, maintenance of natural hydrologic conditions, and buffers for protection of environmentally sensitive areas.
- E. Establishes and maintains an inventory of post-construction stormwater management practices associated with County projects and facilities including (1) location of the practice, (2) type of practice, (3) maintenance needed per design permitting and documentation, (4) dates / types of inspection and maintenance performed, and (5) department and/or staff responsible for inspection and maintenance.

- F. Ensures adequate long-term operation and maintenance of management practices by identified in inventory, including inspection by trained staff, assessment to ensure that the practices are performing properly, and appropriate record keeping documenting the O&M program per items identified in the maintenance requirements provided in the most current version of the NYS Stormwater Design Manual.
- G. Develops, implements, and provides adequate resources for a program to inspect County development and re-development sites by trained staff and to enforce and employ sanctions.
- H. Develops, records, annually assesses and modifies (as needed) measurable goals.
- I. Selects and implements appropriate post-construction stormwater BMPs and measurable goals to ensure the reduction of all POCs in stormwater discharges to the maximum extent practicable.

5.3 Methodology for Compliance with Permit Requirements

As a traditional non-land use MS4 entity, Broome County is unable to adopt a local law regulating the design and management of post-construction stormwater pollution prevention measures in accordance with the state local law. However, the County can establish a policy that will enforce a program which reduces pollutant runoff from both newly and re-developed County projects / sites as well as examining water quality problems and potential retrofits to address these problems. This policy will utilize the County's regulatory mechanism of contracts and bid specifications to implement these measures into County projects and to examine retrofits in redevelopment and/or maintenance projects. Various departments and divisions will be given the staff training and responsibility for inspection and proper operation and maintenance of permanent post-construction BMPs to ensure adequate long-term management and operation at County facilities. As of the issuance of the general permit in May 2010, the requirements of this MCM now extend to the boundaries of the entire County regardless of the extent of the urbanized area.

5.4 Best Management Practices Implemented, Underway and/or Proposed

5.4.1 Inventory of Post-Construction Stormwater Management

Broome County has committed to incorporating permanent BMP stormwater protection measures in all new and redevelopment projects which meet the general permit requirements and are under the direction and control of the County, to address water quality issues within the MS4 to the maximum extent practicable. This includes both structural and non-structural practices in accordance with current NYSDEC stormwater requirements and regulations. This commitment includes incorporation of permanent erosion and sediment control measures, BMP stormwater management features, and post-construction SWPPP maintenance of these features. An inventory of County owned and maintained post-construction stormwater management facilities is included in Appendix C.

5.4.2 Inspection Program for BMP Practices at County Facilities

Where permanent post-construction BMPs have been constructed within County MS4 jurisdiction, the following program for inspection, operation and maintenance has been (or will be for future practices) put in place:

- A. A practice specific O&M plan will be developed from the project SWPPP (and supplemented from the most current version of the NYS Stormwater Design Manual) which details how to inspect, operate, and maintain the stormwater facility.
- B. In addition to customized inspection procedures, this plan will include inspection report forms individualized to assist with identifying any problem or issues that must be repaired and/or adjusted.
- C. Each plan will identify the department and staff member responsible for inspection, the frequency of required inspections, and reporting procedures should any deficiencies be found.

Each responsible department, division, or facility will be accountable for tracking and record keeping, including corrective measures taken (if needed). The DPW-engineering division will be responsible for maintaining a master file of all applicable projects and/or measures for which individual O&M plans have been developed, and will scan and electronically file all applicable records on an annual basis (as of March 1st, annually).

5.4.3 Facility Maintenance O&M Training

When any new post-construction stormwater management practices are installed and an O&M plan developed as described above, DPW-engineering staff will provide the responsible department and/or staff member with individualized training at the time of project completion and turn-over.

5.4.4 County Stormwater Management Planning

Broome County's long range planning to address and deal with regional clean water initiatives and post-construction stormwater management issues includes ongoing project identification within the newly revised County Hazard Mitigation Plan, as well as within the County Comprehensive Plan (currently under revision). It is anticipated that the revised comprehensive plan will identify suggested BMPs to be recommended at redevelopment areas throughout Broome County including features such as green infrastructure, low impact development, and better site design. The plan will also address related issues of County-owned infrastructure, open space preservation and water resources management.

5.5 Minimum Reporting Requirements

At a minimum, Broome County shall report on the following items:

- The number and type of sanctions.
- The number and type of post-construction stormwater management practices implemented at County facilities and / or projects.
- The number and type of post-construction stormwater management practices inspected at County facilities and / or projects.
- The number and type of post-construction stormwater management practices maintained at County facilities and / or projects.

- The status of the regulatory mechanism to assure compliance with the NYS SPDES Permit for Stormwater Discharges from Construction Activities.
- The effectiveness of the program, BMPs and measurable goal assessments.

