# Onondaga County New York

# Stormwater Management Program (SWMP) Plan



J. Ryan McMahon, II County Executive

For compliance with MS4 SPDES General Permit ID Number NYS GP 0-24-001

> Onondaga County Office of the Environment 421 Montgomery Street Syracuse, New York

## **MS4** Notice of Intent

version 1.0

(Submission #: HQ1-40M9-PG1ZQ, version 1)

## Details

Submitted 2/16/2024 (0 days ago) by JESSE MCMAHON

Alternate Identifier NYR20A074

Submission ID HQ1-40M9-PG1ZQ

Status Submitted

### **Form Input**

#### **MS4** Operator Information

Is this NOI for an MS4 Operator continuing coverage? Yes

Permit ID #: NYR20A074

MS4 Operator Type Traditional non-land use control

#### **Traditional Non-Land Use or Non-Traditional**

Traditional non-land use and non-traditional MS4 Operator requirements are found in Part VII of the MS4 General Permit.

Municipality Name or Legal Entity Name Onondaga County

#### Legal Municipal/Entity Mailing address

335 Montgomery St Syracuse, New York 13202 Onondaga

#### NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Water, Bureau of Water Permits 625 Broadway, Albany, New York 12233-3505 P: (518) 402-8111 | F: (518) 402-9029 www.dec.ny.gov

3/1/2024

## Re: Acknowledgement of Notice of Intent for Coverage under SPDES General Permit for Municipal Separate Storm Sewer Systems (GP-0-24-001)

Dear Onondaga County,

This is to acknowledge that the New York State Department of Environmental Conservation (DEC) received a complete electronic Notice of Intent (eNOI) for the MS4 Operator:

Onondaga County

Pursuant to 6 NYCRR 750-1.21(d) and Part II of the SPDES MS4 GP, GP-0-24-001, Onondaga County is authorized to discharge stormwater under the terms and conditions of the SPDES MS4 GP, GP-0-24-001, starting on the effective date of **01/03/2024**. Onondaga County must comply with all requirements contained in the MS4 GP, GP-0-24-001.

The following SPDES ID No. should be included in all correspondences with the DEC:

SPDES ID No: NYR20A074

Should you have any questions regarding any aspect of the requirements in the MS4 GP, GP-0-24-001, please contact <u>MS4GP@dec.ny.gov</u> or (518) 402-8111.

Sincerely,

Medelth Streeter

Meredith Streeter, P.E. Chief, Central Section Bureau of Water Permit



Department of Environmental Conservation

## Preface

This Current Edition (2024) of the Onondaga County Stormwater Management Program (SWMP) Plan establishes that Onondaga County has submitted an NOI and has affirmed that this SWMP has been developed and will be implemented in accordance with the terms of the SPDES (GP-0-24-001) General Permit for Stormwater Discharges from Municipal Separate Storm Sewer Systems (MS4s).

Only those small MS4 operations who develop and implement a stormwater management program plan and obtain permit coverage in accordance with Part II of the SPDES General Permit are authorized to discharge stormwater from their small MS4 under SPDES General Permit GP-0-24-001.

The County's SWMP is consistently updated with the most recent regulatory requirements in accordance with all Federal, State or Local stormwater management regulation(s). Additionally, the County's plan follows the recommendations of the most recent version of the New YorkState Stormwater Management Design Manual.

County Officials and Department that are responsible for implementation of various aspects of the program:

Principal Executive Officer / Chief Elected Official:

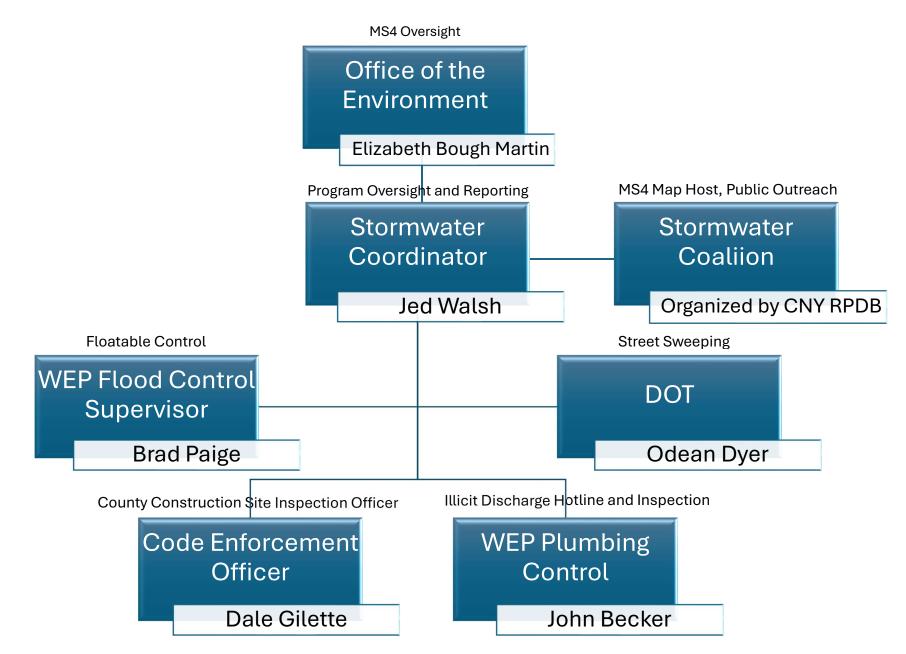
J. Ryan McMahon, II, Onondaga County Executive

Authorized Representative:

Jed Walsh, Program Coordinator, Stormwater Management Onondaga County Department of Water Environment Protection 7120 Henry Clay Blvd, Liverpool, NY 13088 Office: 315-435-5402 Cell: 315-498-5752 Email: jedwalsh@ongov.net

## **Table of Contents**

Staffing Plan	X
Designation of a Regulated MS4	X
Syracuse Urban Area MS4 Mapping	X
Introduction	X
Minimum Control Measures	
MCM 1: Public Education and Outreach	X
MCM 2: Public Involvement and Participation	Х
MCM 3: Illicit Discharge Detection and Elimination	X
MCM4: Construction Site Runoff Control	X
MCM5: Post-Construction Stormwater Management	X
MCM 6: <u>Pollution Prevention and Good Housekeeping</u> for Municipal Operations	X
Additional Requirements for the Onondaga Lake Watershed	Х



## Designation of a Regulated MS4

(adapted from EPA Stormwater Phase II Rule)

What constitutes an MS4 is often misinterpreted and misunderstood. The term MS4 does not solely refer to municipally owned storm sewer systems, but rather can include a broader array of entities, in addition to local jurisdictions, such as state departments of transportation, universities, local sewer districts, hospitals, military bases, and prisons. An MS4 also is not always just a system of underground pipes – it can include roads with drainage systems, gutters, and ditches. The regulatory definition of an MS4 is provided below.

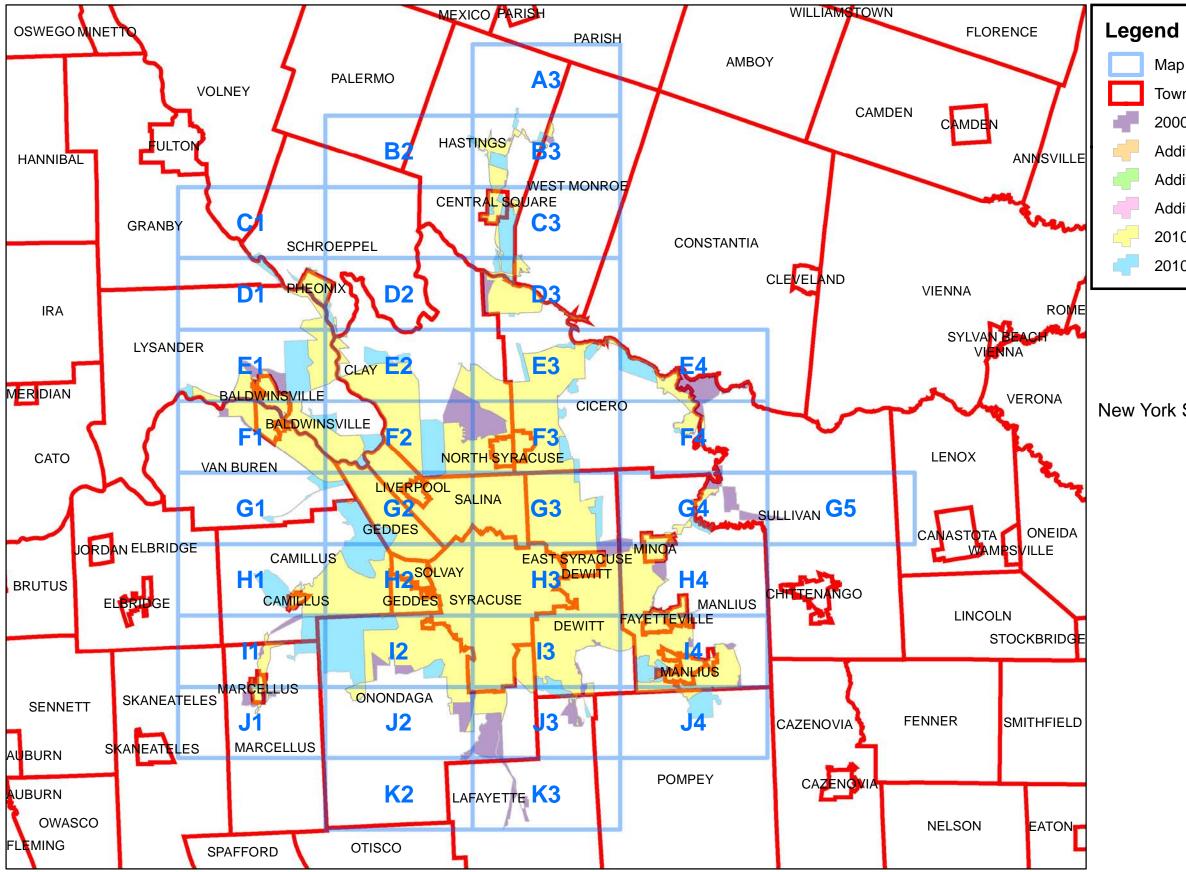
EPA's NPDES (National Pollutant Discharge Elimination System) stormwater permitting regulations distinguish between MS4s that are "small," "medium," or "large." The Phase II stormwater regulations establish requirements for regulated small MS4s, which are not already defined as "large" or "medium" under the Phase I stormwater regulations (40 CFR 122.26(b)(4) and (7)), and which are designated for regulation because of their location in an urban area with a population of 50,000 or more people. Regulated small MS4s may also include Federally owned systems, such as military bases, large hospital or prison complexes, and highways and other thoroughfares.

A small MS4 can be designated by the permitting authority as a regulated small MS4 in several ways, including Automatic Nationwide Designation.

The Phase II rule requires nationwide coverage of all operators of small MS4s that are located within the boundaries of a Bureau of the Census-defined "urban area\* with a population of 50,000 or more people" based on the latest decennial Census. Once a small MS4 is designated as regulated based on the urban areas with a population of 50,000 or more people boundaries, it cannot be removed from the program on the basis that a subsequent decennial urban area calculation shows that the small MS4 is no longer within the urban area with a population of 50,000 or more people boundary.

\*According to the 2020 Census, an urban area represents densely developed territory, and encompass residential, commercial, and other nonresidential urban land uses. Each urban area must encompass at least 2,000 housing units or at least 5,000 people.

## Onondaga, Oswego, and Madison County Municipal Separate Storm Sewer System (MS4) Minimal Regulated Boundaries



- Map Name Identification
- Town, Village, or City Boundary for New York State
- 2000 Census Urbanized Area (No longer UA based on 2010)
- Additionally Designated 2003
- Additionally Designated 2008
- Additionally Designated 2010
- 2010 and 2000 Urbanized Area Overlap
- 2010 Census Urbanized Area (Newly Designated Area)

## Map Prepared by:

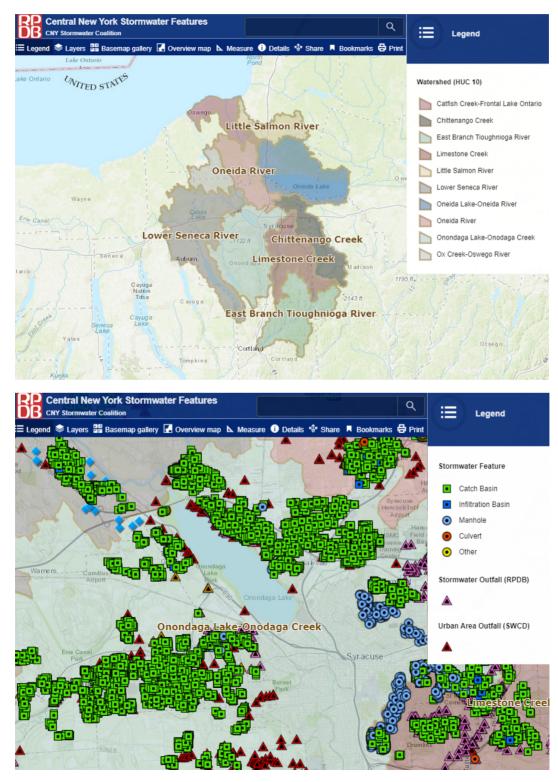
New York State Department of Environmental Conservation Division of Water

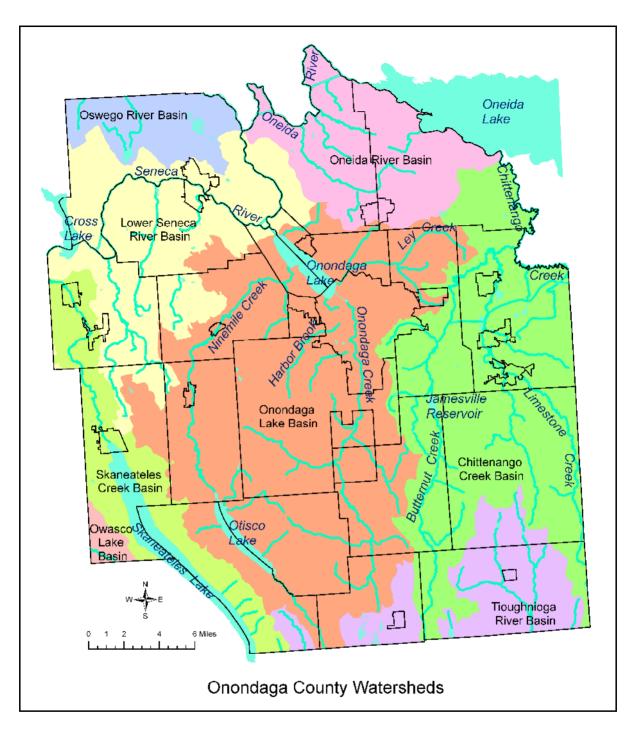
## Syracuse Urban Area MS4 Mapping

Base mapping and MS4 structures for Syracuse Urbanized Area Automatically Designated MS4s can be found here:

https://www.arcgis.com/apps/View/index.html?appid=4b66ca41459b4b18850230d25e5fba14

Mapping is maintained by The CNY Stormwater Coalition, hosted at ArcGIS Online, and powered by ESRI.





