# MS4 General Permit Town of Windsor 2020 Annual Report

# Existing MS4 Permittee Permit Number GSM 000066 January 1, 2020 – December 31, 2020

This report documents Town's efforts to comply with the conditions of the MS4 General Permit to the maximum extent practicable (MEP) from January 1, 2020 to December 31, 2020.

# Part I: Summary of Minimum Control Measure Activities

# 1. Public Education and Outreach (Section 6 (a)(1) / page 19)

вмр	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed	Additional details
1-1 Implement public education and outreach	Ongoing	Stormwater Management information and educational material available on the Town's website	Distribute/Post stormwater information on Town's website	Engineering	Ongoing	Ongoing	https://townofwindsorct.com/engin eering/stormwater-management/
1-2 Address education/ outreach for pollutants of concern	Ongoing	Stormwater Management information and educational material available on the Town's website	Distribute/Post educational materials on pollutants of concern (Bacteria)	Engineering	Ongoing	Ongoing	https://townofwindsorct.com/engin eering/stormwater-management/

1-3 Annual Farmington River Watershed Association River Clean-up Event	Complete	Clean-up event held as part of CT River Conservancy's Source-to-Sea Cleanup	Hold annual Clean-up Event	Wetlands	Not Specified	September 2020	
1-4 Household Hazardous Waste Collection	Complete	Household Hazardous Waste collection events sponsored by The MDC	Educate and provide hazardous waste collections	DPW	Ongoing	08/29/2020	Windsor residents may participate in any MDC sponsored collection day

### 1.2 Describe any Public Education and Outreach activities planned for the next year, if applicable.

- Update the Town Website with additional Stormwater educational materials
- Continue Household Hazardous Waste Collection Events
- Continue to participate in community clean-up events
- Continue to replace catch basin tops with "Drains to Waterway" labelling

### 1.3 Details of activities implemented to educate the community on stormwater

Program Element/Activity	Audience (and number of people reached)	Topic(s) covered	Pollutant of Concern addressed (if applicable)	Responsible dept. or partner org.
Source-to-Sea Cleanup	Citizens of Windsor	General Pollutants, Illegal dumping	General	Farmington River Watershed Association
Informational Material posted on Town Website	Citizens of Windsor	Pet Waste, Water Fowl, Fertilizer, Impervious Cover	Bacteria, Nitrogen, Phosphorous	Engineering
Household Hazardous Waste Collection Event	Citizens of Windsor/ Local Municipalities	General Pollutants, Illegal dumping	General	MDC

# 2. Public Involvement/Participation (Section 6(a)(2) / page 21)

### 2.1 BMP Summary

ВМР	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed	Additional details
2-1 Final Stormwater Management Plan publicly available	Complete	Electronic copy posted on the Town's website. Hard copies available at the Engineering department front desk in Town Hall.	Make Stormwater Management Plan available to citizens	Engineering	04/03/2017	04/03/2017	https://townofwindsorct.com/ app/uploads/sites/8/2018/06/ Final_Windsor_Stormwater_Pl an_2017.pdf
2-2 Comply with public notice requirements for Annual Reports	Complete	Legal notice published. Electronic copy posted on the Town's website. Hard copies available at the Engineering department front desk in Town Hall.	Make annual report available to citizens	Engineering	Public Notice Published - 01/31/2021  Annual Report Available - 02/15/2021	01/31/2021	https://townofwindsorct.com/ engineering/stormwater- management/

# 2.2 Describe any Public Involvement/Participation activities planned for the next year, if applicable.

■ Continue to make Stormwater Plan, Annual Report, and educational materials available to citizens

# 2.3 Public Involvement/Participation reporting metrics

Metrics	Implemented	Date	Posted
Availability of the Stormwater Management Plan to public	Yes	01/31/2021	https://townofwindsorct.com/app/uploads/sites/8/2018/06/Final_Windsor_Stormwater_Plan_2017.pdf
Availability of Annual Report announced to public	Yes	02/15/2021	https://townofwindsorct.com/engineering/stormwater-management/

# 3. Illicit Discharge Detection and Elimination (Section 6(a)(3) and Appendix B / page 22)

ВМР	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed	Additional details
3-1 Develop written IDDE program	Complete	Town has adopted Written IDDE program using the CT IDDE program template	Develop written plan of IDDE program	Engineering	07/01/2018	07/01/2018	
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas	Complete	Town continues a QA/QC process of reviewing GIS system and editing as necessary.	Locate, document, and prioritize outfalls in areas of concerns	Engineering	07/01/2019	03/20/2018	Mapping and data will continue to be updated as outfalls are tested/repaired/etc.
3-3 Implement citizen reporting program	Complete	Citizen's may report Illicit Discharges through See- Click-Fix, the Town's online reporting system	Utilize citizen reporting program for identification of potential illicit discharges	Engineering	Ongoing	Ongoing	Citizens may report illicit discharges as they would report other concerns to The Town
3-4 Establish legal authority to prohibit illicit discharges	Complete	Illicit Discharges and Connections prohibited under Chapter 3 Article X of The Town of Windsor Code of Ordinances	Identify legal authority in written IDDE Program	Engineering	07/01/2018	09/08/2009	
3-5 Develop record keeping system for IDDE tracking	Complete	Town continues to maintain a list of reports that include IDDE.	Maintain a record of IDDE reports and actions	Engineering	07/01/2017	09/13/2017	
3-6 Address IDDE in areas with pollutants of concern	In Progress	None	Wet weather testing and additional investigation as necessary	Engineering	Not specified	Ongoing	

### 3.2 Describe any IDDE activities planned for the next year, if applicable.

- The written program will be posted to the Dept of Public works webpage and a link listed in next year's Annual Report
- Resume Wet/Dry weather screening and sampling in 2021
- Illicit discharges will continue to be investigated and eliminated, as they are discovered
- Maintain master IDDE tracking spreadsheet and ensure all employees involved in IDDE program understand the logging process

**3.3 List of citizen reports of suspected illicit discharges received during this reporting period.** Illicit discharges are any unpermitted discharge to waters of the state that do not consist entirely of stormwater or uncontaminated groundwater except those discharges identified in Section 3(a)(2) of the MS4 general permit when such non-stormwater discharges are not significant contributors of pollution to a discharge from an identified MS4.