5.6 Measureable Program Goals

Measureable Goals for MCM-5 include:

- A. To develop and maintain an INVENTORY of 100% of the County's Post-Construction Stormwater Management Practices including location, inspection records and responsible departments / staff. (MCM-5A)
- B. To INSEPECT 100% of the County's Post-Construction Stormwater Management Practices annually. (MCM-5B)
- C. To MAINTAIN 100% of the County's Post-Construction Stormwater Management Practices annually - in accordance with established O&M guidelines. (MCM-5C)
- D. To TRAIN 100% of the County staff responsible for inspection and O&M of the County's Post-Construction Stormwater Management Practices, with respect to inspections, record keeping, operation, and maintenance (including good housekeeping measures). (MCM-5D)

Minimum Control Measure 6: Pollution Prevention and Good Housekeeping for Municipal Operations

6.1 Description of Minimum Control Measure

The Pollution Prevention and Good Housekeeping for Municipal Operations Minimum Control Measure consist of BMPs that focus on the prevention and/or reduction of pollutant runoff from municipal operations and/or facilities. MCM 6 is addressed through the development and implementation of a comprehensive Municipal Pollution Prevention and Good Housekeeping Program which describes controls for reducing and/or eliminating the discharge of contaminants from the following:

- Street and Bridge Maintenance
- Winter Road Maintenance
- Stormwater Drainage System Maintenance
- Vehicle and Fleet Maintenance
- Parks and Open Space Maintenance
- Municipal Building Maintenance
- Solid Waste Management
- New Construction and/or Land Disturbances
- Right-of-Way Maintenance
- Hydrologic Habitat Modification (i.e. stream channel and floodplain management)
- Other Municipal Facilities Operations

Another critical component of this program is training and education of municipal staff on the hazards of stormwater pollution and the practices required to prevent and mitigate those hazards.

6.2 General Permit Requirements

As a Minimum, Broome County must develop and implement a pollution prevention and good housekeeping program for municipal operations and facilities that:

- A. Addresses municipal operations and facilities that contribute surface runoff (and therefore potentially contribute POCs) to the small MS4.
- B. Includes a self-assessment component to be performed at a minimum frequency of every three years, which will determine the sources of pollutants generated by the County's operations and facilities and identify changes /additions required in the program.
- C. Determines management practices, policies, procedures, etc. that will be developed and implemented to reduce or prevent the discharge of (potential) pollutants.
- D. Prioritizes pollutant prevention and good housekeeping efforts based on (1) geographic area, (2) potential to improve water quality, (3) facilities or operations most in need of modification or improvement, and (4) the County's capabilities.

- E. Addresses pollution prevention and good housekeeping priorities.
- F. Includes employee pollution prevention and good housekeeping training program and ensures that staff receive and utilize the training.
- G. Requires third party entities performing contracted services to meet permit requirements as they apply to the activity performed, and to make the necessary certification in Part IV-G of the General Permit.
- H. Requires municipal operations and facilities that would otherwise be subject to the NYS Multi-Sector General Permit (MSGP; GP-0-06-002) for industrial stormwater discharges to prepare and implement provisions in the SWMP that comply with Parts III A, C, D, J, K, and L of the MSGP. The County must also perform monitoring and record keeping in accordance with Part IV of the MSGP for these operations and facilities. Discharge monitoring reports must be attached to the MS4 annual report. For those operations or facilities that are not required to gain coverage under the MSGP, implementation of the above noted provisions of the SWMP will ensure that stormwater discharges meet the maximum extent practicable pollutant removal.
- I. Considers and incorporates cost effective runoff reduction techniques and green infrastructure in the routine upgrade of the existing stormwater conveyance systems and municipal facilities to the maximum extent practicable.
- J. Develops, records, periodically assesses and modifies (as needed) and all measureable goals.
- K. Selects appropriate pollution prevention and good housekeeping BMPs and measureable goals to ensure the reduction of all POCs in stormwater discharges to the maximum extent practicable.
- L. Adopts techniques to reduce the use of fertilizers, pesticides, and herbicides, as well as potential impact to surface waters.

6.3 Methodology for Compliance with Permit Requirements

Broome County is ultimately responsible for development and implementation of a pollution prevention and good housekeeping program to meet the general permit requirements listed above, fulfill Multi-Sector General Permit requirements for County facilities within the MS4 boundaries (if necessary), perform self assessments at least every three years, and to provide necessary staff training to implement and run the program. To assure that all aspects of this MCM are being adequately addressed for all County operations and facilities, the County contracted with a third-party consulting engineer to assist with the development of facility specific SWPPP plans. These site-specific plans include facility information such as operations assessment and specific potential pollutants based on these operations, suggested / recommended pollution prevention and good housekeeping measures, and record keeping / training recommendations. Plans also include facility mapping and forms for annual record keeping and self-assessments.

6.4 Best Management Practices Implemented, Underway and/or Proposed

6.4.1 Stormwater Pollution Prevention Planning for Municipal Operations

Currently Broome County has site specific SWPPP plans for each County-owned facility which are being used to direct pollution prevention and good housekeeping measures at each facility. Additionally, these plans are being used as the basis for self-assessments, and annual record keeping for reporting purposes. Facility specific plans provide assignment of specific responsibility to departmental personnel and detailed information about each individual site. Detailed testing and monitoring plans have also been developed for those facilities within the MS4 jurisdiction that would otherwise be subject to the NYS Multi-Sector general permit.

