

MS4 General Permit
Town of West Hartford 2018 Annual Report
 Existing MS4 Permittee
 Permit Number GSM 000001
 January 1, 2018 – December 31, 2018

This report documents West Hartford’s efforts to comply with the conditions of the MS4 General Permit to the maximum extent practicable (MEP) from January 1, 2018 to December 31, 2018.

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 / Person Responsible	Due	Date completed or projected completion date	Additional details
1-1 Implement public education and outreach	Ongoing	Expand Stormwater educational materials for the Town’s website and other Town-wide distribution. Update Town’s Stormwater Management Webpage with the new materials. MDC Household Hazardous Waste Collections were held in West Hartford on June 24, 2018 and Sept 22, 2018	Develop a public education program	Renee McCue, Public Relations Specialist	July 1, 2018 July 1, 2019	Year 1: July 1, 2018 Year 2: July 1, 2019	Outreach documents are on Town Stormwater Website, Town parks have signs to educate on picking up pet waste Town developing written education plan
1-2 Address education/ outreach for pollutants of concern*	Complete	Create stormwater educational materials to target pollutants of concern.	Identify pollutants of concern and incorporate applicable materials	Renee McCue, Public Relations Specialist	July 1, 2018	July 1, 2018	Created a tri-fold brochure for distribution

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

Update documents on Town Stormwater website.

Participate in MDC Household Hazardous Collection.

Continue with pet waste education on Public Works website and in Town Parks with signs.

Increase distribute of stormwater brochure by making at engineering office, planning office, library, public works, website, TP&Z wetlands agenda, and Celebrate West Hartford festival.

Perform Yard Waste Collection twice per year, collect 30-gallon brown leaf bags in fall in spring. Drop-off available for yard waste. Advertise to public on website and emails.

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.
Created a tri-fold stormwater brochure	Residents	General stormwater, pollutants, what you can do to help	Bacteria	Renee McCue, Public Relations Specialist
Stormwater Website developed	Residents, public	Multiple topics	Bacteria	Town Engineering
Lawn care: Yard Waste Collection in the spring and fall	Town-wide	Lawn care		Town DPW
Participated in MDC Household Hazardous Collection	Town-wide	Hazardous waste management		Hartford Metropolitan District Commission

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

2.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
2-1 Comply with public notice requirements for the Stormwater Management Plan	Complete	Stormwater Management Plan available to the public on Town's website	Make Stormwater Management Plan available to the public	Duane Martin, Town Engineer	April 3, 2017	April 3, 2017	One inquiry for additional information Town Resident

2-2 Comply with public notice requirements for 2017 Annual Report	Complete Ongoing	Latest annual report will be available to the public on Town's website	Make the latest annual report available to the public	Duane Martin, Town Engineer	Feb 15 th April 1 st	Year 1: Feb 15, 2018 Year 2: Feb 15, 2019	No comments
---	---------------------	--	---	--------------------------------	---	--	-------------

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

Post Annual Report for public comment.

Participate in MDC Household Hazardous Waste Collection program, hosted in West Hartford annually.

Perform Yard Waste Collection, twice per year, collect 30-gallon brown leaf bags in fall in spring. Drop-off available for yard waste.

Advertise to public on website and emails.

2.3 Public Involvement/Participation reporting metrics

Metrics	Implemented	Date	Posted
Availability of the Stormwater Management Plan announced to public	Yes	April 3, 2017	https://www.westhartfordct.gov/gov/departments/engineering/stormwater.asp
Availability of 2017 Annual Report announced to public	Yes	February 15, 2018	https://www.westhartfordct.gov/gov/departments/engineering/stormwater/annual_report.asp
Availability of 2018 Annual Report announced to public	Yes	February 15, 2019	https://www.westhartfordct.gov/gov/departments/engineering/stormwater/annual_report.asp

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 / Person Responsible	Due	Date completed or projected completion date	Additional details
3-1 Develop written IDDE program	Complete	Develop IDDE program with implementation schedule	Develop written plan of IDDE program	Duane Martin, Town Engineer	July 1, 2018	July 31, 2018	
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas	Complete	Develop mapping and database for 50% of priority area	Develop stormwater drainage map and database	Duane Martin, Town Engineer	July 1, 2019	November 2018	Mapping complete and on Town website for public use

3-3 Implement citizen reporting program	Complete	Create module in existing Mobile 311 system to include stormwater issues	Develop citizen reporting program	John Phillips, Public Works Director	July 1, 2018	November 2018	
3-4 Establish legal authority to prohibit illicit discharges	Complete	Establish legal authority	Establish legal authority	Corporation Counsel	July 1, 2018	Effective June 30, 2018	
3-5 Develop record keeping system for IDDE tracking	Complete Ongoing	Develop IDDE tracking system	Develop IDDE tracking system Track and Report IDDE	Todd Dumais, Town Planner	July 1, 2018 July 1, 2019	Year 1: July 1, 2018 Year 2: July 1, 2019	Mobile 311 and tracking spreadsheet from IDDE Plan
3-6 Address IDDE in areas with pollutants of concern	Complete	Review impaired water guidance and TMDL's	Develop program to address IDDE in areas of concern	Duane Martin, Town Engineer	July 1, 2018	July 1, 2018	
3-7 Consolidate IDDE tracking spreadsheets	Complete On-going	Develop outfall screening procedure Dry weather screen outfalls	Develop outfall screening procedure Screen outfalls	Duane Martin, Town Engineer	July 1, 2018 July 1, 2020	July 31, 2018 July 1, 2020	Town has dry weather inspected 101 outfalls

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

Track all IDDE that are identified by outfall screening/testing process or from citizen or Town staff complaint. Follow procedures created in the written IDDE program using the authority created by our Corporation Counsel.