Date of Report	Location / suspected source	Response taken
06/03/2020	·	Confirmed coloring in water was tracing dye used to evaluate system.  No illicit discharge occurred.
	discharge of chmical substance	No filicit discharge occurred.

# 3.4 Provide a record of illicit discharges occurring during the reporting period and SSOs occurring July 2012 through end of reporting period using the following table.

Location	Date and duration of occurrence	Discharge to MS4 or surface water	Estimated volume discharged	Known or suspected cause / Responsible party	Corrective measures planned and completed (include dates)
*22 Lepage Road	01/06/2012	Unknown	1.0	Jet Truck Hose Cleaning	Lower Jet hose line pressure
*8 Maude Circle	01/17/2012	Unknown	1.0	Jet Truck Hose Cleaning	Lower Jet hose line pressure
*12 Maude Circle	01/17/2012	Unknown	1.0	Jet Truck Hose Cleaning	Lower Jet hose line pressure
*20 Maude Circle	01/17/2012	Unknown	1.0	Jet Truck Hose Cleaning	Lower Jet hose line pressure
*67 Giddins Avenue	01/17/2012	Unknown	1.0	Jet Truck Hose Cleaning	Lower Jet hose line pressure
*560 Windsor Ave	10/20/2012	Unknown	1,000.0	Debris	Sewer Crew used equipment to relieve stoppage Regular maintenance of main sewer
*35 Capen Street	01/22/2013	Unknown	25.0	Debris	Sewer Crew used equipment to relieve stoppage Regular maintenance of main sewer
*879 Bloomfield Ave	03/31/2014	Yes	210.0	Collapsed Black Pipe	Sewer Crew repaired collapsed sewer. CCTV Inspection of pipes of similar age and material in the vicinity is conducted

*879 Bloomfield	05/01/2014	No	5.0	Collapsed Black Pipe	Sewer Crew repaired collapsed sewer.
Ave					CCTV Inspection of pipes of similar age and material in the
					vicinity is conducted
*38 Elm Street	12/28/2014	No	30.0	Debris	Sewer Crew cleared blockage of the main sewer
			and the second s		Regular maintenance of main sewer
*39 Rainbow Creek	04/26/2015	No	<100	Debris	Sewer Crew cleared blockage of the main sewer
Drive			7.15.00		Regular maintenance of main sewer
*36 Green Manor/	10/15/2015	No	15.0	Debris	Sewer Crew cleared blockage of the main sewer
6 London Road					Regular maintenance of main sewer
*High Path Road	10/14/2016	No	1,500.0	Grease Clog	Main sewer flushed by jet truck and stoppage relieved
					Regular maintenance of main sewer
*34 Hayden Ave	04/06/2017	No	10.0	Debris	Main sewer flushed by jet truck and stoppage relieved
					Regular maintenance of main sewer
*Ridge St Pump	01/18/2018	Yes	10,000	Differential Settlement	Forced main break repaired by sewer crew
Station				0000000	Regular maintenance of main sewer
*East Street	04/12/2020	No	100	Debris	Sewer Crew cleared blockage of the main sewer
					Regular maintenance of main sewer
80 International	06/24/2020	Yes	3000	Debris – Private System	Sewer line flushed by jet truck and stoppage relieved
Drive				·	Property owner instructed to inspect/clean impacted
					catchbasins and any downstream pipe/structures that
					received flow
*SSO information pro	ovided by The MD0	C			

# 3.5 Briefly describe the method used to track illicit discharge reports, responses to those reports, and who was responsible for tracking this information.

- Citizens can report an illicit discharge through the Town's website via the "See-Click-Fix" program
- An IDDE tracking form is available to all trained employees
- All discharges are reported to the Engineering Department for determining parties responsible and mitigating solutions
- A list of IDDE occurances is maintained by the Engineering Department

# 3.6 Provide a summary of actions taken to address septic failures using the table below.

Location and nature of structure with failing septic systems	Actions taken to respond to and address the failures	Watershed	Impact
276 Palisado Ave	Full Septic Repair/Replace		None Observed
215 Rainbow Road	Full Septic Repair/Replace		None Observed
530 Prospect Hill Road	Full Septic Repair		None Observed

580 Park Ave	Full Septic Repair/Replace	None Observed
4 Spruce	Full Septic Repair/Replace	None Observed
8 Poplar	Full Septic Repair/Replace	None Observed
587 Prospect Hill Rd	Full Septic Repair/Replace	None Observed
282 Hayden Station	Full Septic Repair/Replace	None Observed
71 Colonial Dr	Full Septic Repair/Replace	None Observed
292 Merriman	Tank Replacement	None Observed
1045 Hillside Circle	Tank Replacement	None Observed
366 Kennedy Rd	Tank Replacement	None Observed

# 3.7 IDDE reporting metrics

Metrics	
Estimated or actual number of MS4 outfalls	577
Estimated or actual number of interconnections	Unknown
Outfall mapping complete	100%
Interconnection mapping complete	Unknown
System-wide mapping complete (detailed MS4 infrastructure)	100%
Outfall assessment and priority ranking	100%
Dry weather screening of all High and Low priority outfalls complete	18
Catchment investigations complete	0
Estimated percentage of MS4 catchment area investigated	0%

# 3.8 Briefly describe the IDDE training for employees involved in carrying out IDDE tasks including what type of training is provided and how often is it given (minimum once per year).