The County also has a well defined and managed spill protection control and countermeasures plans (SPCC) for all facilities and buildings with petroleum bulk storage, or any other type of storage for which spill prevention may be necessary, both within and outside of the MS4 boundary. This program includes annual staff training, monthly monitoring, and an established reporting system.

It is the intent of the facility specific SWPPP plans to meet the General Permit requirements listed in Section 6.2 above including BMPs and measurable goals to ensure the reduction of all pollutants of concern in stormwater discharges to the maximum extent practicable.

6.4.2 Staff Training Programs

An important component of pollution prevention and good housekeeping is the staff training component. Our final objective is to clearly establish educational guidelines for County employees within each department as well as at each facility, and to formulate specific training modules based on facility and job needs. (For example, the custodial staff does not necessarily need to be trained on BMP's for ditch cleaning; however, it is critical for them to have a good IDDE training related to onsite drainage, care of site dumpsters, etc.) Currently our internal training is more generic and not facility or position specific. However, eventually our program will specify what training is needed, who needs to be trained, what they need to be trained on, frequency of training, and required record keeping to sufficiently document this training.

6.4.3 Program Record Keeping System

One of the most critical components of an inclusive pollution prevention and good housekeeping program is adequate record keeping which should clearly verify compliance with the General Permit requirements. Although record keeping is occurring at these facilities, it is our intent to develop a uniform tracking and reporting system which will be applied across all County departments and divisions with a central annual filing system to be located in the DPW Engineering Division with the rest of the program files.

6.4.4 Self Assessments

The final part of this program will include the self-assessment survey to be completed and updated every 3 years, as required by the permit. It is our intent to utilize DPW-engineering staff to assist facility managers with this self-assessment by conducting walk-throughs every 3rd summer with facility staff to conduct an in-depth review of all facility operations which may impact stormwater. Reports will be generated for each facility inspected, and will then be used to target areas of improvement. The latest self-assessment survey was completed in 2016, and the next one is scheduled for 2019.

6.5 Minimum Reporting Requirements

At a minimum, Broome County shall report on the following items:

- 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, modified and/or implemented; and report (at a minimum) on the following items that the County's pollution prevention and good housekeeping program addressed during the reporting year:
 - a. Acres of parking lot swept
 - b. Miles of street swept
 - c. Number of catch basins inspected and (where necessary) cleaned
 - d. Post-construction control stormwater management practices inspected, and (where necessary) cleaned
 - e. Pounds of phosphorus applied in chemical fertilizers
 - f. Pounds of nitrogen applied in chemical fertilizers
 - g. acres of pesticides and/or herbicides applied
- Staff training events and number of staff trained.
- Report of effectiveness of the program, including BMP and measureable goal assessment.

6.6 Measureable Program Goals

Measureable goals for MCM-6 include:

- A. To complete a self-assessment every 3-years for each of the 20 County facilities within the MS4 jurisdictional area, and then to use these assessments to evaluate established good housekeeping and implement changes as needed. (MCM-6A)
- B. To sweep 100% of County roads and parking lots within the MS4 boundaries at least once annually in accordance with Good Housekeeping measures. (MCM-6B)
- C. To inspect and clean 50% of catch basins and drop inlets within the MS4 boundary annually. (MCM-6C)
- D. To minimize the amount of phosphorous and nitrogen applied in chemical fertilizers. (MCM-6D)
- E. To minimize the acreage where pesticide/herbicide usage within the MS4 boundaries. (MCM-6E)
- F. To develop staff training related to the stormwater program, IDDE, and good housekeeping measures, and to have 100% of County staff educated in accordance with this goal. This goal will be accomplished in part by the BTSC as part of MCM-1 and MCM-2, they will assist in the creation of applicable training materials and opportunities. (MCM-6F)

- G. To target 100% distribution of good housekeeping guidelines and training materials to new County employees upon orientation. (MCM-6G)
- H. To maintain the County's existing PBS/SPCC plans and training as established and to keep these plans current with any changes in state and/or federal regulations. (MCM-6H)
- I. To complete and updated and detailed inventory of County buildings and facilities within the MS4 boundaries (including updated mapping) and to develop facility specific good housekeeping programs and reporting documents for each. (MCM-6I)
- J. To implement program tracking and record keeping that is individualized for each County facility based on the good housekeeping documents and in accordance with the NYSDEC tracking system and forms. (MCM-6J)

APPENDIX A

Broome-Tioga Stormwater Coalition Intermunicipal Agreement

**INTERMUNICIPAL AGREEMENT
TO FORM THE BROOME-TIOGA STORMWATER COALITION FOR
FEDERAL PHASE II MS4 STORMWATER REGULATION IMPLEMENTATION
IN BROOME AND TIOGA COUNTIES**