Field work to confirm connectivity of storm pipes in two areas that were inconclusion.

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

Date of Report	Location / suspected source	Response taken
July 16, 2018	Parking Lot	Property manager reported backup, grease found by Town
September 15, 2018	Washing machine connected	Disconnected, Health District follow-up

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 (Gallons)	Known or suspected cause / Responsible party	Corrective measures planned and completed (include dates)	Sampling data (if applicable)
107 Hillcrest Avenue	2/27/2013	Surface Water	3,000,000	Metropolitan District Commission (MDC)	Install Sewer Conveyance and Storage Tunnel to eliminate this SSO (Tunnel)	
Opposite 212 Trout Brook Drive	2/27/2013	Surface Water	161,000	MDC	Tunnel	
Southerly end of Chelton Avenue	2/27/2013	Surface Water	2,045,000	MDC	Tunnel	
107 Hillcrest Avenue	3/12/2013	Surface Water	1,755,000	MDC	Tunnel	
Opposite 212 Trout Brook Drive	3/12/2013	Surface Water	69,000	MDC	Tunnel	
Southerly end of Chelton Avenue	3/12/2013	Surface Water	1,000,000	MDC	Tunnel	
107 Hillcrest Avenue	6/7/2013	Surface Water	2,173,000	MDC	Tunnel	
Opposite 212 Trout Brook Drive	6/7/2013	Surface Water	692,000	MDC	Tunnel	
Southerly end of Chelton Avenue	6/7/2013	Surface Water	3,911,000	MDC	Tunnel	
107 Hillcrest Avenue	6/11/2013	Surface Water	7,776,000	MDC	Tunnel	
Opposite 212 Trout Brook Drive	6/11/2013	Surface Water	1,602,000	MDC	Tunnel	
Southerly end of Chelton Avenue	6/11/2013	Surface Water	10,437,000	MDC	Tunnel	
107 Hillcrest Avenue	6/18/2013	Surface Water	24,000	MDC	Tunnel	
107 Hillcrest Avenue	11/27/2013	Surface Water	190,000	MDC	Tunnel	
Southerly end of Chelton Avenue	11/27/2013	Surface Water	183,000	MDC	Tunnel	
Opposite 212 Trout Brook Drive	12/30/2013	Surface Water	6,110	MDC	Tunnel	
Southerly end of Chelton Avenue	1/9/2014	Surface Water	638,000	MDC	Tunnel	
107 Hillcrest Avenue	2/6/2014	Surface Water	854,000	MDC	Tunnel	
107 Hillcrest Avenue	3/20/2014	Surface Water	108,000	MDC	Tunnel	
107 Hillcrest Avenue	3/29/2014-4/2/2014	Surface Water	5,329,000	MDC	Tunnel	
Southerly end of Chelton Avenue	3/29/2014-4/2/2014	Surface Water	4,233,000	MDC	Tunnel	
Opposite 212 Trout Brook Drive	4/30/2014	Surface Water	489,000	MDC	Tunnel	

107 Hillcrest Avenue	4/30/2014-5/3/2014	Surface Water	3,473,000	MDC	Tunnel	
107 Hillcrest Avenue	5/1/2014	Surface Water	68,000	MDC	Tunnel	
Southerly end of Chelton Avenue	4/30/2014-5/2/2014	Surface Water	4,283,000	MDC	Tunnel	
Opposite 212 Trout Brook Drive	5/17/2014	Surface Water	797,000	MDC	Tunnel	
107 Hillcrest Avenue	12/9/2014-12/11/2014	Surface Water	1,545,000	MDC	Tunnel	
Southerly end of Chelton Avenue	12/9/2014	Surface Water	1,674,000	MDC	Tunnel	
Opposite 212 Trout Brook Drive	12/9/2014	Surface Water	128,000	MDC	Tunnel	
107 Hillcrest Avenue	1/18/2015	Surface Water	193,000	MDC	Tunnel	
107 Hillcrest Avenue	3/11/2015	Surface Water	61,000	MDC	Tunnel	
107 Hillcrest Avenue	3/14/2014-3/17/2014	Surface Water	653,000	MDC	Tunnel	
107 Hillcrest Avenue	3/26/2014-3/28/2014	Surface Water	439,000	MDC	Tunnel	
107 Hillcrest Avenue	4/20/2015-4/22/2015	Surface Water	2,055,000	MDC	Tunnel	
Southerly end of Chelton Avenue	4/20/2014-4/21/2014	Surface Water	2,569,000	MDC	Tunnel	
Opposite 212 Trout Brook Drive	4/20/2015	Surface Water	175,000	MDC	Tunnel	
107 Hillcrest Avenue	1/10/2016	Surface Water	194,000	MDC	Tunnel	
107 Hillcrest Avenue	2/16/2016	Surface Water	72,000	MDC	Tunnel	
107 Hillcrest Avenue	2/24/2016	Surface Water	2,426,000	MDC	Tunnel	
Southerly end of Chelton Avenue	2/24/2016	Surface Water	2,319,000	MDC	Tunnel	
Opposite 212 Trout Brook Drive	2/25/2016	Surface Water	110,000	MDC	Tunnel	
107 Hillcrest Avenue	3/31/2017	Surface Water	1,797,000	MDC	Tunnel	
Southerly end of Chelton Avenue	4/1/2017	Surface Water	1,000	MDC	Tunnel	
107 Hillcrest Avenue	4/4/2014	Surface Water	3,003,000	MDC	Tunnel	
Southerly end of Chelton Avenue	4/4/2017	Surface Water	344,000	MDC	Tunnel	
Southerly end of Chelton Avenue	4/6/2017	Surface Water	707,000	MDC	Tunnel	
107 Hillcrest Avenue	5/5/2017	Surface Water	53,000	MDC	Tunnel	
Talcott Rd and Chelton Ave	10/25/2017	Surface Water	500,000 - 1,000,000	MDC	Tunnel	
West of Hillcrest Ave	10/25/2017	Surface Water	100,000 - 500,000	MDC	Tunnel	