- Town staff has been educated about the illicit discharge ordinance since it was adopted in 2009
- New DPW employees are trained on IDDE by crew leaders
- A formal annual training plan is in progress to comply written IDDE

# 4. Construction Site Runoff Control (Section 6(a)(4) / page 25)

вмр	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed	Additional details
4-1 Implement, upgrade, and enforce land use regulations or other legal authority to meet requirements of MS4 general permit	Complete	None	Review and if necessary, update The Town's Erosion & Sediment Control Ordinance (enacted in 2009) to ensure compliance with MS4 general permit	Engineering	07/01/2019	07/01/2019	Town ordinance requires an application for an Erosion & Sediment Permit be submitted and approved for all land disturbing activities greater than one-half acre in size
4-2 Develop and Implement plan for interdepartmental coordination in site plan review and approval	Ongoing	Staff Development Team reviewed and/or approved Site Plan/Revision applications received in 2020	Review of all Site Plans and Development Applications performed by the Staff Development Team	Planning	Ongoing	Ongoing	
4-3 Review site plans for stormwater quality concerns	Ongoing	Staff Development Team reviewed and/or approved Site Plan/Revision applications received in 2020	Review of all Site Plans and Development Applications performed by the Engineering Staff for	Engineering	Ongoing	Ongoing	Zoning Regulations require conformance with the Town's Stormwater Management Ordinance.  If a Stormwater Management Permit is required by the Stormwater Management

			stormwater quality concerns				Ordinance, evidence of an approved permit shall be a condition of approval for all zoning approvals required by the proposed evelopment/activity.  For sites that do not require a Stormwater Management Permit, Section 3.6.1 of the Zoning Regulations outlines minimum requirements that must be met.
4-4 Conduct site inspections	Ongoing	Completed/Docume nted necessary site inspections for all permitted development/redde volpment sites  Violations/Concerns documented and reported to applicants  Follow-up inspections performed	Conduct and documents site inspections	Engineering/ Wetlands	Ongoing	Ongoing	To obtain inspections, the applicant/permittee is responsible for notifying the Town Engineer at least two working days before the following: start of construction; completion of clearing limit demarcation; installation of sediment and erosion control measures; completion of site clearing; completion of rough grading; completion of final grading; close of construction season; completion of final landscaping; and removal of the sediment and erosion and control system  The permittee shall also make regular inspections and all inspections shall be documented in writing and submitted to the Town Engineer at the time interval specific in the approved permit.  Staff is able to enter the site to make inspections at any time they deem necessary
4-5 Implement procedure to allow public comment on site development	Ongoing	Allowed Public review and comment of all open development applications	Post applications online on the Planning Department webpage for public review  Record public comment on applications during the "Public Comment" portion of the Planning and	Planning	Ongoing	Ongoing	If a site development is associated with special use approval, a public hearing is held during which the public may comment.  The Inland Wetlands and Watercourses Commission may also hold a public hearing on a site development application if there are wetlands on the property and it is determined there is public interest and/or a significant impact on the wetlands.

			Zoning Commission meeting				
4-6 Implement procedure to notify developers about DEEP construction stormwater permit	Ongoing	Notified developers about DEEP's construction stormwater permit during development application review	Develop/Implement a Site Development Plan Checklist	Planning	Ongoing	Ongoing	Registration under DEEP General Permit for Discharge of Stormwater and Dewatering Wastewaters Associated with Construction Activities is required for issuance of Town Erosion & Sediment Control Permit

### 4.2 Describe any Construction Site Runoff Control activities planned for the next year, if applicable.

- Continue to review and update ordinances and regulations to comply with the MS4 General Permit
- Continue interdepartmental coordination in Board Reviews, Permitting, and Approval of Land Disturbance Projects
- Continue administration of the Town's Erosion & Sediment Control Ordinance, Permit Applications, and Site Inspections

# **5. Post-construction Stormwater Management** (Section 6(a)(5) / page 27)

вмр	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed	Additional details
5-1 Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning	In Progress	None	Adopt amended ordinance and/or regulations to be compliant with the MS4 general permit	Engineering	07/01/2021		In 2009, the Town adopted a Stormwater Management Ordinance and published a Town Stormwater Manual to meet the Post-Construction Stormwater Runoff requirements of the 2004 General Permit.
5-2 Enforce LID/runoff reduction requirements for development and	Ongoing	Engineering review of site plans require consideration of disconnection and runoff reduction	Compliance with requirements enforced and tracked	Engineering	Ongoing	Ongoing	Developers are required to execute an Inspection & Maintenance Agreement with Windsor Land Records Prior to Commencing work. The Inspection & Maintenance Agreement identifies the person(s) responsible and

redevelopment projects							establishes a schedule for routine inspections and maintenance
5-3 Identify retention and detention ponds in priority areas	Complete	Town staff researched and identified Townowned basins. Several basins were reestablished in 2019 in order to annually maintain based on long-term maintenance plans.	Develop/Maintain a list of all structural stormwater BMPs retention and detention ponds, swirl oncentrators, oil/grit separators, water quality wetlands or wales, etc.) approved on private and municipal property.	Engineering	07/01/2019	07/01/2019	
5-4 Implement long-term maintenance plan for stormwater basins and treatment structures	Ongoing	Town staff researched and identified Town-owned basins. Several basins were reestablished in 2019 in order to annually maintain based on long-term maintenance plans.	Create and inspection and maintenance plan for stormwater structures	DPW	Ongoing	Ongoing	During the appropriate time of year and following permitting through Inland Wetlands, DPW has implemented ongoing maintenance to re-establish basins (if required based on overgrowth), and provide a mowing schedule consistent with best management practices.
5-5 DCIA mapping	Complete	MS4 mapping updated with calculated DCIA values by basin	Calculate DCIA by basin and document on MS4 mapping	Engineering	07/01/2020	07/01/2020	DCIA calculations completed using Sutherland Equations as outlined by UCONN CLEAR
5-6 Address post- construction issues in areas with pollutants of concern	Not Started	None	Prioritize areas where erosion or sedimentation problems are found during the annual inspections conducted under the long-term maintenance plan within DCIA retrofit program	Planning/ Engineering	Not specified		

### 5.2 Describe any Post-Construction Stormwater Management activities planned for the next year, if applicable.

- Adopt amended ordinance and/or regulation to include site development LID and runoff requirements
- Review/Update list of Town Owned detention basins
- Create amaintenance plan for stormwater basins and treatment structures
- Continue tracking DCIA reduction

### 5.3 Post-Construction Stormwater Management reporting metrics

For details on this requirement, visit <a href="https://www.nemo.uconn.edu/ms4/tasks/post-construction.htm">www.nemo.uconn.edu/ms4/tasks/post-construction.htm</a>. Scroll down to the DCIA section.