March 2014

An INTERMUNICIPAL AGREEMENT among municipal corporations of the County of Broome, Edwin L. Crawford Building, 44 Hawley St, PO Box 1766 and the County of Tioga, 56 Main Street, Owego NY 13827, hereinafter referred to as "Counties" and the City of Binghamton, 38 Hawley Street, Binghamton NY 13901, hereinafter referred to as "City" and the Town of Binghamton, 279 Park Avenue, Binghamton NY 13903, the Town of Chenango, Chenango Town Hall, 1137 Front Street, Binghamton NY 13905, the Town of Conklin, PO Box 182, 1271 Conklin Rd, Conklin NY 13748, the Town of Dickinson, 531 Old Front Street, Binghamton NY 13905, the Town of Fenton, 44 Park Street, Port Crane NY 13833, the Town of Kirkwood, 70 Crescent Drive, Kirkwood NY 13795, the Town of Owego, 2354 State Route 434, Apalachin, NY 13732, the Town of Union, 3111 E Main Street, Endwell NY 13760, the Town of Vestal, 605 Vestal Parkway W, Vestal NY 13850, hereinafter referred to as "Towns", and the Village of Endicott, 1009 E Main Street, Endicott NY 13760, the Village of Johnson City, 243 Main Street, Johnson City NY 13790, and the Village of Port Dickinson, 786 Chenango Street, Binghamton NY 13901, hereinafter referred to as "Villages".

WHEREAS, Broome County and Tioga County are responsible for coordination of water quality management activities in their Counties through the Broome and Tioga County Water Quality Coordinating Committees and;

WHEREAS, the Phase II federal stormwater regulations require that small municipal separate storm sewer systems must be authorized in accordance with the State Pollutant Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems; and;

WHEREAS, the Phase II federal stormwater regulations require that regulated small municipal separate storm sewer system operators must prepare and implement a stormwater management program that includes six minimum control measures; and;

WHEREAS, the municipalities recognize that, because watersheds and separate storm sewer systems cross municipal boundaries and because there are opportunities to save time, money, and energy by working collaboratively, the municipalities should work together to identify and analyze options for meeting the requirements of the Phase II Federal stormwater regulations; and;

WHEREAS, the Counties, Towns, Villages and City have an interest in protecting water quality and have been participating in or following the work of the Broome-Tioga Stormwater Coalition and;

WHEREAS, the Towns and Villages and City and the Counties of Broome and Tioga recognize the benefits of cooperating to achieve improved water quality and flood control, and;

WHEREAS, a Broome-Tioga Stormwater Coalition started has been holding meetings since January of 2003 to identify and analyze options for pooling resources to meet the requirements of the Phase II Federal Stormwater Regulations, and;

WHEREAS, the Broome-Tioga Stormwater Coalition provides participating MS4 communities with access to public education programming, public participation events, training opportunities, collaborative annual reporting, and other services, and;

NOW, THEREFORE, in consideration of the mutual covenants and agreements hereinafter set forth, the parties hereto mutually agree as follows:

1. To continue participation as formal members of the Broome-Tioga Stormwater Coalition.

2. To contribute an annual fee of \$1000.00 toward the implementation of Broome-Tioga Stormwater Coalition projects and programming to be submitted by March 10th of each year, the beginning of the MS4 annual reporting period, to be submitted to Southern Tier East Regional Planning Development Board per their role in BTSC administration.
3. To authorize the work of the Broome-Tioga Stormwater Coalition whose purpose it is to cooperatively implement the MS4 Stormwater Management Plans required by the DEC's Phase II Stormwater regulations and thereby oversee the utilization and expenditure of funds received on behalf of the Coalition for said purpose.
4. Each municipal corporation will designate an official representative to serve on the Broome-Tioga Stormwater Coalition. The designee shall be responsible to attend and participate in meetings of the Coalition and to transmit stormwater policy issue questions to their municipal corporation. The designee shall also be responsible to obtain opinions on stormwater policy issues from the municipal corporation and to share such opinions with the Stormwater Coalition membership. Each municipal corporation may also designate additional representatives to participate in the work of the Stormwater Coalition in cooperation and coordination with the official representative.
5. This Agreement may be modified or amended only in writing duly executed by all parties, which shall be attached to and become a part of this Agreement.
6. Each municipal corporation shall, to the extent of its general commercial liability insurance, indemnify and hold harmless the other municipal corporations, its officers, agents and assigns for all liability arising as a result of its own acts and omissions regarding the activities under this Agreement. It is understood and agreed that no municipal corporation shall indemnify any or all of the other municipal corporations for liability arising as a result of the acts or omissions of another municipal corporation who is a party to this Agreement.
7. The Agreement shall be governed by and construed in accordance with the laws of New York State without regard or reference to its conflict of laws and principles.
8. This agreement shall become effective upon the municipal corporation's execution of the Agreement. In the event that not all of the municipal corporations identified in the initial paragraph of this Agreement execute the Agreement, the municipal corporations executing the Agreement agree that it shall be binding as to them.
9. Any municipal corporation may withdraw from this Agreement upon sixty (60) days written notice to the other municipal corporations who are parties to the Agreement. The withdrawal of one or more municipal corporation shall not result in the termination of this Agreement and its provisions shall continue to be applicable to the municipal corporations remaining parties to the Agreement.
10. This Agreement may be terminated upon the written consent of a majority of the municipal corporations who are parties to this Agreement at the time of the proposed termination.