67/69 Levesque Ave	10/29/2017	Basement Backup	100 - 1,000	MDC	MDC CMOM - Jetted mainline sewer 10/29/17	
SSO (NTS - Hillcrest Ave)	10/29/2017	Surface Water	1,000,000 +	MDC	Tunnel	
Talcott Rd and Chelton Ave	10/29/2017	Surface Water	1,000,000 +	MDC	Tunnel	
Trout Brook Dr N/O Quaker La	10/29/2017	Surface Water	100,000 - 500,000	MDC	Tunnel	
101 Woodlawn St	1/6/2018	Surface Water	0	MDC	Caused by water main break that was repaired	
West of Hillcrest Ave	1/12/2018	Surface Water	1,062,000	MDC	Tunnel	
Talcott Rd and Chelton Ave	1/12/2018	Surface Water	334,000	MDC	Tunnel	
West of Hillcrest Ave	2/11/2018	Surface Water	4,991,000	MDC	Tunnel	
Talcott Rd and Chelton Ave	2/11/2018	Surface Water	14,000	MDC	Tunnel	
West of Hillcrest Ave	2/25/2018	Surface Water	5,564,000	MDC	Tunnel	
West of Hillcrest Ave	3/2/2018	Surface Water	7,136,000	MDC	Tunnel	
Talcott Rd and Chelton Ave	3/2/2018	Surface Water	207,000	MDC	Tunnel	
West of Hillcrest Ave	4/16/2018	Surface Water	15,676,000	MDC	Tunnel	
Talcott Rd and Chelton Ave	4/16/2018	Surface Water	4,641,00	MDC	Tunnel	
Near 204 Trout Brook Dr	4/16/2018	Surface Water	1,645,000	MDC	Tunnel	
West of Hillcrest Ave	4/25/2018	Surface Water	1,074,00	MDC	Tunnel	
Talcott Rd and Chelton Ave	4/26/2018	Surface Water	29,000	MDC	Tunnel	
West of Hillcrest Ave	6/28/2018	Surface Water	10,000	MDC	Tunnel	
West of Hillcrest Ave	8/4/2018	Surface Water	1,101,000	MDC	Tunnel	
Near 204 Trout Brook Dr	8/14/2018	Surface Water	<1,000	MDC	Tunnel	
Talcott Rd and Chelton Ave	8/24/2018	Surface Water	<25,000	MDC	Tunnel	
West of Hillcrest Ave	9/3/2018	Surface Water	<50,000	MDC	Tunnel	
Near 204 Trout Brook Dr	9/12/2018	Surface Water	11,000	MDC	Tunnel	
17, 22 Mozart St	9/15/2018	Basement Backup	<100	MDC	CMOM Program - Jetted mainline sewer 9/15/18	
West of Hillcrest Ave	9/25/2018	Surface Water	2,789,000	MDC	Tunnel	
Talcott Rd and Chelton Ave	9/25/2018	Surface Water	574,000	MDC	Tunnel	
Talcott Rd and Chelton Ave	9/25/2018	Surface Water	1,000	MDC	Tunnel	
West of Hillcrest Ave	9/26/2018	Surface Water	574,000	MDC	Tunnel	
West of Hillcrest Ave	9/28/2018	Surface Water	6,000	MDC	Tunnel	
West of Hillcrest Ave	10/2/2018	Surface Water	8,286,000	MDC	Tunnel	
Talcott Rd and Chelton Ave	10/2/2018	Surface Water	128,000	MDC	Tunnel	

