

2021 Annual Report – MS4 General Permit

City of Milford
Milford, Connecticut

March 2022



Prepared by:



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MS4 General Permit
City of Milford 2021 Annual Report
 Existing MS4 Permittee
 Permit Number GSM 000037
 January 1, 2021 – December 31, 2021

This report documents City of Milford's efforts to comply with the conditions of the MS4 General Permit to the maximum extent practicable (MEP) from January 1, 2021 to December 31, 2021.

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	Educational materials posted on the City website include the following: - Stormwater Management Plan (Engineering Division Webpage) - DPW Service Request Form (Public Works Webpage) - Public Health Impacts of Feeding Waterfowl document (Environmental Health Division, Waterfowl Webpage) - Household Sewer Back Up Protocol (Wastewater Division, Household Sewer Back Up Protocol Webpage)	Update and maintain City websites to include educational materials.	Stormwater Committee, Public Works	Ongoing	Ongoing	City of Milford Fire Department and City Planning Department coordinate educational Social Media posts encouraging catchbasin clearing preceding major storms. Channel 12 News reported on the event.

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 (Continued)	Ongoing	Girl Scout Troop 38305 continues to monitor 6 literature distribution boxes along two pond areas on the Wepawaug River. CT DEEP "Don't Feed the Waterfowl" brochures are distributed through their efforts. Over	Distribute educational materials.			Ongoing	
	Complete/ongoing	Rain garden installed at East Shore Middle School in 2020. Maintenance, including tagging invasive species to be removed and servicing the rain garden occurred in the 2021 reporting period.	Involve School and Public for outreach and maintenance	Public Works, CIRCA and UCONN		Completed in 2020	
1-2 Address education/ outreach for pollutants of concern	Ongoing	Girl Scout continues the CT DEEP "Don't Feed the Waterfowl" education program targets bacteria pollution problems, which is a pollutant of concern for 6 impaired waters in the City.	Select educational materials appropriate for impaired waters and stormwater pollutants of concern	Stormwater Committee, Public Works	Ongoing	Ongoing	

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

- Continue to add education and outreach materials to the City website and other forms of social media.
- Girl Scouts expected to continue distribution of CT DEEP "Don't Feed the Waterfowl" brochures.
- Develop the yard waste disposal outreach presentation from 2019 into programming that can be distributed to the public.
- Continue social media posts surrounding catchbasin clean-out efforts in preparation for major storm and flooding events.

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.
"Don't Feed the Waterfowl" brochures distributed by Girl Scout Troop	- Community residents - Over 2000 brochures to date	Impact of feeding waterfowl on water quality/pollution	Bacteria	Girl Scout Troop 38305
Annual Water Quality and Stormwater Public Outreach (Canceled for 2021 due to COVID-19)	- Senior Center - Milford High School, J. Law – AP Environmental Science (2 classes)	- Conservation History, Past Lessons, Future Choices - Impacts of Human Activities on Biodiversity pilot program - Land Use	N/A	- Open Space and Natural Resource Department - Public Works Department
Parsons Building Rain Garden Maintenance	- Regular maintenance as part of Master Gardener Training Program - Brochure distributed at various events	- Rain garden weeding - Native plant education - Stormwater quality	N/A	- Cheryl Cappiali, Master Gardener - City of Milford - Southwest Conservation District - CTDEEP
UCONN Rain Garden Grant Project	- A group of students studied City-owned properties and made recommendations for potential rain garden locations. The City chose one location and installed a rain garden in the spring of 2020. - Continuing to explore potential locations and opportunities for more rain garden installations.	Rain Gardens	N/A	
Annual Minds in Motion Educational Events (Canceled for 2021 due to COVID-19)	Anticipate approximately 1 dozen children	Various ecological topics	N/A	Open Space and Natural Resource Department
"Aligning with Nature" programming (Canceled for 2021 due to COVID-19)	Anticipate approximately 40 people	Educational programming to explain ecological impacts of improper yard waste disposal	N/A	Open Space and Natural Resource Department
Milford Tree Giveaway 4/24/2021	500 Residents	Tree giveaway with educational materials	N/A	Open Space and Natural Resource Department