Approved as to form
BY CDS
BROOME COUNTY
ATTORNEY'S OFFICE

IN WITNESS WHEREOF the signatories of this agreement hereby authorize this Memorandum of Understanding:

Debra A. Preston
Debra A. Preston, Broome County Executive

Date 4/29/14

Martha C. Sauerbrey
Martha C. Sauerbrey, Tioga County Legislature Chair

Date 4-18-14

Richard C. David
Richard C. David, City of Binghamton Mayor

Date 1/23/15

Timothy P. Whitesell
Timothy P. Whitesell, Town of Binghamton Supervisor

Date 4/7/15

Hal Sntopek
Hal Sntopek, Town of Chenango Supervisor

Date 3-2-15

James E. Finch
James E. Finch, Town of Conklin Supervisor

Date 3-26-14

Michael Marinaccio
Michael Marinaccio, Town of Dickinson Supervisor

Date 2-22-15

David C. Hamlin
David C. Hamlin, Town of Fenton Supervisor

Date 1/20/15

Gordon E. Kniffen
Gordon E. Kniffen, Town of Kirkwood Supervisor

Date 5-13-14

Donald Castellucci, Jr.
Donald Castellucci, Jr., Town of Owego Supervisor

Date 9/16/15

Rose A. Sotak
Rose A. Sotak, Town of Union Supervisor

Date

W. John Schaffer
W. John Schaffer, Town of Vestal Supervisor

Date 3/13/14

John Bertoni
John Bertoni, Mavor of Village of Endicott

Date 3/5/15

Gregory W. Deemie
Gregory W. Deemie, Mayor of Village of Johnson City

Date 11/13/14

Kevin M. Burke
Kevin M Burke, Mayor Village of Port Dickinson

Date 10/1/15

APPENDIX B

Broome County Forms & Checklists

Outfall Reconnaissance Inventory

(Inspection of each outfall at least once every five year)

Section 1: Background Data

Outfall ID: 014-5.10LC

Date: 7/10/2018	Time: 11:23:41am	Inspector: Steve C & Phil W
Latitude: 42.096400000000003	Longitude: -75.9756	
Northing: 764353	Easting: 985134	
County Road: Bunn Hill Rd		
Nearest Intersection: Vestal Rd & Vestal PKWY		
Rain Last 24: 0	Rain Last 48: No	
Rain Last 72: No	Temp (°F): 80	
Outfall addition/deletion from inventory: Add		Photos Taken: Yes

Section 2: Outfall Description

Outfall Type: Closed Pipe	Flow Present: No	Flow Description:
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Section 2a: Closed Drainage

Material: CPP	Shape: Circular
Diameter/Dimensions: 18in	
Submerged in Water: No	Submerged with Sediment: No

Section 2b: Open Drainage

Material:	Depth:
Top Width:	Bottom Width:

Section 3: Physical Condition of Outfall

Outfall Damage: No	Type:
Deposits/Stains: None	Type:
Abnormal Vegetation: Yes	Type: Excessive
Poor Pool Quality: No	Type:
Pipe Benthic Growth: No	Type:

Section 4: Physical Indicators for Flowing Outfalls

Flow Odor: No	Odor Description:
Flow Color: No	Color Description:
Turbidity: No	Turbidity Description:
Floatables: No	Type:

Sample Taken:	Collected from:
---------------	-----------------

Comments:

Photos on Back (If Applicable)



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**Broome County
Construction Erosion Control and Stormwater Compliance Inspection Report**

Project Name and Location:	
Project Number:	Report Date:
Municipality:	Report Time:
On-site County Inspector:	Weather Conditions:
Contractor Completing the work:	Project Start Date:

General Guidelines: As part of the County's MS4 program, we have committed to completing erosion control / stormwater compliance inspection on 100% of County projects involving earth disturbance. If the project does not require a SWPPP and associated reporting, this simplified form will be used and inspections conducted as follows:

- One inspection will be completed for each week (every 7 days) of project duration.
- One inspection will be completed after any rainfall event of ½" or greater.
- One inspection will be completed when your project is done and stabilized.

Inspections shall be completed by Broome County staff (or consultants) who have completed the NYSDEC erosion control training and are currently certified. Completed inspection forms will be forwarded to the County's MS4 coordinator for permanent recording.

Inspection Checklist:

Yes: No:

		1. Are inspections performed as required (see above) – please note which inspection this is:
		2. Are the site inspections performed by a qualified inspector?
		3. Is there any earth disturbance adjacent to a creek, stream, wetland, or other water body?
		4. Has appropriate erosion control been installed to avoid erosion / siltation off your construction site? If no, explain why below.
		5. Are erosion control measures being monitored and maintained during construction activities? If no, explain below.
		6. Has permanent stabilization been provided in areas once construction has been completed? If no, explain below.
		7. Was there any discharge to a receiving waterbody the day of your inspection? If yes, explain below.
		8. Are adjacent receiving waters free from evidence of turbidity, sedimentation, and / or oil? If no, explain below.
		9. Have there been any complaints related to this project? If yes, explain below and include how the issue was addressed.