Near 204 Trout Brook Dr	10/2/2018	Surface Water	<1,000	MDC	Tunnel	
Basements of multiple homes (~21) in Linbrook Rd area	10/3/2018	Basement Backup, Surface Water	500,000 - 1,000,000	MDC	CMOM Program - Repaired mainline sewer 10/2018	
Linbrook Rd	10/11/2018	Surface Water	<1,000	MDC	CMOM Program	
Talcott Rd and Chelton Ave	11/3/2018	Surface Water	4,500,000	MDC	Tunnel	
West of Hillcrest Ave	11/3/2018	Surface Water	9,171,000	MDC	Tunnel	
Near 204 Trout Brook Dr	11/3/2018	Surface Water	471,000	MDC	Tunnel	
186 Main St	11/3/2018	Basement Backup	<1,000	MDC	CMOM Program	
West of Hillcrest Ave	11/6/2018	Surface Water	4,075,000	MDC	Tunnel	
West of Hillcrest Ave	11/9/2018	Surface Water	15,896,000	MDC	Tunnel	
West of Hillcrest Ave	11/13/2018	Surface Water	9,607,000	MDC	Tunnel	
Talcott Rd and Chelton Ave	11/13/2018	Surface Water	1,245,000	MDC	Tunnel	
Near 204 Trout Brook Dr	11/13/2018	Surface Water	10,000	MDC	Tunnel	
32, 38 Lockwood Terrace	11/20/2018	Basement Backup	<100	MDC	CMOM Program - Jetted mainline sewer 11/20/18	
24 Lockwood Terrace	11/26/2018	Basement Backup	<100	MDC	CMOM Program - Jetted mainline sewer 11/26/18	
West of Hillcrest Ave	11/26/2018	Surface Water	8,521,000	MDC	Tunnel	
Talcott Rd and Chelton Ave	11/26/2018	Surface Water	91,000	MDC	Tunnel	
West of Hillcrest Ave	12/2/2018	Surface Water	2,630,000	MDC	Tunnel	
West of Hillcrest Ave	12/21/2018	Surface Water	11,181,000	MDC	Tunnel	
Talcott Rd and Chelton Ave	12/21/2018	Surface Water	500,000 to 1,000,000	MDC	Tunnel	
Near 204 Trout Brook Dr	12/21/2018	Surface Water	180,000	MDC	Tunnel	
West of Hillcrest Ave	1/1/2019	Surface Water	151,000	MDC	Tunnel	
Talcott Rd and Chelton Ave	1/5/2019	Surface Water	26,000	MDC	Tunnel	
West of Hillcrest Ave	1/5/2019	Surface Water	3,788,000	MDC	Tunnel	
16, 26 Hammick Rd	1/5/2019	Basement Backup	<100	MDC	CMOM Program - Jetted mainline sewer 1/5/19	
Talcott Rd and Chelton Ave	1/24/2019	Surface Water	4,418,000	MDC	Tunnel	
Near 204 Trout Brook Dr	1/24/2019	Surface Water	782,000	MDC	Tunnel	
Siphon inlet chamber	1/24/2019	Surface Water	25,000 to 50,000	MDC	CMOM Program	
West of Hillcrest Ave	1/24/2019	Surface Water	27,669,000	MDC	Tunnel	
Ringgold St	1/24/2019	Surface Water	<25,000	MDC	CMOM Program	

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

The Metropolitan District Commission tracks sanitary sewer overflows (SSOs) and reports them as required to CT DEEP and EPA to comply with Capacity, Management, Operation, and Maintenance (CMOM) program. The SSO reporting is within the five days required by this MS4 permit.

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
235 Newfield Ave	Failed leaching field	Tank and field replaced
14 Dodge Dr	Failed tank	Tank replaced
269 Ridgewood Rd	Failed tank	Tank replaced
267 Ridgewood Rd	Failed tank	Tank replaced
734 Mountain Rd	Failed tank	Tank replaced
60 Sunset Farm Rd	Failed tank and leaching field	Tank and field replaced
23 Peaslee Hill	Failed tank and leaching field	Tank and field replaced
219 Ridgewood Rd	Failed distribution box	Distribution box replaced
11 Stonebridge La	Failed distribution box	Distribution box replaced
539 South Main	Failed tank and leaching field	Tank and field replaced

3.7 IDDE reporting metrics

Metrics	
Estimated or actual number of MS4 outfalls	434
Estimated or actual number of interconnections	180
Outfall mapping complete	98%
Interconnection mapping complete	98%
System-wide mapping complete (detailed MS4 infrastructure)	98%

Outfall assessment and priority ranking	100%
Dry weather screening of all High and Low priority outfalls complete	101
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).

Annual training of personnel was conducted on December 10, 2018. Training included overview of the MS4 permit, description of potential stormwater pollutants, how to identify illicit connections, presentation of numerous examples of illicit connections and what to do with respect to reporting illicit connections.

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 / Person Responsible	Due	Date completed or projected completion date	Additional details
4-1 Implement, upgrade, and enforce land use regulations or other legal authority to meet requirements of MS4 general permit	Ongoing	Update legal authority	Update legal authority	Corporation Counsel	July 1, 2019	July 1, 2019	Enforcing existing regulations
4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval	Complete Ongoing	Development complete Implement interdepartmental coordination plan	Implement interdepartmental coordination plan	Todd Dumais, Town Planner	Year 1: July 1, 2018 Year 2: July 1, 2019	Year 1: July 1, 2018 Year 2: July 1, 2019	
4-3 Review site plans for stormwater quality concerns	Complete Ongoing	Perform site plan reviews for stormwater quality concerns	Perform site plan reviews for stormwater quality concerns	Todd Dumais, Town Planner	Year 1: July 1, 2018 Year 2: July 1, 2019	Year 1: July 1, 2018 Year 2: July 1, 2019	
4-4 Conduct site inspections	Complete Ongoing	Perform site inspections	Perform Site Inspections	Todd Dumais, Town Planner	Year 1: July 1, 2018 Year 2: July 1, 2019	Year 1: July 1, 2018 Year 2: July 1, 2019	
4-5 Implement procedure to allow public comment on site development	Complete Ongoing	Develop and implement procedure to receive public comments on site development	Implement procedure to receive public comments on site development	Todd Dumais, Town Planner	Year 1: July 1, 2018 Year 2: July 1, 2019	Year 1: July 1, 2018 Year 2: July 1, 2019	Development complete: projects listed on P&Z website