## Water bodies of Concern within the regulated MS4 area of Onondaga County:

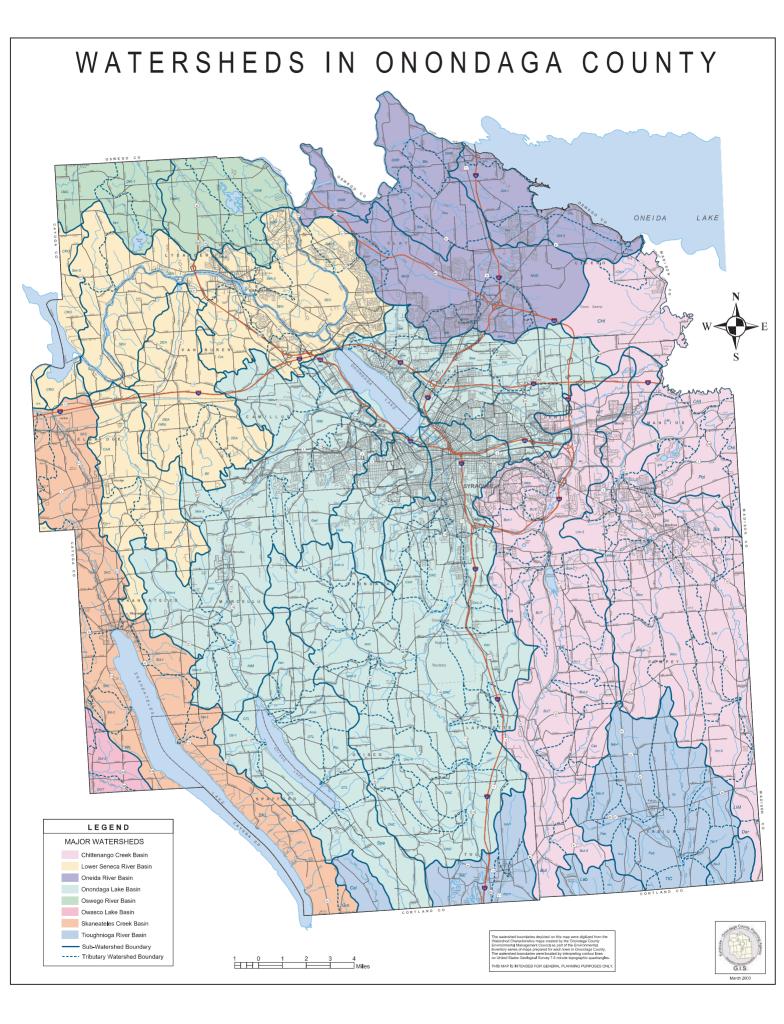
- Onondaga Lake
- Onondaga Creek
- Ley Creek
- Ninemile Creek
- Harbor Brook
- Oneida Lake
- Jamesville Reservoir

#### **Geographic Areas of Concern:**

- Onondaga Lake Watershed
- Combined Sewer Overflow Abatement Areas
- Ley Creek Drainage Area

#### **Target Audiences:**

- Onondaga County residents and businesses
- Schools, Colleges, Universities
- Environmental Organizations



## Introduction

In response to the 1987 Amendments to the Clean Water Act (CWA), the <u>U.S. Environmental</u> <u>Protection Agency (EPA)</u> developed Phase I of the National Pollutant Discharge Elimination System (NPDES) Storm Water Program in 1990. The Phase I program addressed sources of storm water runoff that had the greatest potential to negatively impact water quality. The Department of Environmental Conservation (DEC) is responsible for administering the program in New York State as part of the State Pollutant Discharge Elimination System (SPDES) permit program. Under Phase I, SPDES permit coverage was required for stormwater discharges from medium and large <u>M</u>unicipal <u>S</u>eparate <u>S</u>torm <u>S</u>ewer <u>S</u>ystems (MS4s) located in incorporated places or counties, eleven categories of industrial activity and construction activity that disturbed five or more acres of land.

The Phase II Final Rule, published in the Federal Register on December 8, 1999, expanded the stormwater permit program to include stormwater discharges from certain regulated small MS4s and construction activity that disturbs between 1 and 5 acres of land. On January 8, 2003, the DEC finalized two new permits for stormwater discharges in NYS as required by the Federal EPA; the small MS4 and small construction permits.

The MS4 permit required regulated municipal MS4s (those with a minimum population density of 1000 people per square mile and located in urban areas with a population of 50,000 or more as defined by the U.S. Census Bureau) to develop and fully implement a stormwater management program by 2008. Stormwater management programs must contain appropriate management practices in each of the following minimum control measure categories: <u>Public Education and Outreach</u>; <u>Public Involvement and Participation</u>; <u>Illicit Discharge Detection and Elimination</u>; <u>Construction Site Stormwater Runoff Control</u>; <u>Post-Construction Stormwater Management</u>; and <u>Pollution Prevention and Good Housekeeping for Municipal Operations</u>.

The Syracuse Urbanized Area, which includes portions of Onondaga County, fits the population threshold and density criteria regulated under Phase II of the Storm Water Program and therefore the 35 municipalities that fall within the boundaries of the urbanized area are required to obtain coverage under the SPDES MS4 stormwater permit and comply with requirements of the permit.A list of the regulated MS4s in the Syracuse Urbanized Area and a map of the area can be found in this document.

As a first step toward obtaining SPDES permit coverage, regulated MS4s were required to submit a Notice of Intent (NOI) form to DEC by March 10, 2003. The NOI required MS4s to provide an initial outline of planned management practices and to identify measurable goals to annually assess progress toward the full implementation of an appropriate stormwater management program. Although the DEC has specified a few required actions and provided a list of approved management practices for each minimum control category, regulated MS4s are encouraged to tailor the development of their stormwater management programs to best meet local stormwater concerns.

The DEC is encouraging MS4s to take a watershed approach to local stormwater management by working with neighboring MS4s to develop complementary or cooperative programs for solving shared problems. By combining efforts, sharing costs and working together, regulated municipalities will recognize a higher level of environmental benefits at a decreased program cost.

All publicly funded MS4s operating within the boundaries of regulated municipal MS4s are also subject to the statewide Phase II permit requirements. Examples of other regulated MS4s include school districts, public universities, prisons, state agencies and more. Eventually, the MS4 permit program may be expanded statewide.

#### Why is Stormwater a Problem?

Stormwater gathers a variety of pollutants that are mobilized during runoff events. Polluted runoff degrades our lakes, wetlands, rivers and other waterways. Transported soil clouds receiving waters and interferes with fish habitat and aquatic plant life. Polluted runoff also contaminates our drinking water sources. Nutrients such as phosphorus and nitrogen can be harmful to aquatic life by promoting the overgrowth of algae and depleting oxygen in the waterway. Toxic chemicals from automobiles, sediment from construction activities, and careless application of pesticides and fertilizers threaten the health of the receiving waterway and can kill fish and other aquatic life. Bacteria from animal wastes and illicit sewer system connections can make nearby lakes and rivers unsafe for wading, swimming and the propagation of edible fish. According to an

#### What is Stormwater?

Stormwater is water from rain or melting snow that doesn't soak into the ground but runs off into waterways. As it flows from rooftops, over paved areas and bare soil, and through sloped lawns it picks up a variety of materials including soil, animal waste, salt, pesticides, fertilizers, oil and grease, debris and other potential pollutants. The quality and quantity of runoff is affected by a variety of factors depending on the season, local weather, geography and activities taking place along the path of its flow.

inventory conducted by the United States Environmental Protection Agency (EPA), half of the impaired waterways in the

United States are affected by stormwater runoff from urban/suburban and construction sources.

#### What's Being Done?

Significant improvements have been achieved in controlling pollutants that are discharged from point sources such as sewage and wastewater treatment plants. Across the nation, attention is shifting to non-point sources of pollution such as stormwater runoff. Stormwater management, especially in urban areas, is becoming a necessary step in the process of further reducing water pollution despite the inherent challenges it brings.

Stormwater runoff cannot be treated using the same end-of-pipe controls appropriate for sewage and wastewater treatment plants. Pollutants in Stormwater runoff enter our waterways in numerous ways and the best point of control is usually at the pollutant's source. Significant water quality improvement can be made by employing best management practices, or " BMPs".Properstorage of chemicals, good housekeeping and just plain paying attention to what's happening during runoff events can lay the ground work for developing a relatively inexpensive stormwater pollution prevention program. The EPA and the NYSDEC are increasing their attention to stormwater pollution prevention in several ways. A federal regulation, commonly known as Stormwater Phase II, requires permits for stormwater discharges from Municipal Separate Storm Sewer Systems (MS4s) in urbanized areas and for construction activities disturbing one or more acres. To implement the law, the New York State Department of Environmental Conservation has issued two general permits, one for MS4s in urbanized areas and one for construction activities. The permits are part of the State Pollutant Discharge Elimination System (SPDES).

Additionally the EPA's Clean Water Act provides that stormwater discharges associated with industrial activity to waters of the United States (including discharges through a municipal separate storm sewer system) are unlawful, unless authorized by a National Pollutant Discharge Elimination System (NPDES) permit. In New York, EPA has approved the state program which is enacted through the administration of the State Pollutant Discharge Elimination System (SPDES) program. Industrial facilities engaged in activities defined in 40 CFR 122.26(b)(14)(i-ix) and (xi) must obtain permit coverage for stormwater discharges to waters of the United States through either an individual industrial SPDES permit, the SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity, or provide certification using the No Exposure Exclusion that industrial activities are not exposed to stormwater.

**This program has environmental benefits.** New York State has made significant progress toward improving the overall quality of the State's water resources by controlling major point sources of water pollution, such as industrial stormwater discharges. Despite this progress, *non-point* sources of water pollution such as contaminated stormwater runoff, continue to pose significant water quality threats Statewide. Controlling these non-point sources of pollution will require an approach to resource management that is dramatically different from those taken in the past. The stormwater control program represents a major shift toward just such an approach that builds on New York State's successful past efforts.



Water from rain or melting snow runs off land, carrying litter, soil, bacteria and other pollutants into our bays, rivers and lakes. This pollution source can be a significant contributor to beach and shellfish bed closures, spoiled fishing and swimming, excessive weed growth, and destruction of aquatic habitat. Large amounts of stormwater rushing off paved surfaces can flood yards, streets and basements.

The NYSDEC stormwater program will help correct these problems, protecting and restoring our valuable environmental resources.

#### **MS4 Stormwater Management Program Requirements**

MS4s must develop, implement, and enforce a Stormwater Management Program (SWMP) designed to reduce the discharge of pollutants from small MS4s to the maximum extent practicable (MEP). **"Maximum Extent Practicable" (MEP)** is a technology-based standard established by Congress in the Clean Water Act. Since no precise definition of MEP exists, it allows for maximum flexibility on the part of MS4 operators as they develop their programs.

(40CFR 122.2; See also Stormwater Phase II Compliance Assistance Guide EPA 833-R-00-002, March 2000)

In New York State, the first Phase II MS4 stormwater general permit (GP-02-02) was a five-year permit, effective January 8, 2003 through January 8, 2008. Small MS4s were required to have their Stormwater Management Programs fully implemented by January 8, 2008. Onondaga County's SWMP has met the requirements of the previous permit cycles, and is now being updated to meet the additional requirements of the newest general permit (GP-0-24-001), which commenced January 3, 2024.

#### Six Minimum Control Measures (MCMs)

SWMPs must include six minimum control measures. For each of these six minimum measures, MS4s must identify measurable goals and implement management practices to achieve those measurable goals. The six minimum measures include:

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

#### **Onondaga County Stormwater Management Program (SWMP) Plan Requirements**

Per GP-0-24-001, the SWMP Plan must contain, at a minimum, all permit requirements implemented to meet the terms and conditions of this SPDES general permit, and documentation required by this SPDES general permit. The SWMP Plan may incorporate by reference any documents that meet the requirements of the current SPDES general permit. If an MS4 Operator relies upon other documents to describe how theMS4 Operator will comply with the requirements of this SPDES general permit, the MS4 Operatormust attach to the SWMP Plan a copy of these documents.

The SWMP Plan must identify if any requirements from Part VI. through Part IX. do not require updates and include the rationale behind the determination. The SWMP Plan must identify if any requirements from Part VI. through Part IX. are not applicable and include the rationale behind the determination.

#### Syracuse Urbanized Area Automatically Designated MS4s

The term "urbanized area" refers to a land area comprising one or more central places and the adjacent densely settled surrounding area(s) that together have a minimum residential population of 50,000 and a minimum average population density of 1,000 people per square mile. The Syracuse Urban Area (SUA) includes portions of 31 municipalities in Onondaga, Madison and Oswego Counties.

#### **Onondaga County**

Baldwinsville (V) Camillus (T) Camillus (V) Cicero (T) Clay (T) DeWitt (T) East Syracuse (V) Fayetteville (V) Geddes (T) LaFayette (T) Liverpool (V) Lysander (T) Manlius (T) Manlius (V) Marcellus (T) Marcellus (V) Minoa (V) North Syracuse (V) Onondaga (T) Pompey (T) Salina (T) Solvay (V) Syracuse (C) Van Buren (T) **Onondaga County** 

Madison County

Sullivan (T) Madison County

#### **Oswego County\***

Central Square (V) Hastings (T) Phoenix (V) West Monroe (T)

\* Town of Schroeppel was granted a waiver by NYSDEC and is not subject to Phase II MS4 permit requirements.

Regulated communities in the SUA worked together to establish common standards for mapping stormwater outfalls, developed common procedures for inspecting construction sites and partnered with the Central New York Regional Planning and Development Board (CNYRPDB) to secure grants that are providing funding for municipal staff training and other required program components such as GIS outfall mapping. These efforts and others have reduced duplicative efforts and increased compliance cost sharing opportunities. In other words, intermunicipal cooperation and coordination has improved the effectiveness and efficiency of stormwater management efforts throughout the participating municipalities.

Onondaga County has provided a Stormwater Assistance Program through inter municipal agreement for 23 of the SUA communities within Onondaga County providing assistance with minimum control measure number 3 Illicit Discharge Detection and Elimination (IDDE).

Onondaga County has committed to the following tasks in the Stormwater Assistance Program:

- Establishment of a centralized Hotline number for reporting illicit stormwater discharges. The Hotline number was published in the Verizon phone book in 2009. A procedure manual for reporting and recording illicit discharge calls was developed as part of the program.
- Assist the MS4's with routine inspection of stormwater "outfalls" already mapped by MS4s.
- Standard inspection logs and procedures were created.