Provide any comments related to above responses as noted, please use the back of this page as necessary: _____

Overall Inspection Rating (circle one): **Satisfactory** **Marginal** **Unsatisfactory**

Inspector Signature: _____

Broome County Active Construction Site Tracking Sheet - 2018-2019 Reporting Year

Project Details:		Time:		SWPPP Req:	No of Inspections:	Contractor Information:		
Site/Project Name:	Project Type:	Location:	Start Date:			End Date:	Business Name:	County Staff:
BIN 3371100	Invert repair work to address structural flag condition	CR 197 over Carlin Creek	06-22-18	07-11-18	No	3	ZMK & RDV	Nazar Logvis
Watershed Site 1A	Repair of landing area near watershed pond for CCE educational programs.	Finch Hollow Watershed Site 1A	07-09-18	07-10-18	No	1	ZMK	Pat Hogan
Cole Park	Parking lot mill and pave	Cole Park	05-22-18	07-11-18	No	1		Brenda Gowe
BIN 3349680	Bridge cleaning, repair and painting	Upper Lisle Road over Otselic River	07-16-18	11-18-18	No	8	RDV	Brenda Gowe
BIN 3349220	Bridge maintenance & repair	Tunnel Road over Osbourne Creek	08-06-18	08-23-18	No	3	RDV	Nazar Logvis
Broome County Landfill	Injection lifting of commercial scalehouse slab	Landfill Commercial entrance	07-31-18	08-07-18	No	1	ZMK	Tom Sullivan
CIN 35-1.03	Tipping headwall repair	East Maine Road	09-17-18	09-28-18	No	2	ZMK	Nazar Logvis
Ramp Building	Parking Lot & drainage reconstruction	Ramp Building	09-18-18	10-15-18	No	1	Broome Bituminous	Mitch Cromer
BIN 3360370	Drilled weep holes into abutments to release water pressure	Stratmill Road over Stratton Creek	10-08-18	10-12-18	No	1	ZMK	Nazar Logvis
BIN 3349150	Invert repair work to address structural flag condition	Brook Road over Brooks Creek	10-24-18	10-29-18	No	2	ZMK	Mitch Cromer
BIN 3349420	Heavy rock abutment scour repair	Jennings creek Road over Big Brook	12-10-18	12-13-18	No	1	ZMK	Pat Hogan
CIN 162-0.37	Concrete invert placemeetn and outlet protection	Broome Corporate Parkway	01-02-19	01-11-19	No	1	ZMK	Nazar Logvis

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF WATER**

SPDES General Permit for Stormwater Discharges from Construction Activity
(GP-0-15-002)

Stormwater Pollution Prevention Plan Review Checklist

Project Name:	<input type="checkbox"/> Basic SWPPP (E&SC Plan)	<input type="checkbox"/> Full SWPPP
Site Address:	Watershed:	Date:
MS4 Operator:	Appendix E 303(d) segment:	SPDES General Permit ID Number:
MS4 Permit #:		NYR1 _____
Owner/Operator:	Phone:	Reviewer:
Address:	Fax:	

Site Priority

HIGH

LOW

Citation

MS4 permit IV.D.6

General Requirements

<u>Yes</u>	<u>No</u>	<u>N/A or N/R</u>		<u>Citation</u>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SWPPP contains completed final NOI	III.A.1.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SWPPP identifies potential sources of pollutants in runoff	III.A.2.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SWPPP identifies Trained Contractor.	III.A.6.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Contractor/Subcontractor certification statements have been signed.	III.A.6.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SWPPP is signed by responsible corporate officer, general partner, proprietor, principal executive officer, ranking elected official, or duly authorized representative.	VII.H.2.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	OPRHP documentation	

Erosion & Sediment Control Requirements

<u>Yes</u>	<u>No</u>	<u>N/A or N/R</u>		<u>Citation</u>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Location, type and size of project are described.	III.B.1.a.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Phasing plan and sequence of operations are described.	III.B.1.d.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	HSG is identified.	III.B.1.c.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SWPPP identifies contractor/subcontractor responsible for installing, constructing, repairing, replacing, inspecting and maintaining the E&SCs.	III.A.6.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SWPPP documents selection, design, dimensions, material specifications, installation details, implementation & maintenance of E&SCs, including soil stabilization plans	III.A.1. III.B.1.f. III.B.1.h.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	E&SCs are designed in conformance with the NYS Standards and Specifications for Erosion and Sediment Control; or equivalence to this standard is demonstrated and reason for the alternative is provided.	III.B.1. III.B.1.i.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Maps of general location and site are present showing: Legend, scale, north arrow total area, all improvements, areas disturbed and not disturbed, existing vegetation, onsite and adjacent offsite surface waters, floodplain/floodway boundaries, wetlands and drainage patterns that could be affected the project,	III.B.1.b. III.B.1.