							Implementation ongoing
4-6 Implement procedure to notify developers about DEEP construction stormwater permit	Complete Ongoing	Implement a procedure to notify developers of CTDEEP construction stormwater permit	Implement a procedure to notify developers of CTDEEP construction stormwater permit	Todd Dumais, Town Planner	Year 1: July 1, 2018 Year 2: July 1, 2019	Year 1: July 1, 2018 Year 2: July 1, 2019	Procedure implemented, notification ongoing

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

Continue to advance process of obtaining additional legal authority.
Continue implement interdepartmental coordination.
Continue site inspections: Town zoning enforcement officer on smaller projects; third party inspection on larger projects.
Update permit forms on website for developers.
Pursue training for staff on erosion control.
Make available staff training through UCONN Extension Center.

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 / Person Responsible	Due	Date completed or projected completion date	Additional details
5-1 Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning	Complete Ongoing	Evaluate current regulations and develop regulations to establish legal authority	Evaluate and develop regulations to establish legal authority	Todd Dumais, Town Planner	Year 1: July 1, 2018 Year 2: July 1, 2019	Year 1: July 1, 2018 Year 2: July 1, 2019	Evaluation complete Development ongoing
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects	Ongoing	Enforce current regulations	Enforce current regulations	Todd Dumais, Town Planner	Year 1: July 1, 2018 Year 2: July 1, 2019	Year 1: July 1, 2018 Year 2: July 1, 2019	
5-3 Identify retention and detention ponds in priority areas	In progress	Develop long-term maintenance plan	Develop long-term maintenance plan	Duane Martin, Town Engineer	July 1, 2019	July 1, 2019	

5-3 Implement long-term maintenance plan for stormwater basins and treatment structures	In progress	Develop long-term maintenance plan	Develop long-term maintenance plan	Duane Martin, Town Engineer	July 1, 2019	July 1, 2019	
5-4 DCIA mapping	In progress	Develop methodology for DCIA calculations Calculate baseline DCIA	Develop methodology for DCIA calculations Calculate baseline DCIA	Duane Martin, Town Engineer	July 1, 2020	July 1, 2019	Consultant working on baseline DCIA
5-5 Address post-construction issues in areas with pollutants of concern	Ongoing	Identify projects in catchment areas that discharge to impaired waters	Identify projects in catchments that discharge to impaired waters	Todd Dumais, Town Planner Duane Martin, Town Engineer	Year 1: July 1, 2018 Year 2: July 1, 2019	Year 1: July 1, 2018 Year 2: July 1, 2019	

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

Identifying DCIA reductions from 2012-2017.
Mapping and DCIA baseline calculation by 7/1/19.

5.3 Post-Construction Stormwater Management reporting metrics

Metrics	
Baseline (2012) Directly Connected Impervious Area (DCIA)	In Progress – Goal Spring 2019
DCIA disconnected (redevelopment plus retrofits)	0.18 acres this year / 1.43 acres total
Retrofits completed	None
DCIA disconnected	% this year / % total since 2012
Estimated cost of retrofits	\$0
Detention or retention ponds identified	NA – working on inventory

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

The methodology to be used for determining DCIA is to delineate the catchments to each outfall (this is what is taking place now), evaluate the connectivity level of each catchment, and then calculate DCIA using what is recommended by CT NEMO option 2. See attached link. This will be supplemented by option #3 for catchments/basins that are near the 11% cut off.

<https://nemo.uconn.edu/ms4/tasks/mapping.htm>

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 / Person Responsible	Due	Date completed or projected completion date	Additional details
6-1 Develop/implement formal employee training program	Complete Ongoing	Perform employee training	Complete annual staff training	John Phillips, Public Works Director	July 1, 2018	Year 1: Feb 15, 2018 Year 2: Feb 10, 2018	
6-2 Implement MS4 property and operations maintenance	In progress	Develop, evaluate, and implement maintenance procedures	Develop and evaluate maintenance procedures	John Phillips, Public Works Director	July 1, 2018	July 1, 2018	DPW developing SOPs on lawn care, sweeping, catch basin cleaning, herbicides
6-3 Implement coordination with interconnected MS4s	In progress	Identify and contact interconnected MS4's	Identify and contact interconnected MS4's	Duane Martin, Town Engineer	July 1, 2018	July 1, 2018	In progress – identifying correct contact person,
6-4 Develop/implement program to control other sources of pollutants to the MS4	In progress	Develop and implement pollutant source control program	Develop and implement pollutant source control program	Duane Martin, Town Engineer	July 1, 2018	July 1, 2018	
6-5 Evaluate additional measures for discharges to impaired waters*	Complete Ongoing	Develop and implement procedures for reducing discharges to impaired waters	Develop turf management and source management program	John Phillips, Public Works Director	July 1, 2018	December 2018	DPW developed SOP on turf management policy
6-6 Track projects that disconnect DCIA	Complete Ongoing	Track DCIA percentage	Track DCIA percentage	Todd Dumais, Town Planner Duane Martin, Town Engineer	Year 1: July 1, 2018 Year 2: July 1, 2019	Year 1: July 1, 2018 Year 2: July 1, 2019	