- A GIS mapping file for tracking and recording the progress of outfall inspections and their condition was created.
- Provide illicit discharge track down service upon request by the MS4.
- Sampling procedures and laboratory rates for testing of samples has been established.

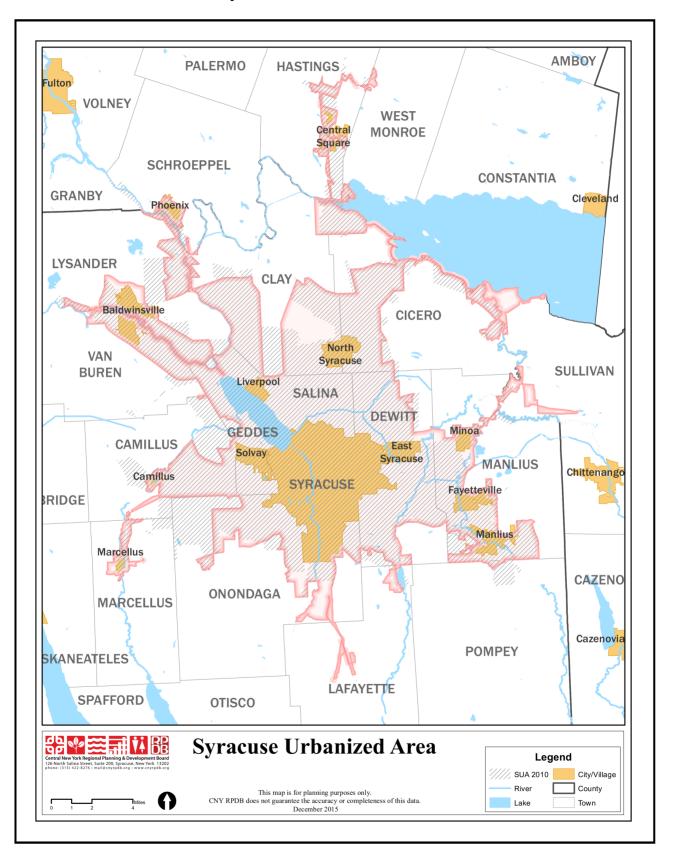
Onondaga County will continue to cooperate with the regulated MS4 communities in the SUA and with CNYRPDB. The County is currently working with SUA communities and CNYRPDB in the development of a Central New York Stormwater Coalition. Onondaga County is committed to becoming a member of the newly established coalition and will continue to work with the organized group in their approach to meeting the stormwater regulatory requirements.

#### Local Laws and Enforcement Response Planning

As Onondaga County is not a Land-Use Control municipality, local laws and regulations governing stormwater and otherwise are not within its purview.

However, the MS4 municipalities that fall within Onondaga County take responsibility for these regulations, and work with the County to ensure that they comply with federal and local statutes and permits.

One example of where this comes to bear is in instances of illicit discharges, where Onondaga County provides track-down services for its partner municipalities. In these cases, wherever illicit discharges are discovered, the County defers to the local code enforcement authorities and/or law enforcement agencies to enforce its scheme for escalating consequences in keeping with their Enforcement Response Plan (ERP). As such, the requirement of an MS4 municipality to develop an ERP is not applicable to Onondaga County, and has been omitted from its SWMP.





Pollutants of Concern Associated with Stormwater in Onondaga County						
Water body/ Segment Name	Watershed	Cause/Pollutant		Source of Pollutant		
		Major	Minor	Primary	Secondary	
Bloody Brook	Onondaga Lake	Pathogens		CSOs, Urban Runoff		
Geddes Brook	Onondaga Lake	Ammonia		Urban Runoff		
Harbor Brook	Onondaga Lake	Pathogens	Phosphorus, Ammonia	CSOs, Urban Runoff		
Ley Creek	Onondaga Lake	Pathogens	Phosphorus, Ammonia, Cyanide	CSOs, Urban Runoff		
Ninemile Creek	Onondaga Lake	Pathogens	Phosphorus	CSOs	Urban Runoff	
Onondaga Lake and Outlet	Onondaga Lake	Dioxin, Mercury, PCBs	Dissolved Oxygen/Oxygen Demand	CSOs, Contaminated Sediment	Industrial, Agricultural, Stormwater Runoff	
Onondaga Lake Watershed	Onondaga Lake	Pathogens, Phosphorus, Ammonia, Mercury, Sediment	Dissolved Oxygen/Oxygen Demand, Cyanide, Turbidity, Pathogens	CSOs, Industrial, Urban Runoff	Agriculture, Streambank Erosion Construction	
Syracuse Urban Area	Oneida Lake, Onondaga Lake, Seneca River, Oswego River	Phosphorus	Silt/Sediment	Construction site runoff and runoff from impervious surfaces		

*Note: The relationship between major pollutants and primary sources is not exclusive. Major pollutants do not solely come from primary sources. Similarly, primary sources do not solely contribute primary pollutants.* 

Source: New York State 2018 Section 303(d) List of Impaired/TMDL Waters

## New York State Final 2018 Section 303(d) List June 2018

#### Water Index Number Waterbody Name (WI/PWL ID) County Type Class Cause/Pollutant Source Year

#### Part 2b - Multiple Segment/Categorical Impaired Waterbody Segments (fish consumption)

#### Oswego River (Finger Lakes) Drainage Basin

Ont 66-12 (portion 1) – Seneca River, Lower, Main Stem (0701-0001)
Onondaga County – Class C River – Cause/Pollutant(s):
PCBs and Other Toxics – Suspected Source(s): Contaminated Sed. (Listed 2014)
Ont 66-12 (portion 2) – Seneca River, Lower, Main Stem (0701-0008)

Ont 00-12 (portion 2) – Seneca River, Lower, Main Stein (0701-00

Onondaga County - Class C River - Cause/Pollutant(s):

• PCBs and Other Toxics - Suspected Source(s): Contaminated Sed. (Listed 2014)

Ont 66-12-12-P154 (portion 1) - Onondaga Lake, Northern End (0702-0003)

Onondaga County – Class B Lake – Cause/Pollutant(s):

• Dioxin – Suspected Source(s): Contaminated Sed. (Listed 1998)

• Mercury – Suspected Source(s): Contaminated Sed. (Listed 1998)

• PCBs and Other Toxics - Suspected Source(s): Contaminated Sed. (Listed 1998)

Ont 66-12-12-P154 (portion 2) – Onondaga Lake, Southern End (0702-0021)

- Onondaga County Class C Lake Cause/Pollutant(s):
  - Dioxin Suspected Source(s): Contaminated Sed. (Listed 1998)
  - Mercury Suspected Source(s): Contaminated Sed. (Listed 1998)
  - PCBs and Other Toxics Suspected Source(s): Contaminated Sed. (Listed 1998)

## Part 3a - Waterbodies for which TMDL Development May be Deferred (Requiring Verification of Impairment)

#### Oswego River (Finger Lakes) Drainage Basin

Ont 66-11-P26-37- 6- 2 - Limestone Creek, Lower, and Minor Tribs (0703-0008) Onondaga County - Class C River - Cause/Pollutant(s): • Oxygen Demand<sup>1</sup> – Suspected Source(s): Municipal (Listed 2008) • Fecal Coliform – Suspected Source(s): Municipal (Listed 2008) Ont 66-12 (portion 2) - Seneca River, Lower, Main Stem (0701-0008) Onondaga County - Class C River - Cause/Pollutant(s): • Fecal Coliform - Suspected Source(s): Onsite WTS (Listed 1998) Ont 66-12-12-P154 (portion 1) - Onondaga Lake, Northern End (0702-0003)8 Onondaga County - Class B Lake - Cause/Pollutant(s): • Low D.O. - Suspected Source(s): Natural Conditions (Listed 2018) Ont 66-12-12-P154- 6-P175 - Otisco Lake (0702-0011)8 Onondaga County - Class AA Lake - Cause/Pollutant(s): • Low D.O. - Suspected Source(s): Natural Conditions (Listed 2018) Ont 66-12-12-P154 (portion 2) - Onondaga Lake, Southern End (0702-0021)8 Onondaga County - Class C Lake - Cause/Pollutant(s): • Low D.O. - Suspected Source(s): Natural Conditions (Listed 2018) Ont 66-12-12-P154- 4 - Onondaga Creek, Lower, and Tribs (0702-0023) Onondaga County - Class C River - Cause/Pollutant(s): • Turbidity - Suspected Source(s): Streambank Erosion, Mudboils (Listed 2010)

Ont 66-12-12-P154- 4 – Onondaga Creek, Middle, and Tribs (0702-0004) Onondaga County – Class B River – Cause/Pollutant(s): • Turbidity – Suspected Source(s): Streambank Erosion, Mudboils (Listed 2008)

Ont 66-12-12-P154- 4 – Onondaga Creek, Upper, and Tribs (0702-0024) Onondaga County – Class C River – Cause/Pollutant(s): • Turbidity – Suspected Source(s): Streambank Erosion, Mudboils (Listed 2008)

## Part 3b - Waterbodies for which TMDL Development May be Deferred (Requiring Verification of Cause/Pollutant)

#### Oswego River (Finger Lakes) Drainage Basin

Ont 66-12 (portion 1) – Seneca River, Lower, Main Stem (0701-0001) Onondaga County – Class C River – Cause/Pollutant(s): • Oxygen Demand<sup>1</sup> – Suspected Source(s): Invasive Species, Agriculture (1998)

Ont 66-12 (portion 2) – Seneca River, Lower, Main Stem (0701-0008) Onondaga County – Class C River – Cause/Pollutant(s):

• Oxygen Demand<sup>1</sup> – Suspected Source(s): Invasive Species, Agriculture (Listed 1998)

Ont 66-12-12-P154- 2 – Bloody Brook and Tribs (0702-0006)<sup>10</sup> Onondaga County – Class C River – Cause/Pollutant(s):

• Unknown (Biological Impacts) – Suspected Source(s): Unknown (Listed 2010)

Fecal Coliform – Suspected Source(s): CSOs, Municipal, Urban Runoff (Listed 2008)

Ont 66-12-12-P154 (portion 2) - Onondaga Lake, Southern End (0702-0021)10

Onondaga County - Class C Lake - Cause/Pollutant(s):

• Fecal Coliform – Suspected Source(s): CSOs, Municipal, Urban Runoff (Listed 2008)

Ont 66-12-12-P154 - Minor Tribs to Onondaga Lake (0702-0022)10

Onondaga County - Class C River - Cause/Pollutant(s):

- Fecal Coliform Suspected Source(s): CSOs, Municipal, Urban Runoff (Listed 2008)
- Nutrients (Phosphorous) Suspected Source(s): CSOs, Municipal, Urban Runoff (Listed 2008)
- Nitrogen (NH<sub>3</sub>, NO<sub>2</sub>) Suspected Source(s): CSOs, Municipal, Urban Runoff (Listed 2008)
- Cyanide Suspected Source(s): CSOs, Municipal, Urban Runoff (Listed 2008)

Ont 66-12-12-P154- 3 - Ley Creek and Tribs (0702-0001)10

- Onondaga County Class C River Cause/Pollutant(s):
- Fecal Coliform Suspected Source(s): CSOs, Municipal, Urban Runoff (Listed 2008)
- Nutrients (Phosphorous) Suspected Source(s): CSOs, Municipal, Urban Runoff (Listed 1998)
- Ammonia (NH<sub>3</sub>) Suspected Source(s): CSOs, Municipal, Urban Runoff (Listed 1998)

Ont 66-12-12-P154- 4 - Onondaga Creek, Lower, and Tribs (0702-0023)10

Onondaga County - Class C River - Cause/Pollutant(s):

- Fecal Coliform Suspected Source(s): CSOs, Municipal, Urban Runoff (Listed 2008)
- Nutrients (Phosphorous) Suspected Source(s): CSOs, Municipal, Urban Runoff (Listed 1998)
- Ammonia (NH<sub>3</sub>) Suspected Source(s): CSOs, Municipal, Urban Runoff (Listed 1998)

Ont 66-12-12-P154- 4 - Onondaga Creek, Middle, and Tribs (0702-0004)

Onondaga County - Class B River - Cause/Pollutant(s):

• Fecal Coliform - Suspected Source(s): CSOs, Municipal, Urban Runoff (Listed 2008)

## Part 3c - Waterbodies for which TMDL Development May be Deferred (Requiring Verification of Impairment)

#### **Oswego River (Finger Lakes) Drainage Basin**

Ont 66-12-12 – Onondaga Lake Outlet (0702-0020)

Onondaga County - Class B River - Cause/Pollutant(s):

• Unknown (Biological Impacts) - Suspected Source(s): CSOs, Municipal, Urban Runoff (Listed 2018)

Ont 66-12-29 - Skaneateles Creek (0707-0003)13

Onondaga County – Class C(T) River – Cause/Pollutant(s):

• PCBs - Suspected Source(s): Industrial/Land Disposal (Listed 1998)

<sup>1</sup>Waters exceeding the New York State Water Quality Standard for dissolved oxygen are listed for 'Oxygen Demand' if a specific oxygen demanding pollutant has not been identified.

<sup>8</sup> Morphology and other natural conditions may contribute to periodic dissolved oxygen (D.O.) depletion at lower depths in in thiswater. However, bottom water conditions are not necessarily representative of the water body as a whole and the aquatic life best use within this water body are fully supported. To the best of NYSDEC's knowledge there are no anthropogenic pollutants driving D.O.excursions within the waterbody. NYSDEC will continue to monitor this water for D.O. and other pollutants that drive oxygendepletion and upon verification of impairment to these waters from other than natural sources or conditions, NYSDEC will move this segment to Part 1 of the 303(d) List.

<sup>10</sup> The Department is conducting a detailed review of monitoring data received from the Onondaga County Ambient Monitoring Program required under the Onondaga Amended Consent Judgement (ACJ), the Microbial Trackdown Study performed by Onondaga Environmental Institute (OEI), and additional environmental sampling performed by others to determine the overall impacts of various restoration measures, the water quality in theses tributaries, and the need for moving these listings to Part 1 of the 303(d) List and consideration for development of a TMDL. Impairments to these waters continue to be addressed through a combination of the following measures: 1) completion of the requirements under the ACJ, 2) development and implementation of the Onondaga CountyCSO Long Term Control Planning (LTCP), 3) potential implementation of additional Microbial Trackdown Studies, and 4) potential Consent Orders and other agreements with municipalities, including regulated Municipal Separate Stormwater Sewer Systems (MS4)entities, and private entities to address industrial contamination, storm water combined sewer overflows, and other urban sources.

<sup>13</sup> Impairments to Skaneateles Creek had been verified, but the impairment is thought to have been addressed through completed environmental (hazardous waste) remediation actions.

