



2018 ANNUAL REPORT

TOWN OF EAST WINDSOR
11 RYE STREET
BROAD BROOK, CONNECTICUT

2018 MS4 GENERAL PERMIT
EXISTING PERMITTEE
PERMIT NUMBER GSM000053

FEBRUARY 2019

PREPARED BY:

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Introduction

This Annual Report has been prepared for the Town of East Windsor in compliance with the Connecticut Department of Energy & Environmental Protection (CT DEEP) General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4) (MS4 General Permit), effective July 1, 2017. This report documents the efforts of the Town of East Windsor to comply with the conditions of the MS4 General Permit to the maximum extent practicable (MEP) for the period of January 1, 2018 to December 31, 2018.

The 2018 Annual Report for the Town of East Windsor is presented on the following pages.

Part I: Summary of Minimum Control Measure Activities

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

1.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department responsible	Due	Completion date	Additional details
1-1 Implement public education and outreach	In progress	Stormwater Management Plan has been posted on Town website	SWMP posted to website	Public Works	July 1, 2018	July 1, 2018	Town website contains info regarding stormwater pollution prevention, a link to EPA Nonpoint Source Pollution webpage and a link to UConn NEMO webpage. Printed info available at town hall.
1-2 Address education/outreach for pollutants of concern	In progress	Stormwater Management Plan has been posted on Town website	SWMP posted to website	Public Works	July 1, 2018	July 1, 2018	Info regarding IDDE program will be posted to website.

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

Town website will be further updated to include the following info:

- Links to EPA Stormwater Discharges from Municipal Sources website and the UConn NEMO Connecticut MS4 Guide
- Link to Annual Report
- Info regarding IDDE program will be posted to website. Once posted, a banner on website indicating new info will be added.

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.
Pamphlet printed and located at Town Hall	All visitors to Town Hall (approximately 1,000)	Impact of impervious cover, stormwater infiltration	Phosphorus, nitrogen, bacteria	Public Works

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

2.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department responsible	Due	Completion date	Additional details
2-1 Comply with public notice requirements for the Stormwater Management Plan	Complete	Stormwater Management Plan has been posted on Town website	SWMP posted to website	Public Works	April 3, 2017	April 3, 2017	None
2-1 Comply with public notice requirements for Annual Reports	In progress	Annual Report has been posted on Town website	Annual Report posted to website	Public Works	Feb. 15, 2019	Feb. 15, 2019	After posting, a banner was added to website indicating new info.

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

Continue annual clean-ups along waterways

2.3 Public Involvement/Participation reporting metrics

Metrics	Implemented	Date	Posted
Availability of the Stormwater Management Plan announced to public	Yes	3/31/17	Town website
Availability of Annual Report announced to public	Yes	2/15/19	Town website

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

3.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department responsible	Due	Completion date	Additional details
3-1 Develop written IDDE program	In progress	Town is in process of completing written IDDE program using the CT IDDE program template	Develop written IDDE program	Public Works	July 1, 2018	July 1, 2018	Once complete, program will be posted to town website with a banner indicating new info added.
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas	In progress	Stormwater drainage lines and outfalls mapping to be completed	Develop list and map	Public Works	July 1, 2019	July 1, 2019	Map of Priority Areas will be developed using NEMO MS4 mapping tool
3-3 Develop citizen reporting program	In progress	Public Works to investigate suspected illicit discharges.	Citizen reports to be logged and investigated	Public Works	July 1, 2018	July 1, 2018	No reports made in 2017
3-4 Establish legal authority to prohibit illicit discharges	In progress	Ordinance development and enforcement	Illicit discharges investigated and remediated	Planning & Development	July 1, 2018	May 23, 2018	Ordinance 18-01 established
3-5 Develop record keeping system for IDDE tracking	In progress	Program to be implemented	Illicit discharges investigated, logged, tracked and remediated	Public Works	July 1, 2017	July 1, 2018	No reports made in 2018
3-6 Address IDDE in areas with pollutants of concern	In progress	IDDE complaints investigated, logged and tracked	Illicit discharges investigated, logged, tracked and remediated	Public Works	Not specified	In progress	No reports made in 2018
3-7 Household hazardous waste collection	In progress	Bi-annual Household Hazardous Waste Collection Day	Household hazardous waste collected and recycled/ disposed	Public Works	Bi-Annually	Bi-Annually	HHW Collection held on 10/20/2018

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

The written program will be posted to the Town website and a link listed in next year's Annual Report. The written IDDE program will be updated as needed throughout the term of the General Permit.