Program Element/Activity	Audience (and number of people reached)	Topic(s) covered	Pollutant of Concern addressed (if applicable)	Responsible dept. or partner org.
Community Cleanups • 4/17/2021 Walker Pond • 4/24/2021 Wilcox Park and Milford Harbor • 5/1/2021 Mackenzie's Beach • Cleanup: Walnut Beach, Silver Sands State Park, and Gulf Beach • 6/19/2021 CT Surfrider Foundation cleanup: Gulf Beach • 9/15/2021 PerkinElmer beach cleanup: Silver Sands State Park and Walnut Beach • 9/23/2021 Discount Power, Inc. cleanup: Walnut Beach • 10/19/2021 Stewart B. McKinney National Wildlife Refuge at Milford Point • 10/24/2021 REI cleanup and restoration: Walker Pond	• Approximately 350 volunteers	• Litter clean-up	• N/A	• Open Space and Natural Resource Department and Department of 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 / Person Responsible	Due	Date completed or projected completion date	Additional details
2-1 Comply with public notice requirements for the Stormwater Management Plan and continue availability of Final Stormwater Management Plan to the public	Complete	The draft Stormwater Management Plan was made available to the public: • An electronic copy was posted on the City's website.	Make draft Stormwater Management Plan available electronically on the City website and paper copies available in the Engineering Offices by Apr 1, 2019. Publish notice of availability on website or local newspaper.	Engineering, Public Works	Apr 3, 2017	April 3, 2017	
	Complete	The final Stormwater Management Plan was made available to the public: • An electronic copy was posted on the City's website.	Make final Stormwater Management Plan available electronically on the City website and paper copies available in Engineering Offices.		Ongoing	May 2017	The City's Stormwater Management Plan is available on the City's website.
2-2 Comply with public notice requirements for Annual Reports	Complete	Notice of annual report was posted to the City website on February 15, 2021. Annual Report was made available to the public on February 15, 2021.	Make draft annual report available electronically on the City website and paper copies available in Engineering Offices. Publish notice of availability on website(s) or local newspaper.	Engineering, Public Works	Feb 15, 2020	Feb 15, 2021	
	In Progress	The City will finalize the draft 2021 Annual Report and will submit it to DEEP, as well as post it on the town website by the April 1, 2022 deadline.	Make final annual report available electronically on the City website.		Apr 1, 2022	Anticipate completion by Apr 1, 2022	



BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
2-3 Work with area organizations and groups	Ongoing	Stormwater staff met periodically throughout the reporting period.	Conduct regular meetings of the Milford Stormwater Committee	Engineering, Public Works, Inland Wetlands	Ongoing	Ongoing	City of Milford Staff meet after severe storm events or at the site of flooding to bring a heightened awareness to drainage issues throughout the City.
	Ongoing	- Coastal Wetland Litter Clean-ups - Mackenzie's Annual - Coastal Litter Clean-ups - Land Trust Clean-ups - CT Audubon Society - Boy Scout Troups - Rain Garden/Garden projects - Cheryl Cappiali, Master Gardener Program - Southwest Conservation District - CTDEEP - UConn - Milford Conservation Commission Dune Maintenance	Work with local organizations (ECC, etc.) to identify public involvement opportunities and assist with plan implementation.	Stormwater Committee		Ongoing	

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

- Continue to participate as a registered community in the Sustainable Connecticut initiative. Milford maintained Silver Level certification in the Sustainable CT program in November 2021.
- Continue to hold regular meetings that cover stormwater-related topics, such Multi-Hazard Mitigation Plan Meetings, Inland Wetlands Meetings, Conservation Commission, and various volunteer organizations.
- Continue ongoing Coastal Resiliency Projects. Hold related public information and outreach meetings and monthly discussions.
- Submit 2021 Annual Report to DEEP by April 1, 2022.
- Develop the yard waste disposal outreach presentation from 2019 into programming that can be distributed to the public.
- Implement software programs to allow the City to track MS4 metrics through permit applicant inputs, discussed during the Plan of Conservation and Development meetings.
- Continue to involve the public in annual reporting process.
 - Post notice of 2021 annual report January 19, 2022.
- Make draft 2021 report available on the City website for public comment.