#### Stormwater Pollutants of Concern and Their Sources

Storm water runoff from impervious surfaces carries large amounts of various pollutants to the surface waters of the United States. These pollutants include nutrients, silt/sediment, pathogens, oil/grease, metals, debris and litter. Of particular concern to the water bodies in the Syracuse Urbanized Area (SUA), are phosphorus and sediment.

Phosphorus, Nitrogen, and Other Nutrients

Phosphorus is the nutrient of greatest concern because it promotes weed and algae growth in lakes and streams. Excessive weed growth clogs waterways and blocks sunlight. When algae die, they sink to the bottom and decompose in a process that removes oxygen from the water. Fish and other aquatic organisms can't exist in water with low dissolved oxygen levels. Some sources of nutrients are fertilizer, human and animal waste, and detergents.



#### Silt and Sediment

Large amounts of silt and sediment, when dislodged and

swept by storm water into water bodies, can disrupt ecosystems and drinking water supplies. Storm water runoff that contains sediment can deposit harmful amounts of silt in sensitive areas



such as wetlands, wildlife preserves, and stream and lake bottoms, harming habitat needed by aquatic insects and plants. Sediment blocks sunlight needed by aquatic plants to grow and can carry toxic chemicals that deplete oxygen in water bodies. Sediment also clogs drinking water intake pipes. Silt and sediment in surface waters generally are the result of soil erosion from construction sites, lawns, and agriculture gardening/landscaping activities.

#### Toxic Substances

Toxic substances may enter surface waters either dissolved in runoff or attached to sediment or organic materials. The principal concerns in surface water are their entry into the food chain, bioaccumulation, toxic effect on fish, wildlife and

microorganisms, habitat degradation, and contamination of public water supply sources. Some toxic substances that may be present in residential areas, businesses and construction sites are listed below:

- Residential: Pet waste, vehicle fluids (oil, gas and antifreeze) paint, pesticides, solvents, batteries, hazardous wastes, street litter, soap from car washing, and swimming pool discharges.
- Businesses: Fuel, soap from equipment washing, waste process water and hazardous liquids.
- Construction: Sediment, wash water from concrete mixers, used oil and solvents, vehicle fuels and pesticides.

#### Pathogens (bacteria, viruses)

Bacteria and viruses include infectious agents and disease producing organisms normally associated with human and animal wastes, leakage from sewers and seepage from septic tanks.

These organisms can cause disease in humans and animals when present in drinking water and contact recreation water bodies. Biological contaminants come from organic matter, animal waste and litter.

#### Oxygen demanding Organics (decaying plant and animal matter, food waste, human and animal waste)

Organic materials (natural or synthetic) may enter surface waters dissolved or suspended in runoff. Natural decomposition of these materials may deplete dissolved oxygen supplies in the surface waters. Dissolved oxygen (DO) becomes reduced below the threshold necessary to maintain aquatic life, impairing or killing fish and other aquatic plants and animals.



#### Oil and Grease (petroleum products)

Oil and grease may be toxic to aquatic life, even in small amounts. Oil and grease in storm drains can generally be traced to automotive leaks and spills or improper disposal of used oil and automotive products into storm drains.

• Metals (e.g. lead, mercury, copper cadmium) Metals in water can be toxic to aquatic life, humans and other animals that drink from surface waters. Metals come from vehicle exhaust, weathered paint, metal plating, tires, discarded auto parts, and motor oil.

#### Thermal Stress (sunlight)

Direct sunlight exposure to urban streams which lack shade may elevate stream temperatures, which can exceed fish tolerance limits, reduce survival and lower resistance to disease. Street, parking lot and roof surfaces which have been heated by sunlight may transport thermal energy to a stream during a storm event, adding stress to biota. Cold water fish (such as trout) may be eliminated, or the habitat may become marginally supportive of the fishery.

#### Floatables (litter)

Floating litter in water may be contaminated with toxic chemicals and bacteria and can cause death to aquatic animals and birds. Commonly observed floatables include cigarette butts, plastic containers, wrappers and cans. Ducks and geese often become caught in plastic six-pack rings, fishing line or string which can strangle them. Floatables are generally the result of careless handling or littering.

#### **Sources of Contamination**

- **Street Pavement:** The components of road surfaces, including breakup and degradation of asphalt, tar, and other oil-based substances are sources of contamination in urban runoff.
- **Motor Vehicles:** Fuels and lubricants spill or leak, particles are worn off from tires or brake linings, exhaust emissions collect on the road surface, and corrosion products or broken parts fall from vehicles. While the quantity of material deposited from individual vehicles may be small, the combined impact from numerous vehicles is significant. Automotive service stations tend to have high concentrations of the above contaminants.

- **Atmospheric Fallout:** Air pollutants include dust, contaminants and particles from stacks and vents, from automobiles and planes, and from exposed land. The airborne matter settles on the land surface and washes off as contaminated runoff.
- **Vegetation:** Leaves, grass clippings, and other plant materials that fall or are deposited on urban land may become part of the runoff problem. Quantities depend on the geographic location, season, landscaping practices, and disposal methods.
- **Spills:** Producers and manufacturers must store and use large quantities of hazardous substances to supply the goods we demand. Sometimes through mismanagement, neglect, or accidents these substances leak or spill into groundwater and surface waters. Consumer products such as paint thinner, lacquers, detergents, etc., also find their way into storm drainage systems.
- *Litter:* This consists of various kinds of discarded refuse items, packaging materials, and animal droppings. Although the quantities may be small, the pollutant sources can be significant and may be the most visible form of urban runoff.
- **Anti Skid Compounds and Chemicals:** In the northeast, urban areas employ large amounts of substances designed to melt ice in the winter. Salts, sand, and ash are the commonly used agents. It is impossible to keep the substances from washing into storm drains.
- Lawn Care: A variety of chemicals may be used as fertilizers, pesticides and herbicides. Many of these substances will become part of urban stormwater runoff when improperly stored or applied.
- **Construction Sites:** Soil erosion from land disturbed by construction is a highly visible source of sediment in stormwater runoff. Construction methods and control measures influence stormwater quantity and quality. Storm Sewers tend to accumulate deposits of silt and sediment that will eventually be dislodged and transported by storm flows. Suspended solids are small soil particles that make the receiving water cloudy.
- **Combined Sewer Overflows:** Wet-weather discharges into water bodies from combined sewer systems carry sanitary and storm flows that exceed the capacity of sewage treatment plants during large storms. Combined sewer overflows contribute pathogens and nutrients to the waterways in older cities like Syracuse.
- Home Septic Systems: Failing or poorly designed and/or located systems are more likely to
  overflow during wet weather periods. Sewage may then be carried with runoff into receiving
  waters.
- Agriculture: Agricultural runoff is water pollution that occurs when water from rain, snow, or irrigation flows over agricultural land instead of soaking into the soil. As it moves across the ground, it can pick up pollutants from both natural and artificial sources, such as: pesticides, sediment, nutrients from fertilizers, and metals.

Some information in the Introduction was developed by the Central New York Regional Planning and Development Board

#### Public Education and Outreach on Storm Water Impacts Minimum Control Measure 1

#### Introduction

People appreciate their local waterways. They use them for swimming, boating and fishing. We are fortunate that we can enjoy several lakes, rivers and streams in Onondaga County for worldclass trout and warm-water fishing, as well as canoeing, motor-boating, birding, swimming and for drinking water. We also have several hundred acres of valuable wetlands that provide wildlife habitat and water quality improvement.

Stormwater runoff can impact these water resources in many ways. Implementing this minimum measure will help the residents of Onondaga County understand what they can do to protect and restore the health of their water resources. Public education is a key component to any effective stormwater management program. Well-planned public education and outreach programs will support and help achieve the goals of the other minimum control measures.

#### Program Details

To meet the requirements of Minimum Control Measure 1, the MS4 Operator must develop and implement an education and outreach program to increase public awareness of pollutant generating activities and behaviors. This MCM is designed to inform the public about the impacts of stormwater on water quality, the general sources of stormwater pollutants, and the steps the general public can take to reduce pollutants in stormwater runoff.

The following education and outreach strategy was designed to meet the conditions of GP-0-24-001 on behalf of members of the Central New York Stormwater Coalition.

In addition to standard conditions, some Coalition members are subject to additional education requirements established in Parts VIII. A, VIII C, VIII D and IX B. This plan is designed to meet those additional elements and extend quality and targeted information to the entire urbanized area in the geographic focus areas and targeted audiences required (see Table 2.).

The Central New York Regional Planning and Development Board (CNY RPDB) hosts the CNY Stormwater Coalition and conducts and coordinates education and outreach activities for Coalition members. CNY RPDB will offer presentations by request on a range of topics including, but not limited to municipal roles in the MS4 program, green infrastructure, BMPs for homeowners or commercial businesses, and specifics of the permit program as requested. Information will be geared to the specific audience which may include, but is not limited to, construction professionals, landscaping professionals, the public, municipal committees, and educators. Ms4s should inform CNY RPDB of any specific topics of educational need in their community.

The CNY RPDB will document all education, training, and outreach compliance activities conducted on behalf of the Coalition. See Table 2 for a summary of documentation of planned and completed education and outreach.

The CNY RPDB will also partner with other entities whose mission is to provide educational opportunities and programming to the public including, but not limited to, the Onondaga County Library System.

#### **Description of Audiences**

The education and outreach strategy identifies distinct audiences which will receive varying targeted messages based on what actions they are able to take in the related sector to prevent run-off pollution through the stormwater conveyance system.

#### Residential

Cumulatively, private homeowners make up a significant land area in the urbanized area and, thus, actions taken in yard and home care practices have great influence on pollutant reductions. Outreach and education targeted to the residential audience include everyday behavioral choices that can make an impact such as responsible pet waste management to prevent pathogens and phosphorus, proper (and legal) fertilizer practices, as well as green infrastructure practices that are simple to install at home. Ultimately the goal is to create widespread understanding of how the conveyance system works, and how pollutants should be controlled at home. A summary of materials to be used in educational programs and distributed to the public is provided in Table 7.

#### Commercial

The business sector has its own set of best housekeeping practices to be employed, which vary by the site conditions of their business. Within impaired sewersheds and the TMDL, businesses such as nurseries, landscaping companies, and golf courses will be targeted for the greater potential of intercepting nutrients in runoff by employing best practices on site. An inventory of these businesses located within the Onondaga Lake TMDL watershed is provided in Tables 3, 4, 5, and 6.

These businesses will be sent direct mailings related to protecting water quality, specifically around proper management of fertilizers and pesticides as well as provisions of the NYS Fertilizer Law and related pesticides laws. Golf Courses will be sent direct mailings of materials generated by the Cornell Turfgrass program as part of a golf course sustainability program funded by the New York State Pollution Prevention Institute.

#### Institutions

Colleges, universities, and libraries are natural outlets for information and educational programming on stormwater. The CNY Stormwater Coalition has a partnership with the Onondaga County Library system to present adult education programs and distribute information on residential best practices for water quality. Programming and materials will be distributed via universities and colleges.

#### Construction

The construction industry plays a significant role in managing stormwater runoff – education and outreach to this sector will seek to achieve widespread understanding of the principles and purpose behind employing stormwater management practices on active construction sites as well as designing them into the final development.

Outreach efforts to this audience include the four-hour Erosion and Sediment Control Courses taught by the Onondaga County Soil and Water Conservation District as well as direct mailings to construction firms regarding Construction permit requirements. Firms are documented in Table 6.

#### Industrial

Small and mid-sized industrial sites that have stormwater discharges to the MS4 system, such as auto salvage, mining, electronics manufacturing and repair, and all forms of heavy industry. Larger industrial sites that discharge stormwater directly to a receiving body do not participate in the MS4 program.

#### Illicit Discharge Education

Annually, the CNY RPDB will deliver messages to the public about illicit discharge. This will be documented in a chart in this section and updated annually to be submitted with annual reports. The CNY Stormwater Coalition will develop a flyer detailing the required information. This flyer will be posted to the CNY Stormwater Website and will be provided to each municipality to distribute to staff and residents as appropriate. It will also be printed and used as a handout during all public presentations and community events attended by the CNY Stormwater Coalition. Additionally, the CNY Stormwater Coalition has developed a tri-fold brochure that provides information about this issue and about the hotline that residents may call to report problems, operated by Onondaga County. This flyer and brochure are included as attachments to the SWMP.

## **Stormwater Pollution**

The contamination of stormwater negatively impacts our lakes. rivers, wetlands, and other water bodies. Nutrients like phosphorous and nitrogen can lead to excessive algae growth and oxygen depletion. Hazardous substances from vehicles and improper use of pesticides, herbicides, and fertilizers pose a threat to water quality and can harm fish and other aquatic life. Bacteria from animal waste and improper connections between sanitary sewer and storm sewer systems can render lakes and waterways unsafe for activities such as wading, swimming, and fish consumption. Additionally, eroded soil is considered a pollutant as it diminishes water clarity and disrupts the habitats of fish and plant life.





In our community, unauthorized non-stormwater discharges into the MS4 (Municipal Separate Storm Sewer System) are strictly prohibited as they are deemed illicit. However, there are certain exceptions to this rule. **Discharges** from firefighting activities are authorized when the events are emergencies/unplanned. Discharges that are significant sources of pollutants, like sanitary connections to storm sewers, illegal dumping, and spills that find their way into the storm sewer system, are considered illicit practices that must be avoided.

For More Info on Stormwater and illicit discharge please visit: https://dec.ny.gov/environmentalprotection/water/water-quality/stormwater

> To report an illicit discharge, please contact the Onondaga County Stormwater Pollution Hotline at (315) 435-3157

### **CNY Stormwater Coalition**

## ILLICIT STORMWATER DISCHARGES:

IDENTIFYING AND PREVENTING STORMWATER POLLUTION IN YOUR NEIGHBORHOOD



Central New York Stormwater Coalition stormwater@cnyrpdb.org





## What is an illicit discharge?

An illicit (illegal) discharge occurs when any substance other than stormwater is released into a municipal storm sewer system, including storm drains, pipes, and ditches. Pollutants enter storm sewer systems through various preventable means, such as the improper connection of waste pipes to stormwater pipes by companies or residences, as well as the disposal of different types of waste into storm drain inlets by individuals. It is important to note that disposing of anything other than stormwater into storm sewers is illegal!



Things you can do to help water quality

- Never dump anything down storm drains
- Use lawn and garden chemicals sparingly; sweep up any excess from driveways, sidewalks, and roads
- Repair vehicle leaks: cover spilled fluids with kitty litter then sweep into household waste
- Pick up after your pet and dispose of it properly
- Control soil erosion on your property by planting ground cover and stabilizing erosionprone areas
- Keep grass clippings, leaves, litter, and debris out of street gutters and storm drains
- Direct downspouts onto grassy areas away from paved surfaces
- Use a commercial car wash or wash your vehicle on the grass instead of the driveway
- Dispose of used oil, antifreeze, paints, and other household chemicals in an approved manner.