A master IDDE tracking spreadsheet will be maintained, and all employees involved in the IDDE program will be trained regarding the logging process.

3.3 List of citizen reports of suspected illicit discharges received during this reporting period.

Date of Report	Location / suspected source	Response taken
None		

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 (Lat long/ street crossing /address and receiving water)	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)	Sampling data (if applicable)
None						

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

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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	Impacted waterbody or watershed, if known
None		

3.7 IDDE reporting metrics

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

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).

Annual training of Public Works and Parks Department employees on the following topics:

- MS4 General Permit
- SWMP and who has responsibility for implementation
- Discussion of IDDE, Post-Construction SW Management and Pollution Prevention / Good Housekeeping MCMs and what Town is required to do under each

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

4.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department responsible	Due	Completion date	Additional details
4-1 Implement and enforce land use regulations or other legal authority to meet requirements of MS4 General Permit	In progress	Inspection of construction sites	Regulations enforcement	Planning & Development	July 1, 2019	July 1, 2019	
4-2 Develop/implement plan for interdepartmental coordination in site plan review and approval	In progress	Public Works/ Engineering, Planning & Development, Building, Health, Fire Depts. involved in review, permitting and approval of land disturbance projects as necessary	Continued inter-departmental site plan review and approval	Planning & Development	July 1, 2017	July 1, 2017	
4-3 Review site plans for stormwater quality concerns	In progress	Town conducts plan reviews and inspections of projects disturbing 1 or more acres	Continued review of site plans for stormwater quality concerns	Planning & Development	July 1, 2017	July 1, 2017	Site inspections are to assess adequacy of installation, maintenance, operation and repair of construction and post-construction control measures
4-4 Conduct site inspections	In progress	Inspection of construction sites and issuance of notices of violation or stop work orders	Inspections conducted	Planning & Development	July 1, 2017	July 1, 2017	
4-5 Implement procedure to allow public comment on site development	In progress	Hearings and/or public hearings with local land use commissions	Public comment solicited and received	Planning & Development	July 1, 2017	July 1, 2017	
4-6 Implement procedure to notify developers about DEEP Construction Stormwater General Permit	In progress	Wetlands Dept. notifies developers and contractors of regulation if projects disturbing 1 or more acres	Continued notification of developers of regulation	Planning & Development	July 1, 2017	July 1, 2017	

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

Integrate stormwater compliance checklist into review process once completed.

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

5.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department responsible	Due	Completion date	Additional details
5-1 Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning.	In progress	Wetlands regulations amended in accordance with DEEP regulation advisories	Continued implementation and upgrade of regulations	Planning & Development	July 1, 2021	July 1, 2021	
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects.	In progress	Inspection of construction sites	Continued enforcement of regulations	Planning & Development	July 1, 2019	July 1, 2019	
5-3 Identify retention and detention ponds in priority areas.	In progress		Develop list of retention and detention ponds.	Public Works	July 1, 2019	July 1, 2019	
5-4 Implement long-term maintenance plan for stormwater basins and treatment structures.	In progress		Develop and implement long-term maintenance plan.	Public Works	July 1, 2019	July 1, 2019	
5-5 DCIA mapping.	In progress	Town is in process of completing IDDE program including DCIA calculations.	Perform calculations and complete mapping.	Planning & Development; Public Works/Engineering	July 1, 2020	July 1, 2020	Map developed using NEMO MS4 mapping tool
5-6 Address post-construction issues in areas with pollutants of concern.	In progress		Post-construction issues will be identified and addressed.	Planning & Development; Public Works/Engineering	Not specified		