Metrics	
Baseline (2012) Directly Connected Impervious Area (DCIA)	1339.63 acres *
DCIA disconnected (redevelopment plus retrofits)	Unknown / 1339.63 acres
Retrofit projects completed	Unknown
DCIA disconnected	0% this year / 0% total since 2012
Estimated cost of retrofits	Unknown
Detention or retention ponds identified	# this year /# total
*Based on DCIA Calculations per BMP 5-5	

### 5.4 Briefly describe the method to be used to determine baseline DCIA.

The Town has calculated the baseline (2012) DCIA for each basin contributing stormwater runoff to its MS4 outfalls. The DCIA calculations were made according to guidance by the UCONN Center for Land Use, Education, and Research using the Sutherland Equations to estimate DCIA based on Total IC and land use for each basin.

# **6. Pollution Prevention/Good Housekeeping** (Section 6(a)(6) / page 31)

ВМР	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed	Additional details
6-1 Develop/implement formal employee training program	Ongoing	None	Continue to provide on-thejob training to existing and new staff; review and revise training procedures as necessary	Public Works/ Engineering	Ongoing	Ongoing	2020 refresher course postponed due to COVID-19
6-2 Implement MS4 property and operations maintenance	Ongoing	Implement property and operations maintenance plan	Implement property and operations maintenance plan	Public Works	Ongoing	Ongoing	Municipally-owned or operated properties, parks, and other facilities will be maintained so as to minimize the discharge of pollutants to the MS4.
6-3 Implement coordination with interconnected MS4s	In Progress	Windsor will continue to coordinate with operators of interconnected MS4s (such as neighboring municipalities, institutions and DOT) regarding the contribution of potential pollutants from the storm sewer systems, contributing land use areas and stormwater control measures in the respective MS4s	Cordinate with interconnected MS4s	Engineering	Not specified		
6-4 Develop/implement program to control other sources of pollutants to the MS4	In Progress	Windsor will control the contribution of pollutants to its MS4 from commercial, industrial, municipal, institutional or other facilities, not otherwise authorized by a CTDEEP stormwater permit, through its IDDE and water quality monitoring programs and regulatory mechanisms	Identify Sources	Wetlands	Not specified		

6-5 Evaluate additional measures for discharges to impaired waters*	In Progress	On municipally-owned or - operated lands with a high potential to contribute bacteria to Mill Brook and the CT river, Windsor will develop, implement, prioritize, and evaluate potential funding sources for a retrofit or source management program to correct the problem(s)	Windsor will prohibit the feeding of geese or waterfowl and implement a program to manage geese and waterfowl populations	Engineering/ Wetlands	Not specified		
6-6 Track projects that disconnect DCIA	Not Started	None	Calculate/Track DCIA reductions	Planning	Ongoing		Track the total acreage of DCIA that is disconnected from the MS4 as a result of redevelopment or retrofit projects within the town.
6-7 Implement infrastructure repair/rehab program	Ongoing	Continued repair and replacement repair of drainage infrastructure	Prioritize and document Infrastructure repair and rehabilitation work	Public Works	07/01/2021	Ongoing	DPW reviews stormwater infrastructure repair/replacement needs annually to plan projects appropriately and as funded
6-8 Develop and implement plan to identify/prioritize retrofit projects	Not Started	None	Develop retrofit project plan	Engineering	07/01/2020		Retrofit Plan to identify and prioritize potential DCIA disconnection projects. Prioritization will be based on several factors, including whether the project lies within a Priority Area.
6-9 Implement retrofit projects to disconnect 2% of DCIA	Not Started	None	Implement and document retrofit projects	Engineering	07/01/2022		
6-10 Develop and implement street sweeping program	Ongoing	Town wide street sweeping conducted every spring	Develop and implement street sweeping program	Public Works	Ongoing	Ongoing	
6-11 Develop and implement catch basin cleaning program	Ongoing	Public Works utilizes a third-party vendor to clean approx. 1/3 of catch basins each year	Develop and implement street Catchbasin cleaning program	Public Works	Ongoing	Ongoing	Catch basin cleaning program was placed on hold while the Town reviews best management practices for storage of debris.

6-12 Develop and	Ongoing	Provide training for	Develop/Implement	Public Works	Ongoing	Ongoing
implement snow		Municipal employees	snow management			
management		on winter roadway	practices			
practices		maintenance procedures				

# 6.2 Describe any Pollution Prevention/Good Housekeeping activities planned for the next year, if applicable.

- Continue annual employee MS4 and snow management training
- Continue to monitor and vehicles and equipment for leaks
- Continue leaf pick up, pavement sweeping and catch basin cleaning
- Develop/implement retrofit plan and track disconnections

### 6.3 Pollution Prevention/ Good Housekeeping reporting metrics

Metrics	
Employee training provided for key staff	N – Postponed due to COVID-19
Street sweeping	AA AMOON A POO
Curb miles swept	350 miles
Volume (or mass) of material collected	190 tons
Catch basin cleaning	
Total catch basins in priority areas (value will be less than or equal to total catch basins town or institution-wide)	1320
Total catch basins town- (or institution-) wide	4776
Catch basins inspected	0 *
Catch basins cleaned	0 *
Volume (or mass) of material removed from all catch basins	0 Tons
Volume removed from catch basins to impaired waters (if known)	Unknown
Snow management	
Type(s) of deicing material used	Salt
Total amount of each deicing material applied	2500 tons
Type(s) of deicing equipment used	Truck Mounted Spreaders,
	Broadcasters, and by Hand
Lane-miles treated (A lane-mile is a mile of roadway in a single driving lane)	350 miles
Snow disposal location	N/A
Staff training provided on application methods & equipment	Y - 12/08/2020

Municipal turf management program actions (for permittee properties in basins with N/P impairments)	
Reduction in application of fertilizers (since start of permit)	N/A
Reduction in turf area (since start of permit)	N/A
Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems)	
Cost of mitigation actions/retrofits	\$0

#### 6.4 Catch basin cleaning program

#### Provide any updates or modifications to your catch basin cleaning program

Windsor has developed a cleaning schedule that covers all municipally-owned catch basins every 3 years. Inspections will be documented through the use of a catch basin inspection form. Prioritize inspection and maintenance for municipally-owned catch basins located near impaired waters and construction activities (roadway construction, residential, commercial, or industrial development or redevelopment). Windsor will clean catch basins in such areas more frequently if inspection and maintenance activities indicate excessive sediment or debris loadings. If a catch basin sump is more than fifty (50) percent full during two consecutive routine inspections/cleaning events, Windsor will document that finding, investigate the contributing drainage area for sources of excessive sediment loading, and to the maximum extent practicable, abate contributing sources.