## If you see/smell something, say something!

Sewage coming out of outfalls is detrimental to our environment and public health. Not only does it contaminate our water bodies, but it also poses serious risks to aquatic life and can lead to the spread of harmful pathogens.



#### Stormwater Runoff and Pollution

Stormwater runoff is water from rain or melting snow that does not soak into the ground. It flows from rooftops, paved areas, bare soil, and lawns into storm drains or ditches.

Storm sewers and ditches collect stormwater runoff and convey it directly to water bodies without treatment. Ideally, stormwater runoff would be free of contaminants. In reality, it picks up pollutants such as animal waste, pesticides, fertilizers, salt, oil and grease, soil and debris and transports them to waterways where they are discharged with no treatment.

Polluted stormwater degrades our waterways limiting drinking water sources and recreational assets, as well as disrupting the balance of aquatic ecosystems. Central New York Stormwater Coalition Protecting Our Waters

The CNY Stormwater Coalition is a collaboration between the Central New York Regional Planning and Development Board and local governments in the Syracuse Urbanized Area to meet conditions of the NYS MS4 General Permit and improve local water quality.

#### CNY STORMWATER COALITION MEMBERS

Onondaga County, City of Syracuse, Towns of Camillus, Cicero, Clay, DeWitt, Geddes, Hastings, LaFayette, Lysander, Manlius, Marcellus, Onondaga, Pompey, Salina, Sullivan, Van Buren. Villages of Baldwinsville, Camillus, Central Square, East Syracuse, Fayetteville, Liverpool, Manlius, Marcellus, Minoa, North Syracuse, Phoenix, Solvay and the NYS Fairgrounds.

### Contact Us!

Email: stormwater@cnyrpdb.org Web: www.cnyrpdb.org/stormwater



## Illicit Stormwater Discharges

Identifying & Preventing Stormwater Pollution In Your Neighborhood





Storm sewer systems cannot treat polluted water. Stormwater doesn't get carried to the wastewater treatment plant. Storm sewers transport rain water and everything in it directly to surrounding rivers, streams, lakes, and other bodies of water.



#### What is an Illicit Discharge?

An illicit (illegal) discharge is any discharge to a municipal storm sewer system, including storm drains, pipes, and ditches, that is not composed entirely of water.

Pollutants end up in storm sewer systems in a number of ways, many of which are easily preventable. In some instances, companies or residences have waste pipes tapped into stormwater pipes. In other cases, individuals use the storm drain inlets to dispose of various types of waste.

Disposal of anything other than stormwater in storm sewers is illegal!

#### Only Rain belongs in the Drain!

#### Examples of Illicit Discharges

- Septic Tank Seepage
- Illegal Sanitary Connections
- Laundry Wastewater / Detergent
- Improper Waste Oil Disposal
- Auto Fluids Flushing
- Paint, concrete
- Pesticides and Fertilizers
- Improper Disposal of Hazardous Waste
- Pool / Spa Discharge
- Cooking Grease
- Household Waste



## Signs of an Illicit Discharge

If an outfall is flowing but there has not been rain or snow melt in the last 72 hours, this may indicate an illicit discharge. Visible sewage waste, foul odor, suds or other evidence of contamination, are also indicators that an illicit discharge is causing water pollution.

### You Can Protect Water Quality!

- Never dump anything down storm drains
- Use lawn and garden chemicals sparingly; sweep up any excess from driveways, sidewalks, and roads
- Repair vehicle leaks; cover spilled fluids with kitty litter then sweep into household waste
- Pick up after your pet and dispose of waste properly
- Control soil erosion on your property by planting ground cover and stabilizing erosion-prone areas
- Keep grass clippings, leaves, litter, and debris out of street gutters and storm drains
- Direct downspouts onto grassy areas away from paved surfaces
- Use a commercial car wash or wash your vehicle on the grass instead of the driveway
- Dispose of used oil, antifreeze, paints and other household chemicals in an approved manner

If you see something, say something! Report illicit discharges to Onondaga County at 315-435-3157

### **Stormwater Pollution**

#### What is Stormwater?

Stormwater is water from rain or melting snow that does not soak into the ground. It flows from rooftops, over paved areas, bare soil, and sloped lawns. As it flows, stormwater runoff collects and transports soil, animal waste, salt, pesticides, fertilizers, oil and grease, debris, and other potential pollutants.

#### What is the Problem?

Rain and snowmelt wash pollutants from streets, construction sites, and land into storm sewers and ditches. Eventually, the storm sewers and ditches empty the polluted stormwater directly into streams and rivers with no treatment. This is known as stormwater pollution.

Polluted stormwater degrades our lakes, rivers, wetlands and other waterways. Nutrients such as phosphorous and nitrogen can cause the overgrowth of algae resulting in oxygen depletion in waterways. Toxic substances from motor vehicles and careless application of pesticides and fertilizers threaten water quality and can kill fish and other aquatic life. Eroded soil is a pollutant as well. It clouds the waterway and interferes with the habitat of fish and plant life.

Stormwater pollution can be prevented or minimized by implementing Best Management Practices, which are procedures or activities that reduce or eliminate pollutants in stormwater.

## Central New York Stormwater Coalition

Under the leadership of Central New York Regional Planning & Development Board (CNY RPDB), 29 municipalities from Onondaga and Oswego Counties, as well as the New York State Fair, work to meet regulatory stormwater management requirements while improving water quality throughout Central New York.

The Coalition meets four times per year and meetings are open to the public. For additional information, send an e-mail to: <u>stormwater@cnyrpdb.org</u>.

## Stormwater Coalition Members

Baldwinsville Village Camillus Town Camillus Village Central Square Village Cicero Town Clay Town DeWitt Town East Syracuse Village Fayetteville Village Geddes Town Hastings Town LaFayette Town Liverpool Village Lysander Town Manlius Town Manlius Village Marcellus Town Marcellus Village Minoa Village North Syracuse Village Onondaga County Onondaga Town Phoenix Village Pompey Town Salina Town Solvay Village Syracuse City Sullivan Town Van Buren Town NYS Fairgrounds





**Central New York Stormwater Coalition** c/o Central New York Regional Planning & Development Board 126 N. Salina Street, Suite 200 Syracuse, New York 13202



## **BMPS for All Construction Sites**

Basic pollution prevention practices can significantly reduce the amount of pollution leaving construction sites. Construction materials, debris, trash, fuel, paint, and stockpiles become pollution sources when it rains. The following practices should be implemented on site:

- Keep potential sources of pollution out of the rain to the maximum extent possible (e.g. inside a building, under a tarp, sealed in containers).
- Clearly identify a protected, lined area for concrete truck washout. This area should be located away from streams, storm drain inlets, or ditches and cleaned out periodically.
- Park, refuel, and maintain vehicles and equipment in a designated area on the site to minimize the area exposed to possible spills and fuel storage. Keep spill kits close by and clean up spills and leaks immediately, including those on pavement and earth surfaces.
- Practice good housekeeping. Keep the construction site free of litter, construction debris, and leaking containers.
- Never hose down paved surfaces to clean dust, debris or trash, as the water could wash pollutants directly into storm drains or streams. Sweep up materials and dispose in the trash. Never bury trash or debris.
- Dispose of hazardous materials promptly and properly.

## Stormwater and the Construction Industry

As stormwater flows over a construction site, it picks up pollutants such as sediment, debris and chemicals. High volumes of stormwater can also cause streambank erosion and have a negative impact on aquatic habitat. Preventing stormwater pollution is an important responsibility at all construction sites.

## **Best Management Practices**

#### **Construction Phasing**

- Sequence construction activities so that soil is not exposed for long periods of time.
- Schedule or limit grading to small areas.
- Immediately seed areas that will be exposed for 7 days or longer with annual rye.
- Install sediment control practices before any soil disturbance begins.
- Schedule site stabilization activities immediately after the land has been graded to its final contours.

#### **Construction Entrances**

- Remove mud and dirt from the tires of construction vehicles before exiting the construction site onto paved roadways, but do not use water.
- Inspect construction entrance to ensure it does not become buried in soil (Entrance should be maintained with gravel to retain soil on-site).

#### **Storm Drain Inlet Protection**

- Use appropriate methods to protect the storm drain to filter out trash and debris.
- If inlet filters are used, maintain them regularly.

#### Silt Fence

- Inspect silt fences after each rainstorm and weekly.
- Make sure the bottom of the silt fence is buried in the ground 6 inches.
- Make sure stormwater does not flow around the silt fence during storm events.
- Don't place silt fence in the middle of a waterway.
- Attach fence securely to stakes.
- Stakes should be on the downslope side of the fence.



## PHOSPHORUS Can Cause Serious Problems

Excess phosphorus in freshwater lakes and ponds can cause algae overgrowth, with serious impacts to the environment and public health:

- Heavy mats of algae deplete the water of oxygen that fish need to survive.
- Algae overgrowth makes water recreation unpleasant and potentially harmful.
- Algae growth may cause carcinogens to form in drinking water during chlorination.
- Phosphorus feeds blooms of toxic algae, creating health risks to people and animals.

## Does the law apply to ...?

- Pesticide/fertilizer combination products ("weed and feed") – YES, when these products contain over 0.67% phosphorus
- Organic phosphorus fertilizer (such as bone meal) **YES**
- Agricultural fertilizer no
- Fertilizer for trees, shrubs or gardens no
- Compost no

## For more information:

General information on the phosphorus runoff law: www.dec.ny.gov/chemical/67239.html

Frequently asked questions about lawn fertilizer: www.dec.ny.gov/chemical/74885.html

Green lawns and gardens: www.dec.ny.gov/public/44290.html

Blue-green harmful algal blooms: www.dec.ny.gov/chemical/77118.html

**Cornell Cooperative Extension:** http://cce.cornell.edu

#### **Contact Information**

New York State Department of Environmental Conservation Division of Water 625 Broadway, Albany, NY 12233-3508 518-402-8086 DOWinformation@dec.ny.gov





www.dec.ny.gov



## **Buying Fertilizer?**

LOOK FOR THE ZERO

## **Protect Your Waters**



32-0-4



in the middle means environmentally friendly, phosphorus-free fertilizer.

## ZERO IN THE MIDDLE means phosphorus-free and that means...

### Zero pollution –

Phosphorus is one of the leading causes of water pollution. Even if you live far from a water body, excess phosphorus from your lawn can wash off and pollute lakes and streams, harming fish and ruining boating and swimming. More than 100 water bodies in the state cannot be used for drinking, fishing or swimming because they contain too much phosphorus.

### Zero waste -

Why pay for a chemical your lawn doesn't need? Generally, only newly established lawns or those with poor soil need phosphorus. Phosphorus applied to a lawn that doesn't need it won't be used and can cause water pollution. Do a soil test if you are unsure.

### Zero hassle –

It's against the law to use phosphorus on lawns that don't need it. (New York State Environmental Conservation Law, article 17, title 21 and Agriculture and Markets Law § 146-g) Check local laws, too–some municipalities have stricter laws about selling and using lawn fertilizers. Use a guard, deflector, or drop spreader to keep fertilizer at least 3 feet away from water bodies

## Fertilizing Your Lawn...

## **DO NOT:**

- S Use lawn fertilizer that contains phosphorus unless you are establishing a new lawn, or a soil test shows that your lawn does not have enough phosphorus.
- O Apply any lawn fertilizer December 1 - April 1.
- Apply fertilizer on sidewalks, driveways or other impervious surfaces. If fertilizer spills onto these surfaces, you MUST sweep it up to prevent it from washing into drains or waterways. Do not hose it off.
- Apply lawn fertilizer within 20 feet of any water body unless...
  - there is at least a 10-foot buffer of shrubs, trees, or other plants between the area you are fertilizing and the water,

#### OR

 fertilizer can be applied no closer than 3 feet from the water using a device with a spreader guard, deflector shield or drop spreader. Algae can ruin boating and swimming



## ...the Right Way

### Look for the zero!

Before buying, check the fertilizer bag for a set of three numbers showing the percentage of nitrogen, phosphorus and potassium. Buy a bag with a **"0"** in the middle.

## What should I see at the store?

Retailers who sell fertilizer must display phosphorus-containing fertilizer separately from phosphorus-free fertilizers and post a sign near the display.

## Test your soil

If you think your lawn might need extra phosphorus, test your soil. Tests cost \$10-\$20. There are several options:

- Have testing done through your local Cornell Cooperative Extension office.
- Find a commercial laboratory that tests soil.
- Use a home test kit. These tests tend to be less accurate and do not come with fertilizer recommendations.

## SCOOP THE POOP



- Stormwater runoff washes bacteria and phosphorus from left behind pet waste directly into waterways.
- Bacteria, parasites and viruses in pet waste are a health risk to other animals and people, especially children.
- Phosphorus promotes excessive aquatic plant growth and harmful algal blooms which are also a health risk to people and your pets!

## Preventing pollution from pet waste is easy!

- Clean it up immediately.
- Double bag and dispose in trash.
- Never dispose of bagged, or unbagged, pet waste in a storm drain, catch basin or by the road.



The CNY Stormwater Coalition is a collaboration between the Central New York Regional Planning and Development Board and local governments in the Syracuse Urbanized Area to meet conditions of the NYS MS4 General Permit and improve local water quality.

To learn more about stormwater pollution, visit the CNY Stormwater Coalition online

www.cnyrpdb.org/stormwater

Stormwater@cnyrpdb.org



# **Rain Barrel Basics**

A rain barrel is a container that collects and stores rainwater from rooftops and gutters for future uses. Water in a rain barrel is not potable, but can be used to water garden plants, wash or rinse outdoor furniture and cars or simply to released at drier time thus decreasing the volume and velocity of runoff that leaves your property during a major rain event.

A rain barrel is typically placed under the downspout from a roof. This is a technology that has been used for thousands of years!

# Why Rain Barrels?

Collecting rain reduces the amount of rain water from roofs that runs off lawns and into sewer systems. Stormwater runoff has the potential to carry pollutants to local waterways, especially during a heavy rain that produces high volumes and velocity of flows.

Rain barrels can help reduce the amount of stormwater, and thus pollutants, going into Onondaga Lake and other local waterways.

Rain barrels help prevent pollution, but also prevent flooding, conserve water, and reduces your own water bill!



The CNY Stormwater Coalition is a collaboration between the Central New York Regional Planning and Development Board and local governments in the Syracuse Urbanized Area to meet conditions of the NYS MS4 General Permit and improve local water quality.

#### CNY STORMWATER COALITION MEMBERS

Onondaga County, City of Syracuse, Towns of Camillus, Cicero, Clay, DeWitt, Geddes, Hastings, LaFayette, Lysander, Manlius, Marcellus, Onondaga, Pompey, Salina, Sullivan, Van Buren. Villages of Baldwinsville, Camillus, Central Square, East Syracuse, Fayetteville, Liverpool, Manlius, Marcellus, Minoa, North Syracuse, Phoenix, Solvay and the NYS Fairgrounds.