2.3 Public Involvement/Participation reporting metrics

Metrics	Implemented	Date	Posted
Availability of the Stormwater Management Plan to public	Yes	May 2017	https://www.ci.milford.ct.us/engineering-division
Availability of Annual Report announced to public	Yes	February 15, 2021	https://www.ci.milford.ct.us/home/news/ms4-annual-notice

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	Not started	The Engineering Division maintains a copy of the "Illicit Discharge Detection and Elimination: manual (2004)", downloaded from the EPA web site and regularly consults it as part of the review process.	Prepare IDDE Plan for the City.	Engineering, Public Works	Jul 1, 2018	Anticipate completion by Jul 1, 2022	
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas	Complete	The City has made stormwater mapping and GIS available on the Engineering Department website.	Update GIS MS4 mapping to include all stormwater outfalls in the municipality.	Engineering, Public Works, GIS	Jul 1, 2019	Dec 31, 2017	
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas (cont.)	Complete	The City has gathered information on outfalls and has adopted a new software program (Municipity) that is being used to collect and manage data.	Develop a list (database or spreadsheet) including required elements listed on page 24 of 50 of the General Permit for all stormwater outfalls in municipality.			Completed in 2021	
	Complete	The City has gathered information on relevant MS4 items. The City has adopted a new software program (Municipity) that is being used to collect and manage data.	Update GIS storm system mapping in priority areas to include required elements listed on pages 3 & 4 in Appendix B of the General Permit including catchment delineations.		Jul 1, 2020	Completed in 2021	The City has documented all known outfalls within GIS.



BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
3-3 Implement citizen reporting program	Complete	Reporting continues to occur through the City's online service request system.	Continue to use the online comment area on the City's webpage as a citizen reporting 'hotline' and advertise it on the City website and in municipal offices.	Engineering, Public Works	Jul 1, 2017	Jul 1, 2017	
3-4 Establish legal authority to prohibit illicit discharges	Complete	Section 23-102 of the Milford Code of Ordinances addresses Illicit Connections and Discharges. Section 23-108 specifically addresses Illegal Discharges. Section 23-109 addresses Suspension of MS4 Access.	Review City's existing ordinance related to illicit discharge and revise, as necessary.	Planning and Zoning	Jul 1, 2018	Jun 4, 2018	
3-5 Develop record keeping system for IDDE tracking	Complete	The Health, Engineering, and Public Works Departments are responsible for tracking and logging incoming reports and responses.	Develop IDDE tracking recordkeeping system.	Health, Engineering, Public Works	Jul 1, 2017	Jul 1, 2017	
3-6 Address IDDE in areas with pollutants of concern	Ongoing	The City has worked with the Health Department to complete the review of areas containing septic systems. As there are few areas of the City being served by septic systems, the Health Department did not have enough information to identify areas of high potential for septic failure.	Identify areas with high potential for septic system failure.	Engineering, Public Works	Not specified	Ongoing	There are few areas of the City still being served by septic systems. Future failures will be logged in the City's Municipality tracking system.



BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
3-7 Conduct SSO inventory	Complete	Review of records was conducted to determine all SSOs from July 1, 2012 to June 30, 2017.	Review City records to identify any known locations where SSOs have discharged to the MS4 within the previous 5 years (July 1, 2012 – June 30, 2017).	Engineering, Public Works, Wastewater Division	Oct 29, 2017	Feb 7, 2018	Reason for addition: Part of the IDDE Program.
3-8 Assess and prepare a priority ranking of catchments	In Progress	The City is documenting the amount of debris removal from each catch basin.	Classify each catchment into an excluded, problem, high priority, or low priority catchment.	Engineering, Public Works	Jul 1, 2019 (initial)	Anticipate completion by Jul 1, 2022	Reason for addition: Part of the IDDE Program.
	Ongoing	The City will be contracting with a consulting firm to complete this task.	Rank catchments within each category (except excluded catchments) based on screening factors found on page 6 & 7 in Appendix B of the General Permit.			Anticipate completion by Jul 1, 2022	Reason for addition: Part of the IDDE Program.
3-9 Conduct outfall and interconnection screening and sampling	In progress	The City has hired a consulting firm to complete this task.	Conduct dry weather screening and sampling (where flowing) of every MS4 outfall and interconnection (except for excluded and Problem Catchments).	Engineering, Public Works	Jul 1, 2019	Anticipate completion by Dec 31, 2022	Reason for addition: Part of the IDDE Program.
3-10 Conduct catchment investigations and remove illicit discharges	Not started		Evaluate catchments for System Vulnerability Factors and begin catchment investigations.	Engineering, Public Works	Jul 1, 2018	Anticipate completion by Jul 1, 2023	Reason for addition: Part of the IDDE Program.
	Not started	See table below for details.	Where System Vulnerability Factors are present, conduct manhole inspections. Isolate and verify sources. Remove identified illicit discharges and conduct confirmatory outfall screening.			Anticipate completion by Jul 1, 2023	Reason for addition: Part of the IDDE Program.

Extra space for describing above BMP activities, if needed:

BMP	
3-10 Conduct catchment investigations and remove illicit discharges	During regular monitoring of sewer mains, force mains and laterals, areas that would benefit from sewer lining are evaluated for project award dependant on funding. The following area has been identified as a potential illicit discharge source that the City has addressed: 1. Line sewer force main under the Wepawaug River (Completed in 2021)

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

• Assess and prepare a priority ranking of catchments. • Conduct dry weather outfall screening and sampling. • Evaluate catchments for System Vulnerability Factors and begin catchment investigations. • Implement reporting options to the online reporting system with language directly referencing illicit discharge activities and add a link to the system from the City's Stormwater page. • Continue updating MS4 mapping as necessary. • Coordinate with DOT to obtain MS4 interconnections mapping.

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

Date of Report	Location / suspected source	Response taken
1/4/2021	Knobb Hill Road / Sewage backup (roots/rags)	Blockage was cleared ad location was added to the maintenance program and schedule for CCTV
3/19/2021	146 High Street / Service lateral backup (roots)	Blockage was cleared ad location was added to the maintenance program and schedule for CCTV



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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)
89 Bridgeport Avenue	06/12/2012	MS4	Unknown	Sewer leaking at rear of property onto Bridgeport Ave	Complaint was received by Milford Health Department, investigated and handled by Health Department or referred to appropriate City Agency for follow-up. Wastewater Department was contacted. Assigned to Gregory Peters. Resolved.	
9 Ellis Street	06/12/2012	MS4	Unknown	Report of possible sewage overflow at property	Complaint was received by Milford Health Department, investigated and handled by Health Department or referred to appropriate City Agency for follow-up. Assigned to Gregory Peters. Resolved.	
1201 Boston Post Road	11/29/2012	Unknown	Unknown	Unknown – Strong sewage odor behind stores and management office in vicinity of Target, Foot Locker, and Charlotte Russe	Complaint was received by Milford Health Department, investigated and handled by Health Department or referred to appropriate City Agency for follow-up. Assigned to Robert Grive. Resolved.	
7 Cindy Circle	01/16/2013	MS4	Unknown	Pipe coming out of back of home and depositing raw sewage into 10 x 10 hole	Complaint was received by Milford Health Department, investigated and handled by Health Department or referred to appropriate City Agency for follow-up. Assigned to Paul Scholz. Resolved.	
40 Gulf Street	03/01/2013	MS4	Unknown	Unknown – Raw sewage coming up in back yard	Complaint was received by Milford Health Department, investigated and handled by Health Department or referred to appropriate City Agency for follow-up. Assigned to Paul Scholz. Resolved.	
9 Ash Street	07/01/2013	MS4	Unknown	Unknown – Raw sewage in back yard of apartment building serviced by sewer. Tenant reports duration of discharge as 5 months	Complaint was received by Milford Health Department, investigated and handled by Health Department or referred to appropriate City Agency for follow-up. Assigned to Tara Mustakos. Resolved.	