\*Catch basin cleaning program was placed on hold while the Town reviews best management practices for the disposal of debris.

#### 6.5 Retrofit program

Briefly describe the Retrofit Program identification and prioritization process, the projects selected for implementation, the rationale for the selection of those projects and the total DCIA to be disconnected upon completion of each project.

Windsor will develop a Retrofit Plan to identify and prioritize potential DCIA disconnection projects. Prioritization will be based on several factors, including whether the project lies within a Priority Area. The Plan will include a process to identify and prioritize retrofit projects, a rationale for the selection of projects to be implemented, and the total acres of DCIA to be disconnected upon implementation

Describe plans for continuing the Retrofit program and how to achieve a goal of 1% DCIA disconnection in future years.
Written retrofit program in process
Describe plans for continuing the Retrofit program beyond this permit term with the goal to disconnect 1% DCIA annually over the next 5 years.
Written retrofit program in progress

### Part II: Impaired waters investigation and monitoring

### 1. Impaired waters investigation and monitoring program

For details on this requirement, visit www.nemo.uconn.edu/ms4/tasks/monitoring.htm. Refer to the yellow column of the Monitoring comparison chart and the Impaired waters monitoring flowchart.

<b>1.1 Indicate which stormwater pollutant(</b> on the MS4 map viewer:
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# 2. Screening data for outfalls to impaired waterbodies (Section 6(i)(1) / page 41)

#### 2.1 Screening data

Complete the table below to report data for any wet weather sampling completed for MS4 outfalls that discharge directly to a stormwater impaired waterbody during the reporting period. For details on this requirement, visit www.nemo.uconn.edu/ms4/tasks/monitoring.htm. Refer to the yellow column of the Monitoring comparison chart and the Impaired waters monitoring flowchart.

Each Annual Report will add on to the previous year's data showing a cumulative list of sampling data. You may also attach a lab report with the same data rather than copying it into this table.

Outfall ID	Sample date	E. Coli (col/100ml)	Total Coliform (col/100ml)	Outfall Turbidity (NTU)	Upstream Turbididty (NTU)	Name of Laboratory	Follow-up required? *

### 2.2 Credit for screening data collected under 2004 permit

If any outfalls to impaired waters were sampled under the 2004 MS4 permit, that data can count towards the monitoring requirements under the modified 2017 MS4 permit. Complete the table below to record sampling data for any outfalls to impaired waters under the 2004 MS4 permit.

Outfall	Sample date	Parameter	Results	Name of Laboratory	Follow-up required? *
B 0.00 P P P P P P P P P P P P P P P P P					

<sup>\*</sup>Follow-up investigation required (last column) if the following pollutant thresholds are exceeded:

Pollutant of concern	Pollutant threshold				
Nitrogen	Total N > 2.5 mg/l				
Phosphorus	Total P > 0.3 mg/l				
Bacteria (fresh waterbody)	<ul> <li>E. coli &gt; 235 col/100ml for swimming areas or 410 col/100ml for all others</li> <li>Total Coliform &gt; 500 col/100ml</li> </ul>				
Bacteria (salt waterbody)	<ul> <li>Fecal Coliform &gt; 31 col/100ml for Class SA and &gt; 260 col/100ml for Class SB</li> <li>Enterococci &gt; 104 col/100ml for swimming areas or 500 col/100 for all others</li> </ul>				
Other pollutants of concern	Sample turbidity is 5 NTU > in-stream sample				

# **3. Follow-up investigations** (Section 6(i)(1)(D) / page 43)

Provide the following information for outfalls exceeding the pollutant threshold.

Outfall ID	Status of drainage area investigation	Control measure to address impairment
(22,222.2) (22,22) (24,222.2) (22,222.2)		
L		

# **4. Prioritized outfall monitoring** (Section 6(i)(1)(D) / page 43)

Once outfall sampling has been completed for at least 50% of outfalls to impaired waters, identify 6 of the highest contributors of any pollutants of concern. Begin monitoring these outfalls on an annual basis by July 1, 2020.

Outfall	Latitude / Longitude	Sample Date	Parameter(s)	Results	Name of Laboratory (if used)
				THE ASSESSMENT OF A STATE OF THE STATE OF TH	

# Part III: Additional IDDE Program Data

# 1. Assessment and Priority Ranking of Catchments data (Appendix B (A)(7)(c) / page 5)

Provide a list of all catchments with ranking results (DEEP basins may be used instead of manual catchment delineations).