# A GUIDE TO RAIN BARRELS

# Contact Us!

Email: stormwater@cnyrpdb.org Web: www.cnyrpdb.org/stormwater





#### Anatomy of a rain barrel

**Down spout:** The down spout is connected to gutters in your roof. To install the rain barrel, you will need to attach the downspout to the barrel.

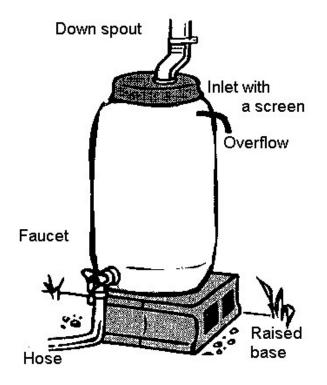
**Inlet and screen:** The inlet is where you connect the down spout into the rain barrel. A screen will keep insects and other unwanted debris, like leaves and twigs, from entering the barrel.

**Faucet:** Located at the bottom of the barrel, this is where you will let water out.

**Hose:** Attach a hose to the outlet spigot at the bottom of your barrel to use water throughout your yard. This is not necessarily required, but very useful!

**Overflow:** An overflow pipe allows water out if the barrel fills to capacity.

**Raised Base:** It is best to put your barrel on a raised platform so gravity can help water flow through the faucet.





#### **Catch the Rain: Tips**

**Roll Out the Rain Barrel in the Spring :** Wait until the last frost to install your rain barrel.

The right place to install: Choose a downspout that is close to where you want to use the water. Make sure the ground is solid and level. Gravel, wooden boards, or concrete slabs can create a firm base. Your barrel should be elevated off the ground with cinder blocks to ensure good water pressure from the barrel.

**Check the Screen:** Make sure the screen is always tightly secured so nothing can get inside. Patch any holes in the screen.

**Cleaning:** Clean with vinegar or soap and water, then rinse it out before winter storage or spring reinstallation.

**Overflow:** During heavy rains, check that water is diverted **away** from the house and that the barrel is not overflowing. If the overflowing barrel becomes a problem, reinstall the barrel onto a smaller section of roof or add additional barrels.

**Leaks:** Use plumbing putty to seal any leaks around the hardware

Winter Storage: Disconnect the barrel in October and store indoors. If you must leave the barrel outside, remove the hoses, open the spigots and turn it upside down to allow any water to drain out.

## Table 2. Documentation of All Planned and Completed Education and Outreach

Target Audience	Focus Area	Торіс	POC	Mode	Planned timeframe	Date(s) delivered	Requirement met
Residential	Town of Manlius, Limestone Creek	Proper yard care for water quality to prevent pollutants of concern.	Phosphorus, nitrogen, pathogens	Volunteer community group will table with copies of six (6) different flyers and share information with abletheir neighbors.	Spring 2024	May 4 <sup>th</sup> 2024	Part VIII
Residential & Municipal	Town of Cicero	Proper yard care for water quality to prevent pollutants of concern.	Phosphorus, nitrogen, pathogens	Table with copies of six (6) flyers and share information with residents as part of a Comprehensive Plan process	January 2024	January 29 <sup>th</sup> , 2024	Part VIII
Residential	All	Proper yard care for water quality to prevent pollutants of concern.	Phosphorus, nitrogen, pathogens	Public library presentations and information tables at Community events	Spring 2024 Autumn 2024.	April 20, 2024, Pompey Earth Fest May 16, 2024, Hazard Library June 13, 2024, Jamesville- DeWitt Library	Part VIII
Residential	All	Proper HHW disposal to prevent Illicit Discharges to the MS4	Phosphorus, nitrogen,	Digital, print flyer	Ongoing through 2024		Part VI
Residential	All	How to prevent illicit discharge	All	Flyer available in digital and print form	Annually		Part VI

Target Audience	Focus Area	Торіс	РОС	Mode	Planned timeframe	Date(s) delivered	Requirement met
Commercial	Onondaga Lake TMDL	Turf management for golf courses and others to prevent pollutants of concern.	Phosphorus, nitrogen,	Post link to Digital/ audio files prepared by Cornell Turf Grass Program on the Coalition Website.	Ongoing through 2024		Part VIII
Institution	Onondaga Lake TMDL	Proper yard care for water quality to prevent pollutants of concern.	Phosphorus, nitrogen, pathogens	Distribute materials and develop educational programming	Ongoing through 2024		Part VIII
Construction	All	Erosion and sediment control	Phosphorus, nitrogen, pathogens	Provide information on the availability of the 4-hour E&S course	Ongoing through 2024		Part VIII
Construction	All	Erosion and sediment control	Phosphorus, nitrogen, pathogens	Distribute informational brochure	Ongoing through 2024	Mailed, 7/10/2024	Part VIII
Industrial	All	Good housekeeping for industrial sites	Phosphorus, nitrogen, pathogens	Provide information on site management	Ongoing through 2024		Part VIII
Municipal Staff: Planning Boards	All	Better site design and low impact development	All	Presentation	2025		

## Table 2. Documentation of All Planned and Completed Education and Outreach

Business Name	Address	Town	Business Type
Ballantyne Gardens	4825 Hopkins Rd, Liverpool, NY 13088	Liverpool	Garden Center, Local
Carol Watson's Greenhouse	2980 Sentinel Heights Rd, Lafayette, NY 13084	LaFayette	Greenhouse
Crazy Daisys Greenhouse and Cafe	4693 Kasson Rd, Syracuse, NY 13215	Camillus	Greenhouse and Agrotourism
Hillside Garden Inc	2756 W Seneca Turnpike, Marcellus, NY 13108	Marcellus	Wholesale Plant Nursery
Home Depot	5814 Bridge St, East Syracuse, NY 13057	East Syracuse	National Chain, Home Improvement and Garden Store
Home Depot	3756 Milton Ave, Camillus, NY 13031	Camillus	National Chain, Home Improvement and Garden Store
Lowes	5377 W Genesee St, Camillus, NY 13031	Camillus	National Chain, Home Improvement and Garden Store
Lowes	131 Simon Dr, Syracuse, NY 13224	Syracuse	National Chain, Home Improvement and Garden Store
Morgan Meille Garden Center	6278 Thompson Road, East Syracuse, NY	East Syracuse	Garden Center and Landscape Company
Sollecito	4094 Howlett Hill Rd, Syracuse, NY 13215	Onondaga	Garden Center and Landscape Company
Vollmer Farms	4W3M+2P East Syracuse, New York	DeWitt	Nursery and Farm Market
Walmart Garden Center	5399 W Genesee St, Camillus, NY 13031	Camillus	National Chain, Garden Store

# Table 3. Inventory of Nurseries in the Onondaga Lake TMDL Watershed

Business Name	Address	Town	Course Type	Website
Belleview Country Club	1901 Glenwood Ave, Syracuse, NY 13207	Syracuse	Private	http://bellevuecountryclub.com/
Burnet Park Golf Course	300 Coleridge Ave, Syracuse, NY 13204	Syracuse	Public	
Sunnycrest Golf Course	Syracuse, NY 13206	Syracuse	Public	https://www.syr.gov/Venues/Sunnycrest-Park- Golf-Course
Sunset Ridge	2814 W Seneca Turnpike, Marcellus, NY 13108	Marcellus	Private	http://www.sunsetridgegolfclub.com/
Tuscarora Golf Club	2901 Howlett Hill Rd, Marcellus, NY 13108	Marcellus	private	https://www.tuscaroragolfclub.com/
Westvale Golf Club	100 Golfview Dr, Camillus, NY 13031	Camillus	Private	http://www.westvalegolfcourse.com/

### Table 4. Inventory of Golf Courses in the Onondaga Lake TMDL

#### Table 5. Inventory of Landscaping Companies in the Onondaga Lake TMDL

Business Name	Address	Town
AJ Miller Landscape Architecture	1833 James St, Syracuse, NY 13206	Syracuse
Award Winning Landscapes	4678 E Townline Rd, Marcellus, NY 13108	Marcellus
Distinguished Landscapes	4263 Abbey Rd, Syracuse, NY 13215	Syracuse
Elite Landscaping and Restoration	101 Corkins Ln, Liverpool, NY 13088	Liverpool
Foxscapes Landscaping	4258 W Seneca Turnpike, Syracuse, NY 13215	Syracuse
Francisco's Landscaping	142 Mather Street, Syracuse, NY 13203	Syracuse
Gardesigns Landscape	7192 Oswego Rd, Liverpool, NY 13090	Liverpool
Gasparini Landscaping	5072 Smoral Rd, Camillus, NY 13031	Camillus

Table 5. Inventory of Landscaping Companies in the Onondaga Lake TWDL				
Business Name	Address	Town		
Greenbriar Lawncare and Hardscapes	2675 Pleasant Valley Rd, Marcellus, NY 13108	Marcellus		
Hunter Springs Landscape Architects	6331E Molloy Rd, East Syracuse, NY 13057	East Syracuse		
J&J Landscaping	321 West 2 <sup>nd</sup> Street, East Syracuse, NY 13057	East Syracuse		
Jeff's Cutting Edge Landscaping	108 Newcastle Rd, Syracuse, NY 13219	Syracuse		
KD Landscaping	1611 Lodi Street, Syracuse, NY 13208	Syracuse		
Shawn Murphy Landscaping	123 Gale Ave, Liverpool, NY 13088	Liverpool		
Swimm Landscape	4269 James Street, East Syracuse, NY 13057	East Syracuse		
Yardsmith	2381, 308 Burnet Ave #1, Syracuse, NY 13203	Syracuse		

#### Table 5. Inventory of Landscaping Companies in the Onondaga Lake TMDL

#### Table 6. Select Inventory of Construction Companies Active in the Syracuse Urbanized Area

Business Name	Address	Town
Alberici General Contractors, Inc	300 Clayton Manor Dr S	Salina
Ballard Construction Company	320 Bridge St	Syracuse
Bella Casa Builders by Alberici Inc.	8245 Loop Rd	Lysander
Bragman Companies, The	8285 Thompson Rd	Cicero
C Michael Exteriors, Inc.	6075 E Molloy Rd #6	Syracuse
Cordelle Development Corporation	206 E Seneca St	Manlius
Cornerstone Homes CNY, LLC	5508 Rolling Meadows Way	Camillus
Custom Homes by Ron Merle	300 Old Liverpool Rd #201	Salina

Business Name	Address	Town
D&B Painting and Construction	140 Main St	Camillus
David B. Lee & Company Inc.	1741 Pork St	Skaneateles
Drumm Construction Corp.	801 US-11	Tully
Eagan Real Estate Inc.	202 Windcrest Dr	Camillus
Eldan Homes, Inc.	7854 Oswego Rd	Salina
G F Frost Construction Company	5229 E Foxhill Ln	Camillus
Gowing Contracting	2261 Buckwheat Rd	Tully
Harrington Homes	3848 Henneberry Rd	DeWitt
Heritage Homes	7519 Morgan Rd	Salina
Home HeadQuarters, Inc.	625 Erie Blvd W	Syracuse
Hueber-Breuer Construction	148 Berwyn Ave	Syracuse
J & B Builders, Inc.	5040 Velasko Rd	Syracuse
J M G Custom Homes	6265 NY-31	Cicero
J. Alberici & Sons, Inc	3536 Timber Banks Pkwy	Van Buren
J's Construction and Hauling	303 Smith Ave	Onondaga
Kasper Homes	3895 Fennell St	Skaneateles
Kevin Rich Construction LLC	775 Crow Hill Rd #785	Skaneateles
Klepper Construction Inc.	122 Marangale Rd	Manlius
Konrad Builders	5263 Wethersfield Rd	DeWitt

#### Table 6. Select Inventory of Construction Companies Active in the Syracuse Urbanized Area

Business Name	Address	Town
Kreis Construction & Home	609 7th N St	Salina
Liguigli Construction	104 Cleveland St	Salina
Loscombe Custom Homes Inc.	9407 Steamship Manhattan	Cicero
Luber	103 Milo Ln	Syracuse
Marinich Builders	1123 N State St	Syracuse
Mark Antony Contracting Inc.	3208 W Genesee St Ste A	Syracuse
Martin Custom Homes	7527 Buckley Rd	Syracuse
McClurg Remodeling & Construction Services	60 E Main St	Marcellus
McKean Building & Remodeling, Inc.	405 Silver St	DeWitt
Merle Builders Inc.	8692 Oswego Rd	Clay
Mitchell's Construction Solutions	2666 Warners Rd	Van Buren
MWG Construction Inc.	201 S Main St	Cicero
Northeast Natural Homes	5110 Velasko Rd	Syracuse
Oot Brothers, Inc.	5912 N Burdick St	DeWitt
Paduana Construction	1149 Grand Ave	Syracuse
Parker Construction Company	2877 Pleasant Valley Rd	Marcellus
Paul M. Fowler Dev. Corp.	7058 E Genesee St	DeWitt
PLS Construction Company	115 Valley Dr	Syracuse
Rees Construction	367 Gertrude St	Syracuse

Table 6. Select Inventory of Construction Companies Active in the Syracuse Urbanized Area

Business Name	Address	Town
Rich and Gardner Construction Company	206 Plum St	Syracuse
Ryan Homes	159 Dwight Park Cir	Syracuse
S & R Custom Homes Inc.	5020 Munro Rd	Camillus
Scalice Custom Homes and Remodeling	4558 Limeledge Rd	Marcellus
Sciuga Custom Builders	2339 Milton Ave	Geddes
Signature Crest Builders	634 Old Liverpool Road #A	Salina
Smolen Homes, Inc.	100 Osceola Rd #1252	Syracuse
Stringer Homes, LLC	4500 Pewter Ln #3A	Manlius
T & L Companies, LLC	6981 Island Rd	Cicero
Welch Construction Inc	4331 Slate Hill Rd	Marcellus

#### Table 7. Inventory of Print Materials Used for Outreach

Title	Торіс	Format	Audience
My Rain Garden	Rain gardens	Coloring book	Kids / homeowners
Illicit Stormwater Discharges	Illicit discharge reporting	Brochure	Residential & municipal
Scoop the poop	Pet waste cleanup	Information card	Residential
Look for the Zero	Fertilizer	Brochure	Residential
Stormwater and the Construction Industry	BMPs for Construction Sites	Brochure	Commercial

### Web Site

- The CNYRPDB developed and continues to host a Stormwater Phase II Syracuse Urban Area website (http://www.cnyrpdb.org/stormwater-phase2). The site serves as an information dissemination, communication, education and public outreach tool.
- In 2005, the County Office of Environment established a Stormwater Outreach and Education component as part of its website at http://www.ongov.net/environment/stormwater/overview.html. Much of the information on the site was developed by the Central New York Regional Planning and Development Board.
- The County Department of Water Environment Protection included a section on the Onondaga Lake Improvement Project website that focuses on pollution prevention in general, with a special page entitled "P2 Starts in the Home," which provides tips on how homeowners can do their part to reduce water pollution and includes additional pages that include: What is pollution prevention, P2 at work, P2 in healthcare, grease reduction, mercury reduction, silver management, anti-freeze: recycle it, and an "additional resources" page. (http://www.ongov.net/wep/we17.html).
- The CNYRPDB maintained a list of all NYS and federal legislation referenced in the Phase II permits, all NYSDEC Phase II guidance materials and permits, individual books, pamphlets and manuals, training videos, training and education presentations and links to related internet websites. The holdings catalog is posted on the Board's stormwater website and contact information is provided for requesting copies of the catalogued materials at http://www.cnyrpdb.org/stormwater/public/library.asp#\_BookReports.