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)
561 New Haven Avenue	07/17/2013	MS4	Unknown	Overflow of sewage outside of Family Mart building	Reported by Robin Lynch from Engineering and Sewer Commission. Complaint was received by Milford Health Department, investigated and handled by Health Department or referred to appropriate City Agency for follow-up. Assigned to Robert Grive. Resolved.	
7 Cindy Circle	04/21/2014	MS4	Unknown	Open pit in rear yard – Dwelling may/may not be tied into sanitary sewers	Complaint was received by Milford Health Department, investigated and handled by Health Department or referred to appropriate City Agency for follow-up. Assigned to Paul Scholz. Resolved.	
367 Bridgeport Avenue	08/28/2014	Unknown	Unknown	Unknown – Strong sewage odor at Dunkin Donuts	Complaint was received by Milford Health Department, investigated and handled by Health Department or referred to appropriate City Agency for follow-up. Assigned to Robert Grive. Resolved.	
1292 Boston Post Road	09/23/2014	Unknown	Unknown	Unknown – Strong sewage odor at Burger King	Complaint was received by Milford Health Department, investigated and handled by Health Department or referred to appropriate City Agency for follow-up. Assigned to Gregory Peters. Resolved.	
92 E Broadway	09/10/2015	MS4	Unknown	Sewage spill at apartment complex	Complaint was received by Milford Health Department, investigated and handled by Health Department or referred to appropriate City Agency for follow-up. Assigned to Robert Grive. Resolved.	
50 Wilson Street	04/03/2017 Over 1 year	MS4	Unknown	Septic system failure during heavy rain	Complaint was received by Milford Health Department, investigated and handled by Health Department or referred to appropriate City Agency for follow-up. Assigned to Robert Grive. In progress. On-site inspection with complainant 04/04/17. Warning letter sent to property owner 04/17/17. Owners will be required by ordinance to hook up to city sewer. NOV issued 07/11/17.	
23 Flax Mill Terrace	05/03/2017	MS4	Unknown	Report of un- permitted SSDS being installed on property	Complaint was received by Milford Health Department, investigated and handled by Health Department or referred to appropriate City Agency for follow-up. Assigned to Paul Scholz. Resolved.	



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)
323 Wheelers Farms Road	05/12/2017	MS4	Unknown	Septic system failure	Complaint was received by Milford Health Department, investigated and handled by Health Department or referred to appropriate City Agency for follow-up. Assigned to Paul Scholz. In progress. Site visit 05/16/17. Phone message left for owner 05/17/17.	
64 Seaside Ave	05/29/2017	MS4	Unknown	Septic system failure	Complaint was received by Milford Health Department, investigated and handled by Health Department or referred to appropriate City Agency for follow-up. Assigned to Gregory Peters. Resolved.	
680 Wheelers Farms Road	06/14/2017	MS4	Unknown	Septic failure/breakout at rear of property	Complaint was received by Milford Health Department, investigated and handled by Health Department or referred to appropriate City Agency for follow-up. Assigned to Robert Grive. Resolved. Met with property owner 06/20/17. Coordination with inland wetlands indicates need for a survey of wetlands and watercourses 06/21/2017. Soil tests conducted 08/15/2017. Septic system plans under design, review, and revision 10/17 to 11-17. New septic system installed 01/23/18.	
Merwin Avenue/Mark Street	06/21/2017 2 days	Unknown	Unknown	Report of sewage odor lasting two days	Complaint was received by Milford Health Department, investigated and handled by Health Department or referred to appropriate City Agency for follow-up. Assigned to Laura Miller. Resolved.	
433 Old Gate Lane	3/15/2018	MS4	<30 gal.	Diesel Fuel Leak	DEEP Dispatch, leaking saddle tank at Pilot Travel Center	
157 Cherry Street	3/23/2018 2 days	MS4	~150 gal.	Restaurant grease trap overflow Stubby Plain Brook wetlands	Health Dept. responded to a reported sewage complaint and determined it to be grease. They worked with Restaurant Building owner, who consulted WSP environmental firm and United pumped out grease and repaired grease trap pump to resolve overflow and cleanup.	
540 New Haven Ave	4/25/2018	MS4	Unknown	Unknown green substance, possibly from adjacent car wash	DEEP Dispatch, Fire Dept responded.	