		*Priority Ra	nking of DEEP basi	ns in progre	ss – See At	tachment A		
Catchment ID (DEEP Basin ID)	Category	Rank	Catchment ID (DEEP Basin ID)	Category	Rank	Catchment ID (DEEP Basin ID)	Category	Rank
4100-11-1-L1			4300-52-1			4321-03-1		
4300-50-1-L1			4000-00-4+R5			4000-00-5+R1		
4300-51-1-L1			43000-48-1			4321-00-1		
4100-06-1			4300-48-1-L1			4321-00-2-R2		
4300-00-5+L5			4300-00-5+R25			4300-00-5+R34		
4300-50-1			4300-54-1			4300-00-5+R32		
4300-53-1			4300-00-5+R30			4321-02-1		
4300-00-5+R26			4000-00-4+R6			4321-00-2-R1		
4300-49-1-L1			4300-54-2-R1			4300-58-1		
4000-11-1-L1			4300-00-5+R31			4000-23-1		
4300-00-5+R27			4300-55-1			4000-20-1		
4300-49-1			4300-00-5+L4			4000-00-5+R2		
4300-51-1			4300-56-1			4000-00-6+R1		
4300-00-5+R29			4300-57-1			4000-22-1		
4300-50-2-R1			4404-00-2-L1			4000-24-1		
4000-11-1			4321-01-1			4000-22-2-R1		
4300-00-5+R28			4404-02-1			4000-00-6+R2		
4300-52-1-L1			4321-00-1-L2			4000-00-6+R3		
4000-00-4+R4			4300-00-5+R23			4400-00-4-R1		
4000-11-2-R2			4321-03-1-l1			4000-00-6+R4		
4000-12-1			4321-00-1-L1			4000-24-2-R1		
4300-00-5+R24			4000-00-4+R7			4000-25-1		
4000-16-1			4321-00-2-R3			4000-26-1		

# 2. Outfall and Interconnection Screening and Sampling data (Appendix B (A)(7)(d) / page 7)

### 2.1 Dry weather screening and sampling data from outfalls and interconnections

For details on this requirement, visit www.nemo.uconn.edu/ms4/tasks/monitoring.htm. Refer to the blue column of the Monitoring comparison chart and the IDDE baseline monitoring flowchart.

Provide sample data for outfalls where flow is observed. Only include Pollutant of concern data for outfalls that discharge into stormwater impaired waterbodies. You may also attach a lab report with the same data rather than copying it to this table.

Outfall / Interconnection ID	Latitude / Longitude	Screening / sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or enterococcus	Surfactants	Water Temp	Pollutant of concern	If required, follow-up actions taken
								tions and the			
	TOTAL STATE OF THE	The second secon									
					A STATE OF THE STA						

### 2.2 Wet weather sample and inspection data

For details on this requirement, visit www.nemo.uconn.edu/ms4/tasks/monitoring.htm. Refer to the green column of the Monitoring comparison chart and the IDDE catchment investigation flowchart.

Provide sample data for outfalls and key junction manholes of any catchment area with at least one System Vulnerability Factor. You may also attach a lab report with the same data rather than copying it to this table.

Outfall / Interconnection ID	Latitude / Longitude	Sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or Enterococcus	Surfactants	Water Temp	Pollutant of concern
trian descent design and relation to all on the property of the relationship of the re	detheVirex-thistoclassic contact a children is the	hidaya sirada kilonor hakwa nda Affiliansi awalikin wakwana i							y mai matandha may mengamisi (Aminina) may milida yi SAA (Ali SAA PASA PASA PASA PASA PASA PASA PASA	

### **3. Catchment Investigation data** (Appendix B (A)(7)(e) / page 9)

For details on this requirement, visit www.nemo.uconn.edu/ms4/tasks/monitoring.htm. Refer to the green column of the Monitoring comparison chart and the IDDE catchment investigation flowchart.

#### 3.1 System Vulnerability Factor Summary

For those catchments being investigated for illicit discharges (i.e. categorized as high priority, low priority, or problem) document the presence or absence of System Vulnerability Factors (SVF). If present, report which SVF's were identified. An example is provided below.

Outfall ID	Receiving Water	System Vulnerability Factors
the strong and the section of the contract of the section of the s	gangga menang sepulang segunda, ngihika antopolisik, anti-hid famongan kryangsil pendih kelikulan kambala a, hid bilan a yakilika 1901-1901 ini anti-hid senalah kelikulan kambala selah s	

#### Where SVFs are:

- 1. History of SSOs, including, but not limited to, those resulting from wet weather, high water table, or fat/oil/grease blockages.
- 2. Sewer pump/lift stations, siphons, or known sanitary sewer restrictions where power/equipment failures or blockages could readily result in SSOs.
- 3. Inadequate sanitary sewer level of service (LOS) resulting in regular surcharging, customer back-ups, or frequent customer complaints.
- 4. Common or twin-invert manholes serving storm and sanitary sewer alignments.
- 5. Common trench construction serving both storm and sanitary sewer alignments.
- 6. Crossings of storm and sanitary sewer alignments.
- 7. Sanitary sewer alignments known or suspected to have been constructed with an underdrain system;
- 8. Sanitary sewer infrastructure defects such as leaking service laterals, cracked, broken, or offset sanitary infrastructure, directly piped connections between storm drain and sanitary sewer infrastructure, or other vulnerability factors identified through Inflow/Infiltration Analyses, Sanitary Sewer Evaluation Surveys, or other infrastructure investigations.
- 9. Areas formerly served by combined sewer systems.
- 10. Any sanitary sewer and storm drain infrastructure greater than 40 years old in medium and densely developed areas.
- 11. Widespread code-required septic system upgrades required at property transfers (indicative of inadequate soils, water table separation, or other physical constraints of the area rather that poor owner maintenance).
- 12. History of multiple local health department or sanitarian actions addressing widespread septic system failures (indicative of inadequate soils, water table separation, or other physical constraints of the area rather that poor owner maintenance).