# Media Campaign

- The CNYRPDB developed two feature length articles and submitted both for publication in regional (Post Standard) and local (Eagle Newspapers, CNY Environment) newspapers in August, September and October 2003 and March 2004. Articles were posted on the Board's website for use and distribution by regulated MS4s. An additional article (An Overview of the Phase II Stormwater Regulatory Program) was developed, and posted on the Board's website.
- The CNYRPDB prepared press releases for various meetings and workshops and submitted them for publication to all media outlets on 9/5/03 (Citizen Workshop); 2/17/04 (Think Spring); 3/16/04 (Municipal Training Workshop).
- The CNYRPDB developed one feature length article and one shorter informational piece and submitted both to all local and regional media outlets for publication during the second quarter of 2004. The Board also posted the articles on their stormwater website and provided an electronic copy to MS4s for local use and distribution.

The Board prepared press releases for various meetings and workshops and submitted them for publication to all media outlets, including the Municipal Good Housekeeping workshop on March 30, 2005.

### **Printed Material**

- The CNYRPDB compiled information needed to concisely fill information gaps and produced two double-sided fact sheets: 1) Reducing the Impacts of Stormwater Pollution/Ten Ways Homeowners Can Improve the Quality of Stormwater Runoff, 2) Summary of Stormwater Runoff Pollutant Effects/Sources of Contamination in Urban Runoff; posted fact sheets as PDF files on the Board's stormwater website for use and distribution by regulated MS4s.
- The Board compiled comprehensive information needed to fill information gaps and produce two 3-panel brochures for target audiences (i.e., construction operators and homeowners); mailed brochure announcements and hard copy brochure masters to MS4s; posted brochures as PDF files on the Board's stormwater website for use and distribution by regulated MS4s.
- The County distributed copies of the brochure entitled "Stormwater Pollution Prevention: The Influence of Construction Activities" to applicants who receive County permits for construction activities impacting County facilities, primarily within or adjacent to County roads. The CNYRPDB developed the brochure and distributed 15,000 copies to all counties, cities, towns and villages within the SUA and the remainder of their 5-county Central New York region. This brochure also appears on the CNYRPDB website:

http://www.cnvrpdb.org/stormwater/docs/ConstructionBrochure.pdf.

- In 2005 the Council on Environmental Health developed a new brochure entitled: "Stop Pollution Before It Starts" to enhance general public understanding of residential stormwater protection practices and stormwater issues in general. This brochure is also distributed to residential applicants who receive County permits for construction activities impacting County facilities, and several hundred copies have been placed in various public locations. A copy also appears on the CNYRPDB website: http://www.cnyrpdb.org/stormwater/docs/HomeownerBrochure.pdf.
- In 2008, the Onondaga County Council on Environmental Health produced a brochure titled "Is There a Pond Near Your Home?" and distributed approximately 250 copies to municipalities and homeowners.

#### **Events and programs**

- The CNYRPDB made formal Stormwater Phase II presentations at the FOCUS Greater Syracuse meeting (2/13/04) and the Izaac Walton League (IWL) conference (2/28/04). Presentations included a general description of stormwater issues and concerns, and described the overall requirements of the Phase II regulatory program. Additionally, the FOCUS presentation emphasized the logic and benefits of a regional compliance effort and the level of intermunicipal cooperation currently occurring within the SUA. The IWL presentation emphasized the requirements of Minimum Measure 2 and the need for citizen participation.
- On January 28, 2004 the Onondaga County Planning Federation hosted a one-hour course entitled "Stormwater Controls for Local Elected Officials," conducted by the NYS Departments of State and Environmental Conservation.

- On January 25, 2005 the Onondaga County Planning Federation hosted a one-hour course for municipal officials entitled "Stormwater Phase II: Revising Local Laws to Implement Community Stormwater Programs."
- On January 31, 2006 the Onondaga County Planning Federation hosted a one-hour course for municipal officials entitled "Protecting Water Resources through Local Regulations."
- On September 25, 2007 the Onondaga County Planning Federation, which, among other things, puts on programs for local officials appointed to town and village boards, included a two-hour course for municipal officials entitled "NY SPDES Stormwater General Permit Requirements."
- The County Parks Department promoted community awareness at the Rosamond Gifford Zoo by conducting an event called "Eco-Expo," the Zoo's celebration of Earth Day. The event included a "green building tour," which included information about the collection of water from building roofs. The event also featured the non-point source model funded by the OLP.
- On the recommendation of the County Council on Environmental Health, Finger Lakes-Lake Ontario Watershed Protection Alliance funds were provided to the Cornell Cooperative Extension of Onondaga County to initiate a "<u>Rain Catcher</u>" program in Onondaga County to include the following: rain garden presentations to community groups, the design and maintenance of a webpage on rain gardens, rain barrels, etc., and work with media to promote rain gardens, work with landscape, nursery professionals and the Homebuilders/Remodelers Association to increase knowledge of rain gardens and other practices.

#### Proper Disposal of Household Hazardous Waste

- The County continued to support public participation in the bi-annual household hazardous waste cleanup days carried out by the Onondaga County Resource Recovery Agency.
- The County continued to carry out a pilot thermometer exchange program with Bristol-Myers Squibb and the Onondaga County Resources Recovery Agency to remove mercury thermometers from residences and distribute non-mercury thermometers.

# Public Involvement/Participation Minimum Control Measure 2

Cleaning up stormwater pollution is a difficult task because there is no single source, no single solution and, no single responsible party. We all contribute to the problem and we all have a role to play in the solution.

MS4s can reap the benefit of a stronger program and higher levels of compliance if they involve people in planning and implementing the Stormwater Management Program (SWMP) right from the beginning. Important partnerships can be cultivated for planning and implementing the program through public involvement activities. An involved public will be more likely to support a stormwater program both in terms of helping implement the program and sustaining it in the long run.



#### **Requirements:**

Onondaga County must comply with State and local public notice requirements when implementing a public involvement/participation program. The County will comply with public participation and involvement provisions of the Clean Water Act whenever applicable.

The County is required to design and conduct a public involvement/participation program that: identifies key individuals and groups who are interested in or affected by the stormwater permitting program, identifies the type of input the MS4 will seek from them, and describes activities the MS4 will undertake to provide program access and gather needed input.

Onondaga County is required to report to the NYSDEC by June 1 each year on the progress and effectiveness of the Stormwater Management Program, and provide an opportunity for the public to comment on the Program and the Annual Report. The Annual Report is available on the County web site at: <u>http://www.ongov.net/Environment</u>.

Prior to submitting the annual report, the County is required to announce that the draft annual report is available for public review and comment, post the draft report in a format that is available to the public (for example, on the County's web site), and provide an opportunity for the public to request an open public meeting to ask questions about and make comments on the report. The County is required to include a summary of comments and intended responses in the final annual report and make the final report available for public inspection. Beginning in 2009, the County also must make the SWMP available for public inspection.

As a component of this minimum control measure, the County must develop measurable goals and select appropriate public involvement activities to ensure the reduction of all pollutants of concern in stormwater discharges to the maximum extent practicable. The County will periodically assess and modify the measurable goals as needed.

#### **Activities and Practices:**

To accomplish the public involvement/participation goals, the County designated the Onondaga County Council on Environmental Health as the citizen advisory entity. The Council maintains a list of stakeholders who would like to be apprised of milestones and give input to environmental management decisions, and the Council participates in and encourages citizen volunteer programs for activities like beach cleanups, picking up litter, stream monitoring and field surveys, and storm drain stenciling.



The County worked with the <u>Central New</u> <u>York Regional Planning and Development</u> <u>Board</u> to solicit initial stakeholder input on stormwater issues, concerns and suggestions for effectively incorporating the general public into stormwater management planning and implementation efforts.

The CNYRPDB encourages schools, community groups and individuals to become involved in cleaning streams, roadsides, and beaches, stenciling storm drains, planting trees, composting, using less fertilizers and

pesticides, and other stormwater stewardship activities through the <u>Watershed Stewardship Program</u>. Volunteers can receive a little extra recognition and a chance to win Wegman's gift cards.

Elizabeth Martin, Director of the County's Office of Environment, is identified as the primary contact person on the County's Notice of Intent. The County Office of Environment's website (<u>http://www.ongov.net/Environment</u>), which features a stormwater outreach and education component, includes the County's Stormwater Management Plan and Annual Report for public review.

# Illicit Discharge Detection and Elimination (IDDE) Minimum Control Measure 3

A significant portion of flows from municipal separate storm sewer systems (MS4s) are not directly attributable to precipitation runoff. They are due to inappropriate, or illicit, discharges and connections to the MS4. Illicit discharges enter the system through direct or indirect connections. The result is inadequately treated stormwater discharges that contribute high levels of pollutants, including heavy metals, toxics, oil and grease, viruses, and bacteria to receiving water bodies.



#### **Requirements:**

Under this minimum control measure, Onondaga County must develop, implement and enforce a program to detect and eliminate illicit discharges into the MS4, including illegal dumping, and develop and maintain a map showing the location of all stormwater outfalls within the County's urbanized area and the names and location of all surface waters that receive discharges from those outfalls. (A stormwater outfall is defined as any point where a storm sewer system discharges to either the waters of the U.S. or to another MS4. Outfalls include discharges from pipes, ditches, swales, and other points of concentrated flow.)

The program must include: an ordinance or other regulatory mechanism prohibiting illicit discharges into the storm sewer system; procedures for identifying priority areas of concern (geographic, audiences, or otherwise) for the IDDE program; description of priority areas of concern, available equipment, staff, funding, etc.; procedures for identifying and locating illicit discharges (trackdown); procedures for eliminating illicit discharges; and procedures for documenting actions. The County's program also contains components to inform public

employees, businesses and the general public of hazards associated with illegal discharges and improper disposal of waste.

The County is also required to conduct an inspection, or outfall reconnaissance inventory, as described in the EPA publication <u>Illicit Discharge Detection and</u> <u>Elimination: A Guidance Manual for Program</u> <u>Development and Technical Assessment</u>, addressing every outfall within the County's jurisdiction in the urbanized area at least once every five years, with reasonable progress each year.

By March 9, 2010, the County must also show progress on mapping the boundaries of the County's storm sewersheds – determined using a Geographic Information System (GIS) or other tools, even if they extend outside of the urbanized area – to facilitate trackdown of illicit discharges. The County

#### What is an "Illicit Discharge"?

Federal regulations define an illicit discharge as "....any discharge to an MS4 that is not composed entirely of stormwater...." with some exceptions. These exceptions include discharges from SPDES-permitted industrial sources and discharges from firefighting activities. Illicit discharges are considered "illicit" because MS4s are not designed to accept, process, or discharge such non-stormwater wastes. Sources of illicit discharges include: sanitary wastewater piped to storm drains, leaking septic tanks, car wash wastewaters, improper oil disposal, radiator flushing disposal, laundry wastewaters, and auto or household toxics dumped into storm drains.

must also map new outfalls as they are constructed or discovered within the urbanized area. As with other minimum control measures, the County must develop appropriate measurable goals, and assess and modify them as needed to protect the quality of Onondaga County's water bodies to the maximum extent practicable. The County reports to the NYSDEC annually the number of illicit discharges detected and eliminated, the percent of outfalls for which an outfall reconnaissance inventory has been performed, the status of storm sewer system mapping, and results of activities to inform the public of hazards associated with illegal discharges and improper disposal of waste.

#### **Activities and Practices:**

The County investigated the adequacy and/or suitability of existing regulatory controls available to the County to prohibit and eliminate illicit discharges to County stormwater conveyance systems. It was determined that the County Sanitary Code, Plumbing Code and Sewer Use Ordinance, in concert with State Environmental Regulations, are sufficient to enable the County to prohibit illicit discharges to the County stormwater systems. The County also assessed the adequacy of existing County department illicit discharge detection procedures, and existing policies and procedures to respond to illicit or unusual discharges to County systems.

Since 2009, through intermunicipal agreements, the County has provided stormwater outfall reconnaissance inventory for MS4s in the urbanized area at no cost, and trackdown and lab analysis of discharge samples at cost. In addition to the outfall inspections, the County has extended its sewer maintenance 24-hour hotline to include stormwater illicit discharges. The County takes reports of illicit discharges and, upon request, conducts investigations on behalf of participating MS4s.

# **Onondaga County Department of** Water Environment Protection

**Stormwater Pollution Hotline** 

(435-3157)

# ILLICIT DISCHARGE CALL PROCEDURE MANUAL

**Binder Contents:** 

- Hotline Call Receipt Procedure
- Illicit Discharge Hotline Tracking Sheet
- OCDOT Illicit Discharge Reporting Procedure
- OC Parks Illicit Discharge Reporting Procedure
- OCWEP Unusual Discharge Reporting Procedure
- OCWEP Stormwater Outfall Inspection Procedure
- OCWEP Illicit Discharge Sampling Procedure
- Field Survey Conditions & Causes
- FOAM in Waterbodies
- Outfall Reconnaissance Inventory ID Sheets
- MS4's-Parks-DOT inspection logs

# **Onondaga County Department of Water Environment Protection Hotline Call Receipt Procedure**

- 1) Accept calls reporting potential illicit discharges from the public at large
- 2) Record receipt of the potential illicit discharge in the WEP Dispatch Logbook
- 3) Collect the following information if available:
  - Date and time of call
  - Name/title of the person making the call
  - Name of organization if relevant
  - Record caller contact information
  - Location of where potential illicit discharge was observed
  - Source or type of illicit discharge if known
  - Weather conditions at time illicit discharge was observed
- 4) Notify the Stormwater Program Coordinator (Jed Walsh 435-5402 Ext. 219 or 530-2044). The Stormwater Program Coordinator will notify the appropriate authority and Town/Village contact person(s) as soon as possible after receiving a reported illicit discharge.