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

None

5.3 Post-Construction Stormwater Management reporting metrics

Metrics	
Baseline (2012) Directly Connected Impervious Area (DCIA)	acres
DCIA disconnected (redevelopment plus retrofits)	acres this year / acre's total
Retrofits completed	#
DCIA disconnected	% this year / % total since 2012
Estimated cost of retrofits	\$
Detention or retention ponds identified	# this year /# total

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

Consultation of MS4 map on UConn NEMO website.

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

6.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department responsible	Due	Completion date	Additional details
6-1 Develop/implement formal employee training program.	In progress	Training program has been established and implemented	Continued program implementation	Public Works	July 1, 2017		
6-2 Implement MS4 property and operations maintenance.	In progress	Town optimizes fertilizer application, properly manages grass clippings and leaves, manages pet waste and waterfowl, and buildings, vehicles and equipment are properly maintained	Continued program implementation	Public Works	July 1, 2018	July 1, 2018	
6-3 Implement coordination with interconnected MS4s.	In progress		Town will coordinate with interconnected MS4s as necessary	Public Works	Not specified		
6-4 Develop/implement program to control other sources of pollutants to the MS4.	In progress		Program will be developed and implemented as necessary	Public Works	Not specified		
6-5 Evaluate additional measures for discharges to impaired waters.	In progress		Discharges will be evaluated as necessary	Public Works	Not specified		
6-6 Track projects that disconnect DCIA.	In progress		Projects will be tracked	Public Works	July 1, 2017	July 1, 2017	
6-7 Implement infrastructure repair/rehab program.	In progress		Program will continue to be implemented	Public Works	July 1, 2021	July 1, 2021	

6-8 Develop/implement plan to identify/prioritize retrofit projects.	In progress		Projects will be identified and prioritized	Public Works	July 1, 2020	July 1, 2020	
6-9 Implement retrofit projects to disconnect 2% of DCIA.			Projects will be implemented	Public Works	July 1, 2022	July 1, 2022	
6-10 Develop/implement street sweeping program.	In progress	Streets and parking lots in Priority Areas are inspected and swept annually in spring	Program will continue to be implemented	Public Works	July 1, 2017	July 1, 2017	70 miles of Town streets swept every year
6-11 Develop/implement catch basin cleaning program.	In progress	Catch basins routinely inspected and cleaned as necessary	Program will continue to be implemented	Public Works	July 1, 2020	July 1, 2020	On going program, checking, cleaning catch basins
6-12 Develop/implement snow management practices.	In progress	Snow and de-icing agents are properly managed	Program will continue to be implemented	Public Works	July 1, 2018	July 1, 2018	On going practice

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

None other than continuation of those listed above.

6.3 Pollution Prevention/ Good Housekeeping reporting metrics

Metrics	
Employee training provided for key staff	(y/n) / date(s)
Street sweeping	
Curb miles swept	70 miles
Volume (or mass) of material collected	lbs or tons
Catch basin cleaning	
Total catch basins in priority areas	#
Total catch basins in MS4	#
Catch basins inspected	#
Catch basins cleaned	#
Volume (or mass) of material removed from all catch basins	lbs or tons
Volume removed from catch basins to impaired waters (if known)	lbs or tons
Snow management	
Type(s) of deicing material used	Sand/Salt Mix
Total amount of each deicing material applied	lbs or tons
Type(s) of deicing equipment used	Truck spreaders
Lane-miles treated	miles
Snow disposal location	N/A
Staff training provided on application methods & equipment	(y/n) / dates(s)
Municipal turf management program actions (for permittee properties in basins with N/P impairments)	
Reduction in application of fertilizers (since start of permit)	lbs or %
Reduction in turf area (since start of permit)	acres
Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems)	
Cost of mitigation actions/retrofits	\$