### 3.2 Key junction manhole dry weather screening and sampling data

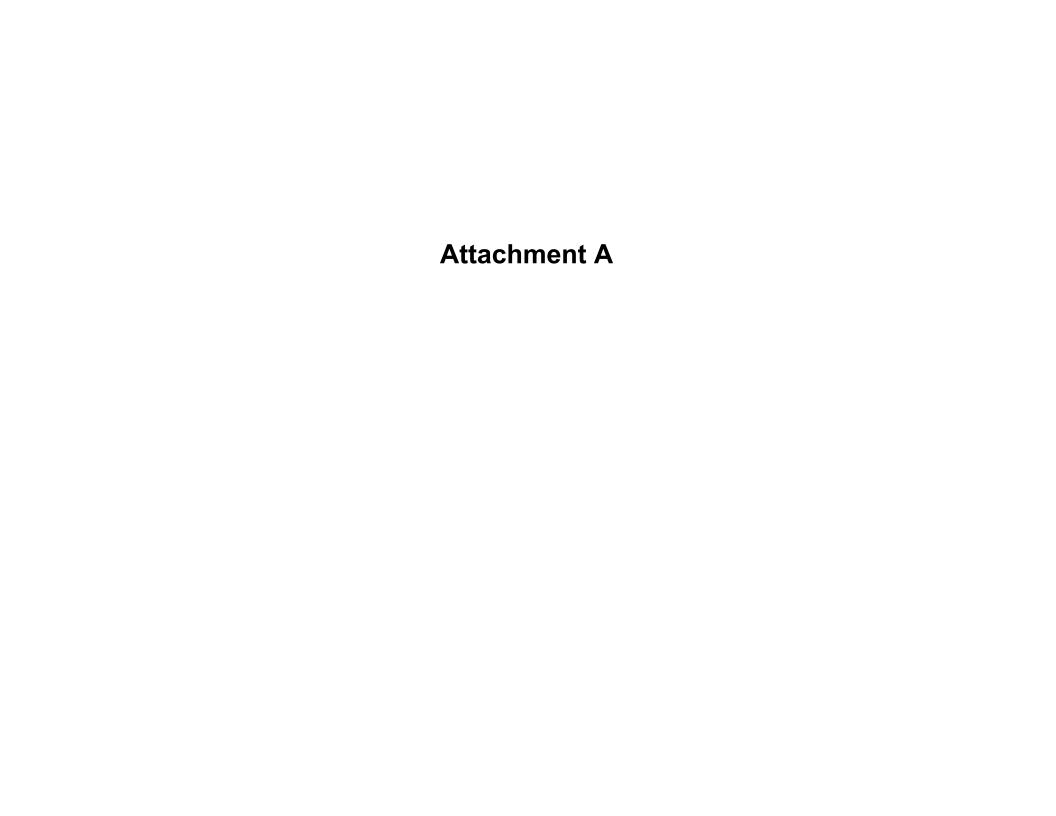
You may also attach a lab report with the same data rather than copying it to this table.

Key Junction Manhole ID	Latitude / Longitude	Screening / Sample date	Visual/ olfactory evidence of illicit discharge	Ammonia	Chlorin	ne Surfactants	194 HOOK
	ther investigation	•	g data data rather than cop	wing it to th	is table		
Outfall ID	Latitude / Longitude	Sample date	Ammonia	Chlorine	Surfacta	nts	

### Part IV: Certification

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with Section 22a-6 of the Connecticut General Statutes, pursuant to Section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute."

Chief Elected Official or Principal Executive Officer	Document Prepared by
Print name:	Print name:
Peter Souza	Jenna A.W. Zinky
Signature / Date: 3 · 22 · 21	Signature / Date:  pun UW Tindy 03/26/2021
Email:	Email:
Souza@townofwindsorct.com	Zinky@townofwindsorct.com