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF WATER**

SPDES General Permit for Stormwater Discharges from Construction Activity
(GP-0-15-002)

Stormwater Pollution Prevention Plan Review Checklist

			existing and final contours, locations of soil types & boundaries, material/waste/borrow/equipment storage areas, locations of stormwater discharges, and location/size/length of each E&SC	III.B.1.g.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Location and sizing of any temporary sediment basins or structural practices planned to divert flows from exposed soils are included	III.B.1.h.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Maintenance inspection schedule, in accordance with the NYS Standards & Specs for E&SCs is included	III.B.1.i.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Pollution Prevention measures to control litter, chemicals, debris are described.	III.B.1.j.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Description & location of any industrial stormwater discharges (i.e., concrete, asphalt, etc.) is included	III.B.1.k.

Post-construction Stormwater Management Practices

<u>Yes</u>	<u>No</u>	<u>N/A or N/R</u>		<u>Citation</u>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SWPPP is prepared by a Qualified Professional.	III.A.3.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SWPPP identifies contractor/subcontractor responsible for constructing the SMPs.	III.A.6.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Design Manual planning process for reducing runoff is employed: <u>Site planning</u> to preserve natural features and reduce impervious cover, <u>Calculation of the WQ_v</u> for the site, <u>Incorporation of runoff reduction</u> techniques and standard SMPs with Runoff Reduction Volume (RR _v) capacity, <u>Determine minimum RR_v required</u> , Use of <u>standard SMPs</u> , where applicable, <u>to treat the remaining WQ_v</u> not addressed by runoff reduction techniques and standard SMPs with RR _v capacity, design of <u>volume and peak rate control</u> practices where required	III.B.2.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SWPPP documents selection, design, installation, implementation and maintenance of SMPs	III.A.1.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	SMPs are designed in conformance with the applicable sizing and performance criteria in the NYS Stormwater Management Design Manual (Jan. 2015); or equivalence to this standard is demonstrated and reason for the alternative is provided.	III.B.2.c.vi.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	All SMPs are identified, including dimensions, material specs & installation details.	III.B.2.a.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Location & size of SMPs are shown on a site map or construction drawing.	III.B.2.b.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The SWPPP includes a <u>Stormwater Modeling and Analysis Report</u> that contains: <ul style="list-style-type: none"> • <u>Predevelopment map</u> w/ watershed/subcatchment boundaries, flow paths & design points, (<i>list further detail per App. G Design Manual?</i>) • <u>Post-development map</u> showing same plus SMPs, • <u>Hydrology & Hydraulics results</u> for required storm events including supporting calculations, methodology and a summary table comparing pre & post-development runoff rates & volumes for the different storm events, • <u>Summary table</u> w/ calculations showing that ea. SMP conforms w/ the Design Manual sizing criteria 	III.B.2.c.

**NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF WATER**

SPDES General Permit for Stormwater Discharges from Construction Activity
(GP-0-15-002)

Stormwater Pollution Prevention Plan Review Checklist

- Identification of any Design Manual sizing criteria that are not required under the General Permit

<u>Yes</u>	<u>No</u>	<u>N/A or N/R</u>		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Soil testing results and locations of test pits and borings are included	III.B.2.d.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Infiltration test results are included if needed	III.B.2.e.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	O&M plan, including inspection & maintenance schedules, is included and identifies the responsible entity	III.B.2.f.
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Enhanced Phosphorus Removal Standards sizing criteria are included if required.	III.B.3.

APPENDIX C

Inventory of County-Owned & Maintained Post-Construction Stormwater Management Facilities / Practices

BROOME COUNTY MS4 POST-CONSTRUCTION STORMWATER PRACTICE INSPECTION LOG

Practice ID#	Location	Type*	Inspection date	Identify maintenance needed	Date work completed	Date maintenance issue closed**
Permanent Measures Tracked and Maintained within MS4 boundaries						
OP-1	Otsinsngo Park south of Beaver Street bridge -- associated with bridge rehab and trail addition	Dry treatment swale with forbay		Sediment buildup behind check dams and in forbay exceeds depth allowed in maintenance plan - need to be cleaned out		
PSF-1	Public Safety Facility - Van Winkle Drive wetland pond	Wetland Pond				
PSF-2	Public Safety Facility - Van Winkle Drive - Upper Parking Lot	Pervious Pavement				
PSF-3	Public Safety Facility - Van Winkle Drive - Lower Parking Lot	Pervious Pavement				
PSF-4	Public Safety Facility - Van Winkle Drive - Front Parking Lot	Pervious pavers (grid)				
HW-1	Airport Road between Lower Stella Ireland Rd and Choconut center	Bioretention area / raingarden				
Greater Binghamton Airport - covered by MSGP - outside MS4 boundaries						
AP-1	Stormwater Pond A - located at the north end of the airport	Treatment Pond				
AP-2	Stormwater Pond B - located at the southern end of the airport	Treatment Pond				
Broome County Landfill - covered by MSGP - outside MS4 boundaries						
LF-1	Landfill - intersection of Knapp and Dunhap Hill Roads	Treatment pond				
LF-2	Landfill - Knapp Road	Dry Swale system				
LF-3	Landfill - South of DunhamHill Road - north of leachate plant	Treatment pond				

* Types include ponds, wetlands, infiltration and filter systems, open channels, alternative practices. Refer to NYS Stormwater Management Design Manual.