# **Onondaga County Department of Water Environment Protection Unusual Discharge Reporting Procedure**

Please use the procedure below when a discharge of unusual or unknown material is discovered entering any stormwater collection or conveyance system.\*

- A. Notify supervisor and Stormwater Coordinator
- B. Notify OCDWEP Henry Clay operator to record incident report, and include the following:
  - 1. Your name and job title.
  - 2. Where and how you can be reached (phone #, cell #, radio or beeper #)
  - 3. Location where the unusual discharge was detected (address, nearest intersection, town, etc.)
  - 4. Identify any unsafe conditions observed.
    - Note: If threat to workers is immediate, notify OCDWEP operator
  - 5. The time the unusual discharge was detected.
  - 6. The source or type of discharge, if known.
  - 7. Description of the discharge material, which may include:
    - a. Visual appearance (color, oily sheen, suds, etc.)
    - b. Physical characteristics (viscosity, floatables, etc.)
    - c. Odor
    - d. Field measurements if available (pH, temperature, flow rate)
    - e. Estimated amount of material

C. Collect a sample of the unusual discharge material if it is safe and practical to do so.

- 1. Use a one-quart glass sample jar (available from Engineering and Laboratory Services)
- 2. Record the location, date, and time of sample collection, as well as the name of the person collecting the sample, on the container label.
- 3. Arrange sample delivery or pick up with Engineering Laboratory Services

Caution: All employees shall observe Department safety procedures when confronted with conditions that may pose a hazard! Requests for information regarding proper safety procedures should be directed to your supervisor and OCDWEP Safety Director.

\* Stormwater collection and conveyance systems include ditches, swales, catch basins, curb inlets, pipes, culverts and outfalls.

# **Onondaga County Department of Water Environment Protection Stormwater Outfall Inspection Procedures**

#### Equipment:

- Digital Camera
- Cell phone
- White-board and Erasable Marker
- Outfall Inspection Forms
- Clip board and pencils
- Outfall Reconnaissance Inventory ID sheets
- Field Map of Outfall Locations, ID numbers

- Tape measure
- Spray paint
- Waders/Hip boats
- Watch with second hand
- Flashlight
- Reflective safety vest
- Hard hat

#### **Inspection Procedure:**

- 1. Determine inspection route and file route plan with Stormwater Coordinator.
- 2. Locate outfall using field map.
- 3. Write outfall ID number on white-board.
- 4. Photograph outfall with white-board visible in the photo
  - a. Take photos from several angles, Looking upstream and downstream
  - b. close-up, and (Flash photo of inside of pipe)
  - c. surrounding area.
- 5. Complete Outfall Inspection Form, noting outfall description, physical conditions, and physical indicators of any illicit or unusual discharges found (use Outfall Reconnaissance Inventory ID sheets to assist with identifying the discharge).
- 6. Photograph any discharges even if you can identify/describe the discharge.
- 7. Call OCDWEP operator to record the illicit discharge incident and to request review by the Stormwater Coordinator.
- 8. Spray paint the outfall ID number on the outfall or at edge of pavement if possible (not applicable to ditch or swale outfalls).

<u>Note:</u> In cases where an illicit discharge is detected/suspected on systems other than Onondaga County's the Stormwater Coordinator will Contact the MS4 Municipal contact prior to initiating Trackdown and Sampling procedures per the intermunicipal their agreement.

# **Onondaga County Department of Water Environment Protection** Illicit discharge Sampling Procedure

**<u>NOTE:</u>** Stormwater sampling should <u>**only**</u> be conducted to assist in Illicit Discharge Trackdown after Determination is made by the Stormwater Coordinator.

At the time of sampling a full re-inspection of the outfall with discharge shall be conducted.

#### Equipment:

- GPS Unit
- Digital Camera
- Cell phone
- White-board and Erasable Marker
- Outfall Inspection Forms
- Clip board and pencils
- Outfall Reconnaissance Inventory ID sheets
- Field Map of Outfall Locations, ID numbers, and GPS Coordinates
- Sample bottles
- Surgical gloves

- pH probe or test strips
- Ammonia test strips
- Temperature probe
- Tape measure
- Spray paint
- Waders
- Watch with second hand
- Flashlight
- Reflective safety vest
- Hard hat
- Portable boom or sand bags

#### **Sampling and Inspection Procedure:**

- 1. Locate outfall for inspection and sampling based the determination made by the Stormwater Coordinator.
- 2. Record GPS coordinates, and place coordinates on Outfall Inspection Form (be sure to stand on or as close as possible to the outfall when operating the GPS).
- 3. Write outfall ID number on white-board.
- 4. Photograph outfall with white-board visible in the photo
  - a. Take photos from several angles, Looking upstream and downstream
  - b. close-up, and (Flash photo of inside of pipe)
  - c. surrounding area.
- 5. Complete Outfall Inspection Form, noting outfall description, physical conditions, and physical indicators of any illicit or unusual discharges found (use Outfall Reconnaissance Inventory ID sheets to assist with identifying the discharge).
- 6. Photograph any discharges even if you can identify/describe the discharge.
- 7. Call OCDWEP operator to record the illicit discharge incident and to request trackdown if needed.\*
- 8. Obtain samples of unknown discharges (wear gloves!) and record sampling site (flow or pool) on Outfall Inspection Form. (**Refer to the Unusual Discharge Reporting Procedure**)
- 9. Spray paint the outfall ID number on the outfall or at the edge of pavement if possible (not applicable to ditch or swale outfalls).
- \* If the source of the discharge cannot readily be located, call the Stormwater Coordinator before initiating trackdown procedures.

Illicit Discharge	Hatling	In aid ant 7	[ma alring	Shoot
IIIIcit Discharge			URACKING	NIIGEI

Incident ID:							
Responder Information							
Call taken by:				Call date:			
Call time:				Precipitation (inches) in past 24-48 hrs:			
Reporter In	formation						
Incident time	:				Incident date:		
Caller contact information ( <i>optional</i> ):							
Incident L	ocation (complete	one or 1	nore below)				
Latitude and	longitude:						
Stream addre	ess or outfall #:						
Closest street	t address:						
Nearby landr	nark:						
Primary Lo	cation Description	Secor	dary Location De	scription:			
	Stream corridor (In or adjacent to stream)		ıtfall	In-stream flow		Along banks	
Upland and (Land not ad	rea jacent to stream)	Near storm drain         Near other water source (storm water pond, wetland, etc.)			ter pond, wetland, etc.):		
Narrative description of location:							
Upland Problem Indicator Description							
		Dil/solvents/chemic	ls Sewage				
U Wash was	Wash water, suds, etc.						
Stream Corridor Problem Indicator Description							
Odor	□ None	Sewage			Rancid/Sour		Petroleum (gas)
Odor Sulfide (rotten eggs); [		Other: Describe in "Narrative" section					
"Normal"			Oil sheen		Cloudy		Suds
Appearance	Appearance Other: Describe in "Narrative" section						
Floatablas	None:	Sewage (toilet paper, etc)		r, etc)	Algae		Dead fish
Floatables Other: Describe in "Narrative" section							
Narrative description of problem indicators:							
Suspected Violator (name, personal or vehicle description, license plate #, etc.):							

Investigation Notes				
Initial investigation date:	Investigators:			
No investigation made	Reason:			
Referred to different department/agency:	Department/Agency:			
Investigated: No action necessary				
Investigated: Requires action	Description of actions:			
Hours between call and investigation:	Hours to close incident:			
Date case closed:				
Notes:				

# Construction Site Runoff Control Minimum Control Measure 4

Though most communities welcome a certain level of development, construction sites can present a risk to water quality. Construction sites can be a significant source of sediment-laden runoff to MS4s, especially when installation and maintenance of erosion and sediment controls are not required or not adequately enforced. Proper stormwater management at construction sites will prevent loose soil and other pollution in stormwater runoff from causing significant degradation of our water bodies.

# **Requirements for non-land use control MS4s:**

The County's Construction Site Stormwater Runoff Control program applies to construction activities that occur on property owned, under easement to, within the right-of-way of, or under the maintenance jurisdiction of Onondaga County. Construction projects within the County boundaries, but not under Onondaga County ownership or jurisdiction, are regulated by the town, village or city MS4 they are located in.



Onondaga County is required to develop, implement, and enforce a program to reduce pollutants in any stormwater runoff to the County's MS4 from the County's construction activities that result in a land disturbance of one acre or more.

The program must include a mechanism to require construction site contractors on County Construction projects to implement erosion and sediment control management practices and to control waste at the construction site that may cause adverse impacts to water quality. The County's program also includes procedures for site plan review to ensure consistency with State erosion and sediment control requirements and considers potential water quality impacts, provides opportunity for public comment on construction plans, and procedures for site inspections and enforcement of control measures.

To ensure the reduction of all pollutants of concern in construction stormwater discharges to the storm sewer system to the maximum extent practicable, County construction projects disturbing one acre or more must have a Stormwater Pollution Prevention Plan (SWPPP) prepared in compliance with the <u>NYS SPDES General Permit For Stormwater Discharges from Construction Activity</u> and the DEC's technical standards contained in the <u>New York State Stormwater</u> <u>Management Design Manual</u> and the <u>New York Standards and Specifications for Sediment and Erosion Control</u>. To address phosphorus loading to Onondaga Lake, the County selects appropriate management practices to reduce phosphorus transport from construction sites.

All County employees involved in design and implementation of SWPPPs have received Erosion and Sediment Control training and all contractors on construction sites within the County's

jurisdiction are also required to receive four hours of Erosion and SedimentControl training before they do any work on the site.

The County maintains an inventory of active construction sites and stormwater management facilities within the County's jurisdiction.

#### **Activities and Practices:**

Onondaga County is a "traditional non-land use control MS4" for the purposes of complying with the SPDES Stormwater MS4 permit. As such, the County does not have laws governing construction site activities within the County. Local municipalities, however, do have laws and ordinances regulating erosion and sediment control and stormwater management on construction sites.

The County investigated existing and alternative mechanisms for instituting required erosion and sediment controls, construction site plan review, construction site waste management, site inspection and enforcement, and required education and training as it relates to County construction projects. It was determined that this could best be accomplished through County Executive Order. In 2004, such an Executive Order was drafted and subjected to interdepartmental review.

Construction Site Stormwater Runoff Control:

FOR REPORTING OF STORMWATER-RELATED VIOLATIONS ON COUNTY CONSTRUCTION PROJECT SITES:

#### 315-435-2525 Codes@ongov.net

Onondaga County Department of Emergency Management 420 Electronics Parkway Liverpool, NY 13088

## Post Construction Stormwater Management Minimum Control Measure 5

As runoff flows over areas altered by development, it picks up pollutants such as oil and grease, heavy metals, pesticides, and fertilizers. New development and redevelopment projects offer the opportunity to implement structural and non-structural stormwater runoff controls and management strategies to reduce the amount of pollutants that run off the sites into lakes, rivers and streams. Prior planning and design for minimization of pollutants in post-construction stormwater discharges is a cost-effective approach to stormwater quality and quantity management for new development and redevelopment.

Stormwater management technologies are evolving, and Onondaga County is promoting the use of new treatment methods collectively called "Green Infrastructure" – including green roofs, stormwater planters, porous pavement, infiltration trenches and rain gardens – implemented on new construction and redeveloped sites within the urbanized area.

The main goals of the County's new Green Infrastructure program are to improve water quality in Onondaga Lake, and reduce the volume of stormwater runoff from developed sites into the streams that feed the lake. Combined sewer overflows will be reduced by infiltrating runoff rather than allowing it to drain into the sewer system. Reducing overland flow from impervious surfaces like parking lots, driveways and roofs, and directing the runoff into vegetated areas helps to restore natural stream flows and protects stream habitat and water quality.



# **Requirements for non-land use control MS4s:**

To meet the requirements of Minimum Control Measure 5, Onondaga County is tasked with developing and implementing a program that includes a combination of stormwater management practices that will protect water quality and reduce the discharge of pollutants to the MS4 to the maximum extent practicable, using a mechanism to address post-construction runoff from SPDES-permitted County construction sites, and ensuring adequate

long-term operation and maintenance of management practices, including monitoring if necessary. The County is also required to inspect permitted construction sites on properties within the County's jurisdiction (County construction projects) to ensure compliance with the State's stormwater regulations.

The County annually reports to the DEC on the effectiveness of the program and stormwater management practices and measurable goal assessment and modifications.

#### **Activities and Practices:**

The County promotes using a combination of structural management practices (including practices from the <u>New York State Stormwater Management Design Manual</u>) and/or non-structural management practices (including open space preservation programs, Low Impact Development (LID), Better Site Design (BSD) and other Green Infrastructure practices) appropriate for construction sites, that will reduce the discharge of pollutants to the maximum extent practicable. With respect to the County's CSO (combined sewer overflow) abatement program, construction site developers in certain watersheds are encouraged to implement Green Infrastructure practices at both new and redeveloped sites, and the County will use Green Infrastructure practices on County construction projects whenever practicable.

# Pollution Prevention/Good Housekeeping for Municipal Operations Minimum Control Measure 6

Municipal operation and maintenance activities can become sources of the pollutants that need to be minimized through the SWMP. Good housekeeping measures for municipal operations will reduce or prevent this pollution from entering nearby water bodies in stormwater runoff. Effective stormwater management programs should start with municipal employees. Municipal crews can be educated about the impacts of their work on stormwater quality to prevent pollution from municipal operations. Also, municipal crews can set a good example for citizens.

#### **Requirements:**

This minimum control measure requires Onondaga County to develop and implement an operation and maintenance program to determine management practices, policies, and procedures to reduce and prevent the discharge of pollutants to the maximum extent practicable from County parks, campuses, open spaces, DOT maintenance garages, fleet and building maintenance facilities, and from County activities such as winter road maintenance, street sweeping, solid waste management, and stormwater system maintenance. The program includes annual pollution prevention and good housekeeping training for employees at County Parks, DOT, and Water Environment Protection facilities.



The County follows management practices identified in the <u>NYS Pollution Prevention and Good</u> <u>Housekeeping Assistance Document</u> and other guidance materials available from the EPA and New York State, and selects appropriate management practices to ensure the reduction of all pollutants of concern in stormwater discharges from County properties.

Onondaga County must report annually to the DEC the number of catch basins inspected, cleaned, repaired or replaced, miles of roads swept, the number of post-construction stormwater management facilities inspected and cleaned, and pounds of phosphorus applied in chemical fertilizer (a new addition to the reporting, beginning in 2009). The annual report also includes an evaluation of the effectiveness of the County's Pollution Prevention program.

## **Activities and Practices:**

In 2007-08, multi-media environmental compliance audits were performed at the County Department of Transportation's four highway garages and associated operations, and the Department of Water Environment Protection's Metropolitan Syracuse Wastewater Treatment Plant, consistent with the U.S. Environmental Protection Agency's Self-Audit Policy.

The County prioritizes pollution prevention and good housekeeping efforts based on potential to improve water quality, and facilities or operations most in need of modification or improvement. Pollution prevention policies such as petroleum storage and spill containment, and hazardous material storage and disposal procedures, have been implemented at all County facilities. Onondaga County Department of Transportation maintains enclosed or covered areas for its storage of road salt.