	Catchment ID	Receiving Water	Previous Screening Results	Discharging to Area of	Frequency of Past	Receiving Water Quality <sup>3</sup> Poor = 3	Density of Generating Sites <sup>4</sup> High = 3	Age of surrounding development and infrastructure High = 3	Historic Combined Sewers or Septic? <sup>6</sup>	Density of aging septic systems <sup>7</sup>	Culverted Streams? 8	Est. DCIA >11%	Score	Priority Ranking	Notes
			Indicate Likely Sewer Input?	Concern to Public Health?	Discharge Complaints										
			•		Frequent = 3										
			Yes = 3 (Problem Catchment) No = 0	Yes = 3 (High Priority) No = 0	Occaisonal = 2	Fair = 2	Medium = 2	Medium = 2	Yes = 3 No = 0		Yes = 3 No = 0	Yes = 2 No = 0			
0	4100-11-1-L1	Stony Brook	0	0	None = 0 0	Good = 0 0	Low = 1	Low = 1	140 - 0		0	2	2		
1	4300-50-1-L1	Farmington River	-	-	-	-	-	-	-	-	-	-	-	Excluded	No MS4 Facilities
2	4300-51-1-L1	Farmington River	0	0	0	2					0	0	2		
3	4100-06-1 4300-00-5+L5	Stony Brook	- 0	- 0	0	2	-	-	-	-	- 0	- 0	2	Excluded	No MS4 Facilities
5	4300-00-5+15	Farmington River Farmington River	0	0	0	2					0	0	2		
6	4300-53-1	Farmington River	0	0	0	2					0	0	2		
7	4300-00-5+R26	Farmington River	0	0	0	2					0	0	2		
8 9	4300-49-1-L1 4000-11-1-L1	Farmington River Connecticut River	0	0	0	2					0	0	3		
10	4300-00-5+R27	Farmington River	-	-	-	-	-	-	-	-	-	-	-	Excluded	No MS4 Facilities
11	4300-49-1	Farmington River	0	0	0	2					0	0	2		
12	4300-51-1	Farmington River	- 0	3	- 0	2	-	-	-	-	- 0	- 0	- 5	Excluded	No MS4 Facilities
14	4300-00-5+R29 4300-50-2-R1	Farmington River Farmington River	-	-	-	-	-	-	-	-	-	-	-	High Priority Excluded	No MS4 Facilities
15	4000-11-1	Connecticut River	0	0	0	3					0	2	5		
16	4300-00-5+R28	Farmington River	0	3	0	2					0	0	5	High Priority	
17 18	4300-52-1-L1 4000-00-4+R4	Farmington River Connecticut River	0	0	0	2			-	-	0	0	2	Excluded	No MS4 Facilities
19	4000-00-4+R4 4000-11-2-R2	Connecticut River	-		-	-	-	-	-	-	-	-	-	Excluded	No MS4 Facilities No MS4 Facilities
20	4000-12-1	Connecticut River	0	0	0	3					0	2	5	Excided	NO MIST I delities
21	4300-00-5+R24	Farmington River	-	-	-	-	-	-	-	-	-	-	-	Excluded	No MS4 Facilities
22	4000-16-1	Connecticut River	0	0	0	3					0	0	3		
23 24	4300-52-1 4000-00-4+R5	Farmington River Connecticut River	0	0	-	2			_		0	- 0	2	Excluded	No MS4 Facilities
25	43000-48-1	Farmington River	-	-	-	-	-	-	-	-	-	-	-	Excluded	No MS4 Facilities
26	4300-48-1-L1	Farmington River	0	0	0	2					0	0	2		
27	4300-00-5+R25	Farmington River	-	-	-	-	-	-	-	-	-	-	-	Excluded	No MS4 Facilities
28 29	4300-54-1 4300-00-5+R30	Farmington River Farmington River	0	0 3	0	2					0	0	5	High Priority	
30	4000-00-3+R50	Connecticut River	0	0	0	3					0	0	3	High Friority	
31	4300-54-2-R1	Farmington River	0	0	0	2					0	0	2		
32	4300-00-5+R31	Farmington River	0	3	0	2					0	0	5	High Priority	
33 34	4300-55-1 4300-00-5+L4	Farmington River Farmington River	0	0	0	2					0	2	2		
35	4300-56-1	Farmington River	0	0	0	2					0	2	4		
36	4300-57-1	Farmington River	0	0	0	2					0	0	2		
37	4404-00-2-L1	North Branch Park River	0	0	0	3					0	0	3		
38 39	4321-01-1 4404-02-1	Mill Brook North Branch Park River	0	0	0	3					0	2	5		
40	4321-00-1-L2	Mill Brook	0	0	0	3					0	0	3		
41	4300-00-5+R23	Farmington River	0	0	0	2					0	0	2		
42	4321-03-1-l1	Mill Brook	0	0	0	3					0	2	5		
43	4321-00-1-L1 4000-00-4+R7	Mill Brook Connecticut River	0	0	0	3	_		-	-	0	2	5	Excluded	No MS4 Facilities
45	4321-00-2-R3	Mill Brook	0	3	0	3	-	<u> </u>	-	-	0	2	8	High Priority	NO IVI34 Facilities
46	4321-03-1	Mill Brook	0	0	0	3					0	2	5		
47	4000-00-5+R1	Connecticut River			-		-	÷	-	-	-	-	-	Excluded	No MS4 Facilities
48 49	4321-00-1 4321-00-2-R2	Mill Brook Mill Brook	0	0	0	3					0	0	3		
50	4321-00-2-R2 4300-00-5+R34	Farmington River	0	3	0	2	-	-	-	-	-	-	-	High Priority	
51	4300-00-5+R32	Farmington River	-		-		-	-	-	-	-	-	-	Excluded	No MS4 Facilities
52	4321-02-1	Mill Brook	0	0	0	3					0	0	3		
53 54	4321-00-2-R1 4300-58-1	Mill Brook Farmington River	- 0	- 0	- 0	2	-	•	-	-	- 0	- 2	- 4	Excluded	No MS4 Facilities
55	4000-23-1	Connecticut River	0	0	0	3					0	2	5		
56	4000-20-1	Connecticut River	0	0	0	3					0	0	3		
57	4000-00-5+R2	Connecticut River	-	÷	-	٠	-	-	-	-	-	-	-	Excluded	No MS4 Facilities
58 59	4000-00-6+R1 4000-22-1	Connecticut River Connecticut River	- 0	- 0	- 0	3	-	•	-	-	- 0	2	- 5	Excluded	No MS4 Facilities
60	4000-22-1	Connecticut River	0	0	0	3					0	0	3		
61	4000-22-2-R1	Connecticut River	0	0	0	3					0	2	5		
62	4000-00-6+R2	Connecticut River	0	0	0	3					0	0	3		
63 64	4000-00-6+R3 4400-00-4-R1	Connecticut River Park River	0	0	0	0					0	0	3 0		
65	4000-00-4-R1 4000-00-6+R4	Connecticut River	-	-	-	-	-	-	-	-	-	-	-	Excluded	No MS4 Facilities
66	4000-24-2-R1	Connecticut River	0	0	0	3					0	2	5		
67	4000-25-1	Connecticut River	-		-	-	-	-	-	-		-	-	Excluded	No MS4 Facilities
68	4000-26-1	Connecticut River	-	-	-	-	-	-	-	-	-	-	-	Excluded	No MS4 Facilities

1. Previous wet weather screening results indicate impacts to impaired waters including:

Total Nitrogen >2.5 mg/L

Total Phosphorous >0.3 mg/L E. Coli >235col/100 ml for swimming areas and >410 col/100 ml for all others

Total Coliform >500 col/100 ml, or Fecal coliform >31 col/100ml for Class SA and >260 Col/100ml for Class SB

Enterococci >104 col/100ml for swimming areas and >500 col/100ml for all others Turbidity at outfall is more than 5 NTU greater than the in-stream sample

Previous dry weather screening results indicate likely sewer input if any of the following are true:

Olfactory or visual evidence of sewage,
Ammonia ≥ 0.5 mg/L, surfactants ≥ 0.25 mg/L, and bacteria levels greater than the water quality criteria applicable to the receiving water

Ammonia≥ 0.5 mg/L, surfactants ≥ 0.25 mg/L, and detectable levels of chlorine

2. Catchments that discharge to or in the vicinity of any of the following areas: public beaches, recreational areas, drinking water supplies, or shellfish beds

2. Execulting water quality based on latest version of State of Connecticut Integrated Water Quality Reposit.

Poor = Waters with approved TMDIs (Category 4a Waters) where illustic discharges have the potential to contain the pollutant identified as the cause of the impairment Fair - Water quality influence water objects.

4. Generating sites are institutional, municipal, commercial, or industrial sites with a potential to contribute to illicit discharges (e.x., car dealers; car washes; gas stations; garden centers; and industrial manufacturing areas, etc.)

5. Age of development and infrastructure:

High = Industrial areas greater than 40 years old and areas where the sanitary sewer system is more than 40 years old Medium = Developments 20-40 years old

Low = Developments less than 20 years old

6. Areas once served by combined sewers that have been separated, or areas once served by septic that have been converted to sanitary sewers

7. Aging septic systems are systems 30 years or older in residential areas

8. Any river or stream that is culverted for distance greater than a simple roadway crossing