** It will be possible to address some issues immediately without additional followup, but many will require additional visits to determine success of initial repair work.

Note: The Highway Department or Code Enforcement Officer should maintain this form as a summary of each inspection completed. The Operation and Maintenance Log (Appendix G from the New York State Stormwater Management Design Manual) should be referred to for more detailed technical inspection criteria. Each practice within a given development should be listed separately. A separate entry should be used to denote different types of maintenance required for each particular practice.

APPENDIX D

Broome County
Municipal Facilities/Operations
within the MS4 area

BROOME COUNTY FACILITIES W/IN THE MS4 BOUNDARIES - 2019 Update

FacName	Street Address	Type	FM Name	FM Phone	FM Cell	FM email	GIS Flood	Survey Plans	Onsite Assessment
The Forum Theatre	236 Washington Street Binghamton NY	Facility	Marion, Chris	607-778-2052		CMarion@co.broome.ny.us	X	X	summer 2016
Veterans Memorial Arena	1 Stuart Street Binghamton NY	Facility	Marion, Chris	607-778-2052		CMarion@co.broome.ny.us	X	X	summer 2016
Willow Point Nursing Home	3701 Vestal Road Vestal NY	Facility	Neferis, Pete	607-763-4904	607-343-0344	pneferis@co.broome.ny.us	X	X	summer 2016
Dog Shelter	110 Culter Pond Road Binghamton NY	Facility	Conlon, Kelly	607-778-2493		kconlon@co.broome.ny.us	X	X	summer 2016
En-Joie Golf Course	722 West Main St. Endicott NY	Golf Course	Chapman, Anthony	607-785-1661		achapman@co.broome.ny.us	X	X	summer 2016
Broome County Court Annex	65 Hawley Street Binghamton NY	Facility	Fernquist, Jerry	607-778-2057	607-343-0899	jfernquist@co.broome.ny.us	X	X	summer 2016
Broome County Court House	92 Court Street Binghamton NY	Facility	Fernquist, Jerry	607-778-2057	607-343-0899	jfernquist@co.broome.ny.us	X	X	summer 2016
Broome County Office Building	60 Hawley Street Binghamton NY	Facility	Fernquist, Jerry	607-778-2057	607-343-0899	jfernquist@co.broome.ny.us	X	X	summer 2016
Broome County Public Library	185 Court Street Binghamton NY	Facility	Fernquist, Jerry	607-778-2057	607-343-0899	jfernquist@co.broome.ny.us	X	X	summer 2016
George Harvey Justice Building	45 Hawley Street Binghamton NY	Facility	Fernquist, Jerry	607-778-2057	607-343-0899	jfernquist@co.broome.ny.us	X	X	summer 2016
BAGSAI	897 Upper Front Street Binghamton NY	Park	Mayers, Joe	607-778-2193		jmayer@co.broome.ny.us	X	X	summer 2016
Grippen Park	607 South Grippen Avenue Endicott NY	Park	Mayers, Joe	607-778-2193		jmayer@co.broome.ny.us	X	X	summer 2016
Otsiningo Park	1 Otsiningo Park Binghamton NY	Park	Mayers, Joe	607-778-2193		jmayer@co.broome.ny.us	X	X	summer 2016
Round Top Park	1 Roundtop Park Street Endicott NY	Park	Mayers, Joe	607-778-2193		jmayer@co.broome.ny.us	X	X	summer 2016
Greater Binghamton Transportation Center	81 Chenango Street Binghamton NY	Facility	Keefer, Brian	607-763-4930	607-349-2814	bkeefe@co.broome.ny.us	X		summer 2016
Transit Office / Garage	413 Old Mill Road Vestal NY	Facility	Keefer, Brian	607-763-4930	607-349-2814	bkeefe@co.broome.ny.us	X	X	summer 2016
Broome County Highway Garage	47 Thomas Street Chenango NY	Facility	VanValkenburgh, Mitch	607-778-1640	607-343-2146	mvanvalkenburgh@co.broome.ny.us	X	X	summer 2016
Soil & Water Conservation	110 Culter Pond Road Binghamton NY	Facility	Stimak, Brian	607-778-8826	607-343-8043	bstimak@co.broome.ny.us	X	X	summer 2016
Public Safety Facility	155 Lt. VanWinkle Drive Binghamton NY	Facility	Wittig, Keith	607-778-1909	607-343-3798	kwittig@co.broome.ny.us	X	X	summer 2016
RAMP Buiding		Facility	Miller, Harry	607-778-2151		hmliller@co.broome.ny.us	X		summer 2016