6-7 Implement infrastructure repair/rehab program	Complete Ongoing	Evaluate infrastructure repair and rehabilitate MS4 infrastructure	Evaluate MS4 infrastructure and develop a repair/rehab program	Duane Martin, Town Engineer	Year 1: July 1, 2018 Year 2: July 1, 2019	Year 1: July 1, 2018 Year 2: July 1, 2019	Through the Capital Improvement Planning: annual budget allocates funds for stormwater projects
6-8 Develop/implement plan to identify/prioritize retrofit projects	Not started	Develop retrofit plan	Develop and implement retrofit plan	Todd Dumais, Town Planner Duane Martin, Town Engineer	July 1, 2020	July 1, 2020	
6-8 Implement retrofit projects to disconnect 2% of DCIA	In progress	Implement retrofit projects	Implement retrofit projects	Todd Dumais, Town Planner Duane Martin, Town Engineer	July 1, 2022	July 1, 2022	
6-9 Develop/implement street sweeping program	Complete Ongoing	Perform annual street sweeping	Perform annual street sweeping	John Phillips, Public Works Director	Year 1: July 1, 2018 Year 2: July 1, 2019	Year 1: July 1, 2018 Year 2: July 1, 2019	
6-10 Develop/implement catch basin cleaning program	Complete Ongoing	Develop and implement catch basin cleaning and inspection procedures	Develop and implement catch basin cleaning and inspection procedures	John Phillips, Public Works Director	Year 1: July 1, 2018 Year 2: July 1, 2019	Year 1: July 1, 2018 Year 2: July 1, 2019	
6-11 Develop/implement snow management practices	Complete Ongoing	Update and implement snow management measures and practices	Develop and update snow management measures and practices	John Phillips, Public Works Director	Year 1: July 1, 2018 Year 2: July 1, 2019	Year 1: July 1, 2018 Year 2: July 1, 2019	

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

Employee training with Town staff focused on engineering, planning, and health department

BMP Hire Environmental Services, Inc. to clean Vortech Storm Water Separators at the Town Hall

Coordinate with interconnected MS4s

Implement turf management program

Track DCIA percentage

Repair and rehabilitated MS4 infrastructure

Continue annual street sweeping

Continue annual catch basin cleaning

Continue to implement snow management practices

6.3 Pollution Prevention/ Good Housekeeping reporting metrics

Metrics	
Employee training provided for key staff	Year 1 – 2/15/18 Year 2 – 12/10/18
Street sweeping	
Curb miles swept	1,148 miles
Volume (or mass) of material collected	413 tons
Catch basin cleaning	
Total catch basins in priority areas	1,770 est
Total catch basins in MS4	6,500 est
Catch basins inspected	1,979
Catch basins cleaned	280
Volume (or mass) of material removed from all catch basins	34.75 tons
Volume removed from catch basins to impaired waters (if known)	unknown
Snow management	
Type(s) of deicing material used	Clearlane, salt
Total amount of each deicing material applied	2,512 tons Clearlane - 1,000 tons salt
Type(s) of deicing equipment used	Spreader
Lane-miles treated	40,349 miles
Snow disposal location	187 Dexter Ave
Staff training provided on application methods & equipment	January 2018
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	\$0

6.4 Catch basin cleaning program

Briefly describe the method used to optimize your catch basin inspection and cleaning schedule.

The catch basin optimization plan is an informal plan that is being documented through the work order system. A part-time employee inspected catch basins to develop a baseline for future catch basin cleaning; catch basins that are found to be greater than 50% full are put on a list to be cleaned.

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.

N/A – to be provided in 2019 report

Describe plans for continuing the Retrofit program and how to achieve a goal of 1% DCIA disconnection in future years.

N/A – to be provided in 2019 report

Describe plans for continuing the Retrofit program beyond this permit term with the goal to disconnect 1% DCIA annually over the next 5 years.

N/A – to be provided in 2019 report

Part II: Impaired waters investigation and monitoring

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.
Outfall screening and sampling during wet and dry weather has begun, a summary of the results is below.

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

2.1 Screening data collected under 2017 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.

Old Outfall ID	New Outfall ID	Sample date	Parameter (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	Results E. coli (cfu/100mL)	Name of Laboratory (if used)	Follow-up required?
214	OF-5641-018	4/16/2018	Bacteria	1040	Phoenix	Yes
216	OF-5641-016	4/16/2018	Bacteria	3780	Phoenix	Yes
218	OF-0731-001	4/16/2018	Bacteria	10,500	Phoenix	Yes
204	OF-2547-001	4/16/2018	Bacteria	1440	Phoenix	Yes
205	OF-2547-002	4/16/2018	Bacteria	146	Phoenix	No
NEW_9456	OF-2547-003	4/16/2018	Bacteria	2610	Phoenix	Yes
206	OF-1091-001	4/16/2018	Bacteria	1990	Phoenix	Yes
180	OF-6361-001	4/16/2018	Bacteria	813	Phoenix	Yes
162	OF-1981-006	4/16/2018	Bacteria	759	Phoenix	Yes
164	OF-2021-001	4/16/2018	Bacteria	1400	Phoenix	Yes
14304	OF-3321-003	4/16/2018	Bacteria	9800	Phoenix	Yes
New_9445	OF-1981-008	4/16/2018	Bacteria	368	Phoenix	No
435	OF-5096-003	4/16/2018	Bacteria	318	Phoenix	No
443	OF-5641-044	4/16/2018	Bacteria	110	Phoenix	No
NEW_13881	OF-5096-001	4/16/2018	Bacteria	1270	Phoenix	Yes
434	OF-5096-002	4/16/2018	Bacteria	1300	Phoenix	Yes
221	OF-1981-009	4/16/2018	Bacteria	723	Phoenix	Yes
222	OF-5641-007	4/16/2018	Bacteria	402	Phoenix	No
305	OF-5641-008	4/16/2018	Bacteria	2280	Phoenix	Yes
306	OF-5641-009	4/16/2018	Bacteria	767	Phoenix	Yes