6.4 Catch basin cleaning program

Briefly describe the method used to optimize your catch basin inspection and cleaning schedule. [Complete this section for the 2017 Annual Report only]
<p>All catch basins are to be inspected annually. Prioritize inspection and maintenance for catch basins located near impaired waters and construction activities. Maintain a schedule such that no catch basin will be more than 50% full at any given time. Priority will be given to basins within the MS4 Priority Areas.</p>

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. [\[Provide information if available in 2017 report. Section to be completed for the 2019 Annual Report.\]](#)

Information not available

Describe plans for continuing the Retrofit program and how to achieve a goal of 1% DCIA disconnection in future years. [\[Provide information if available in 2017 report. Section to be completed for the 2019 Annual Report.\]](#)

Information not available

Describe plans for continuing the Retrofit program beyond this permit term with the goal to disconnect 1% DCIA annually over the next 5 years. [\[Provide information if available in 2017 report. Section to be completed for the 2019 Annual Report.\]](#)

Information not available

Part II: Impaired waters investigation and monitoring [This section required beginning with 2018 Annual Report]

1. Impaired waters investigation and monitoring program

1.1 Indicate which stormwater pollutant(s) of concern occur(s) in your municipality or institution. This data is available on the MS4 map viewer: <http://s.uconn.edu/ctms4map>.

Nitrogen/Phosphorus ☐ Bacteria ☒ Mercury ☐ Other Pollutant of Concern ☐

1.2 Describe program status.

Discuss 1) the status of monitoring work completed, 2) a summary of the results and any notable findings, and 3) any changes to the Stormwater Management Plan based on monitoring results.
None yet

2. Screening data for outfalls to impaired waterbodies (Section 6(i)(1) / page 41)

2.1 Screening data collected under 2017 General Permit

Complete the table below for any outfalls screened during the reporting period. Each Annual Report will add on to the previous year's screening data showing a cumulative list of outfall screening data.

Outfall ID	Sample date	Parameter (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	Results	Name of Laboratory (if used)	Follow-up required?
None yet					

2.2 Credit for screening data collected under 2004 General Permit

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

Outfall	Sample date	Parameter (Nitrogen, Phosphorus, Bacteria or Other pollutant of concern)	Results	Name of Laboratory (if used)	Follow-up required?

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

Provide the following information for outfalls exceeding the pollutant threshold.

Outfall	Status of drainage area investigation	Control measure implementation to address impairment

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

Once outfall screening 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	Sample Date	Parameter(s)	Results	Name of Laboratory (if used)

Part III: Additional IDDE Program Data [This section required beginning with 2018 Annual Report]

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).

1. Catchment ID (DEEP Basin ID)	2. Category	3. Rank

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

Provide sample data for outfalls where flow is observed. Only include Pollutant of concern data for outfalls that discharge into stormwater impaired waterbodies.

Outfall / Interconnection ID	Screening / sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or enterococcus	Surfactants	Water Temp	Pollutant of concern	If required, follow-up actions taken

2.2 Wet weather sample and inspection data

Provide sample data for outfalls and key junction manholes of any catchment area with at least one System Vulnerability Factor.

Outfall / Interconnection ID	Sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or Enterococcus	Surfactants	Water Temp	Pollutant of concern

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

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

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 than 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 than poor owner maintenance).

3.2 Key junction manhole dry weather screening and sampling data

Key Junction Manhole ID	Screening / Sample date	Visual/ olfactory evidence of illicit discharge	Ammonia	Chlorine	Surfactants

3.3 Wet weather investigation outfall sampling data

Outfall ID	Sample date	Ammonia	Chlorine	Surfactants

3.4 Data for each illicit discharge source confirmed through the catchment investigation procedure

Discharge location	Source location	Discharge description	Method of discovery	Date of discovery	Date of elimination	Mitigation or enforcement action	Estimated volume of flow removed

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
Robert Maynard, First Selectman	Leonard J. Norton, P.E.
Signature / Date	Signature / Date