NEW_15104	OF-0531-007	4/16/2018	Bacteria	565	Phoenix	Yes
NEW_13895	OF-1891-010	4/16/2018	Bacteria	109	Phoenix	No
225	OF-3321-001	4/16/2018	Bacteria	2760	Phoenix	Yes
NEW_13878	OF-1011-001	4/25/2018	Bacteria	63	Phoenix	No
447	OF-1011-002	4/25/2018	Bacteria	256	Phoenix	No
224	OF-5641-001	4/25/2018	Bacteria	7700	Phoenix	Yes
309	OF-0531-006	4/25/2018	Bacteria	1500	Phoenix	Yes
219	OF-5641-013	4/25/2018	Bacteria	2760	Phoenix	Yes
214	OF-5641-018	4/16/2018	Bacteria	1040	Phoenix	Yes
216	OF-5641-016	4/16/2018	Bacteria	3780	Phoenix	Yes
218	OF-0731-001	4/16/2018	Bacteria	10,500	Phoenix	Yes

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 (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	Results E. coli (cfu/100mL)	Name of Laboratory (if used)	Follow-up required?
OF-3961-002: #1 Oakwood Ave @ Trout Brook	8/16/2010	E. coli	1660	Phoenix	Yes
OF-3771-013: #2 New Britain Ave @ South St	8/16/2010	E. coli	1150	Phoenix	Yes
OF-5641-022: #3 Ballard Dr @ East Branch Trout Brook	8/16/2010	E. coli	1350	Phoenix	Yes
OF-1981-008: #4 Fern St @ Trout Brook	8/16/2010	E. coli	>24,200	Phoenix	Yes
OF-4501-001: #5 Red Top Dr @ Rockledge Brook	8/16/2010	E. coli	>24,200	Phoenix	Yes
OF-4131-008: #6 Park Rd @ Kennedy Brook	8/16/2010	E. coli	>50	Phoenix	Result inconclusive

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

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).

1. Catchment ID (DEEP Basin ID)	2. Category	3. Rank
SEE ATTACHED TABLE FROM IDDE PLAN		

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.

Old Outfall / Interconnect ID	New ID	Screening / sample date	Ammonia (mg/L)	Chlorine (mg/L)	Conductivity (uS/cm)	Salinity (ppt)	E. coli (cfu/100mL)	Surfactants (mg/L)	Water Temp (Deg C)	Pollutant of concern	If required, follow-up actions taken
164	OF-2021-001	8/16/2018	0.20	0.00	886	0.23	120	0.25	23.5	bacteria	No
New_9445	OF-1981-008	8/16/2018	0.10	0.08	437	0.22	909	0.25	24.2	bacteria	Yes
162	OF-1981-006	8/16/2018	0.10	0.08	899	0.45	6,130	0.25	25.4	bacteria	Yes
188	OF-6201-005	8/16/2018	0.05	1.4	1132	0.57	183	0.25	28.6	bacteria	No
223A		8/17/2018	0.04	0.4	524	0.26	388	0.25	24.3	bacteria	No
225	OF-3321-001	8/17/2018	8.00	0.6	1539	0.77	>24,200	0.50	27.9	bacteria	Yes
224	OF-5641-001	8/17/2018	2.00	0.4	950	0.48	>24,200	0.25	26.8	bacteria	Yes
308	OF-0531-005	8/17/2018	0.02	0.6	1150	0.56	121	0.25	28.2	bacteria	No
309	OF-0531-006	8/17/2018	0.20	0	394	0.2	452	0.25	27.3	bacteria	Yes
219	OF-5641-013	8/27/2018	0.12	0.6	2690	1.34	3,080	0.25	27.5	bacteria	Yes
305	OF-5641-008	8/27/2018	0.02	0	737	0.36	855	0.25	26.9	bacteria	Yes
304	OF-3541-001	9/5/2018	0.30	0	2040	1.02	>24,200	0.25	24.5	bacteria	Yes
81	OF-3171-002	9/5/2018	0.10	0.08	1030	0.53	20	0.25	23	bacteria	No
97	OF-0961-002	9/5/2018	0.20	0.04	675	0.34	121	0.50	23.5	bacteria	No
281	OF-4258-001	9/5/2018	0.10	0.04	854	0.43	1,870	0.25	22.1	bacteria	Yes
288	OF-0171-005	9/5/2018	0.10	0.04	870	0.42	160	0.25	24.9	bacteria	No
414	OF-3131-001	9/5/2018	0.20	0.02	217	0.11	<10	0.25	25.6	bacteria	No

411	OF-5551-001	9/5/2018	0.40	0.02	971	0.49	168	0.25	26.2	bacteria	No
435	OF-5096-003	8/27/2018	0.10	0	986	0.49	231	0.25	22.4	bacteria	No
458	OF-3961-002	8/27/2018	2.00	0.12	1023	0.55	233	0.50	24.6	bacteria	No
461	OF-2701-002	8/27/2018	4.00	0	728	0.37	10,500	0.25	28.1	bacteria	No
464	OF-5115-001	8/27/2018	0.60	0.05	973	0.48	9,800	0.25	28	bacteria	No
15107	OF-2401-001	8/28/2018	1.00	0.04	2150	1.07	435	0.75	24.4	bacteria	Yes
New_13881	OF-5096-001	8/28/2018	0.00	0.08	842	0.42	31	0.25	23	bacteria	No
271	OF-0801-003	8/28/2018	0.20	0	983	0.49	473	0.25	27.4	bacteria	Yes
164	OF-2021-001	8/16/2018	0.20	0.00	886	0.23	120	0.25	23.5	bacteria	No
188	OF-6201-005	8/16/2018	0.05	1.4	1132	0.57	183	0.25	28.6	bacteria	No
225	OF-3321-001	8/17/2018	8.00	0.6	1539	0.77	>24,200	0.50	27.9	bacteria	Yes
224	OF-5641-001	8/17/2018	2.00	0.4	950	0.48	>24,200	0.25	26.8	bacteria	Yes
308	OF-0531-005	8/17/2018	0.02	0.6	1150	0.56	121	0.25	28.2	bacteria	No
309	OF-0531-006	8/17/2018	0.20	0	394	0.2	452	0.25	27.3	bacteria	Yes
219	OF-5641-013	8/27/2018	0.12	0.6	2690	1.34	3,080	0.25	27.5	bacteria	Yes

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	New Outfall ID	Sample date	Ammonia (mg/L)	Chlorine (mg/L)	Conductivity (uS/cm)	Salinity (ppt)	E. coli (cfu/100mL)	Surfactants (mg/L)	Water Temp (Deg C)	Pollutant of concern
214	OF-5641-018	4/16/2018	0.33	<0.02	-	-	1040	0.17	3.3	bacteria
216	OF-5641-016	4/16/2018	0.13	<0.02	-	-	3780	0.08	6.3	bacteria
218	OF-0731-001	4/16/2018	0.22	<0.02	-	-	10,500	0.11	3.9	bacteria
204	OF-2547-001	4/16/2018	0.18	<0.02	-	-	1440	0.09	4.5	bacteria
205	OF-2547-002	4/16/2018	0.11	<0.02	-	-	146	0.06	4.8	bacteria
NEW_9456	OF-2547-003	4/16/2018	0.12	0.02	-	-	2610	0.06	3.2	bacteria
206	OF-1091-001	4/16/2018	0.24	<0.02	-	-	1990	0.08	4.5	bacteria
180	OF-6361-001	4/16/2018	0.17	0.04	-	-	813	0.07	4.8	bacteria
162	OF-1981-006	4/16/2018	0.15	0.05	-	-	759	<0.05	5.4	bacteria
164	OF-2021-001	4/16/2018	0.11	0.03	-	-	1400	0.07	5.2	bacteria
14304	OF-3321-003	4/16/2018	0.19	<0.02	-	-	9800	<0.05	7	bacteria
New_9445	OF-1981-008	4/16/2018	0.09	<0.02	455	0.23	368	0.07	4.1	bacteria
435	OF-5096-003	4/16/2018	0.11	0.11	1089	0.54	318	0.10	11	bacteria
443	OF-5641-044	4/16/2018	0.17	<0.02	34	0.02	110	0.08	5.8	bacteria
NEW_13881	OF-5096-001	4/16/2018	0.15	<0.02	183	0.09	1270	0.06	9.3	bacteria
434	OF-5096-002	4/16/2018	0.13	<0.02	131	0.06	1300	0.06	7.4	bacteria

221	OF-1981-009	4/16/2018	0.19	<0.02	67	0.03	723	0.07	7.5	bacteria
222	OF-5641-007	4/16/2018	0.18	<0.02	0	> 10.00	402	0.08	10.2	bacteria
305	OF-5641-008	4/16/2018	0.14	<0.02	109	0.05	2280	0.07	8.4	bacteria
306	OF-5641-009	4/16/2018	0.21	<0.02	726	0.36	767	0.07	9.6	bacteria
NEW_15104	OF-0531-007	4/16/2018	0.10	<0.02	25	0.01	565	0.06	10.7	bacteria
NEW_13895	OF-1891-010	4/16/2018	0.09	<0.02	297	0.15	109	0.05	9.5	bacteria
225	OF-3321-001	4/16/2018	0.34	<0.02	358	0.17	2760	0.11	11.2	bacteria
NEW_13878	OF-1011-001	4/25/2018	0.35	<0.02	478	0.02	63	0.35	16.8	bacteria
447	OF-1011-002	4/25/2018	0.20	<0.02	243	0.01	256	0.24	16.4	bacteria
224	OF-5641-001	4/25/2018	0.21	<0.02	222	0.01	7700	0.17	16.4	bacteria
309	OF-0531-006	4/25/2018	0.23	<0.02	82	0	1500	0.20	16.2	bacteria
219	OF-5641-013	4/25/2018	0.14	<0.02	85	0	2760	0.14	15.6	bacteria

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
457	Trout Brook	Drainage system repair of deteriorated corrugated metal pipe at 17 Brixton St.

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;

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: <i>Matthew W. Hart, Town Manager</i>	Print name: <i>Cynthia C. Baumann</i>
Signature / Date: <i>M. W. Hart 03/21/2019</i>	Signature / Date: <i>Cynthia C. Baumann 3/21/19</i>