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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)
83 Ford Street	5/14/2018	MS4	Unknown	Hydraulic oil release due to broken hose	Spill prevention measures activated for clean-up. Fire Dept notified.	
714-730 Boston Post Road	5/17/2018	SSO	7,000 – 8,000 gal. Est. 50% to Wepawaug River.	Sanitary Sewer Force Main break	City bypassed pump station to stop the leak and did emergency repair. Completed 5/19 – 5/20.	
258 Boston Post Road	5/22/2018	MS4	5 gal.	Gasoline leak at Cumberland Farms	Vac truck dispatched to catch basin at location	
75 Edgefield Street	6/1/2018	SSO to catch basin and LIS at Burwell St.	3,000 – 4,000 gal. Est	City sanitary sewer	City's WWTF responded to force main break and repaired.	
57 New Haven Ave	6/1/2018	MS4	~ 10 gal.	Hydraulic hose broke Street Sweeper	Oil contained in catch basin. City Spill Prevention measures activated for containment and cleanup	
738 Boston Post Road	6/10/2018	SSO – Wepawaug River	Unknown	City Sanitary Sewer Force main break & leak	City bypassed pump station to stop the leak and did emergency repair completed 6/11/2018, 15:00 hr. No Fishing / Swimming Signs posted at Wepawaug River North St & City Hall ponds. Water samples on 6/11 & 6/12 that included both regular scheduled beach and 4 additional locations.	Within allowable limits, 6/11 & 6/12 samples
44 Rose Street	6/22/2018	MS4 – LIS	Unknown	Diesel from vessel	Spencer's Marina	
9 Seaview Ave	6/23/2018	MS4 - LIS	15 gal.	Capsized boat leaked fuel	USCG, Fire Dept. dispatched	
16 New Haven Ave.	7/12/2018	MS4	Unknown	Restaurant grey water from floor washing	MHD responded. Mob sink required to be installed to prevent grey water from being dumped to road and catch basins. Letter sent 8/2/18.	
831 Oronoque Rd	7/26/2018	MS4	~ 50 gal.	Hydraulic Oil leak due hose line failure, Milford Transfer Station	Fire Dept. – Spill Prevention Measures initiated	
685 Broadway	7/27/2018	MS4 - LIS	Unknown	Sewage Order Report	DEEP Dispatch	
121 North Street	8/3/2018	MS4	Unknown	Dump truck fire	Extinguished by Fire Dept. Fuel tanks did not leak. Unknown what other fluids entered catch basin.	

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)
1 Helwig Street	9/9/2018	MS4-LIS	Unknown	40' Clam boat fire at Milford Harbor	Fire Extinguished by Local Fire Dept. Disconnected fuel connections, only minor seepage occurred.	
I-95 South Exit 36	9/13/2018	MS4	Unknown	Tractor Trailer & MV Accident	Diesel Fuel into catch basin. CT Tank Removal responded for cleanup.	
20 Wall Street	9/14/2018	MS4	Unknown	LGB Pool Company dumping water into catch basin	Unknown	
I-95 South, Exit 40	10/08/2018	MS4	80 gal.	Tractor Trailer Accident	Diesel Fuel leak into catch basin. Fire Dept. responded.	
365 Old Gate Lane	1/3/2019	MS4	50 gallons	Diesel fuel released during fire	Local fire departed responded.	
Silver Sands	3/19/2019	Marsh	Unknown	Fire runoff from buildings on fire	Local fire department responded to fire.	
500 Bic Drive	5/9/2019	MS4	Unknown	Heavy odor of gasoline in MS4	Potential illicit discharge was investigated. The cause is unknown.	
19 Summer Place	5/28/2019	Tidal marsh behind property	Unknown	Oil waste items were found in tidal marsh	Spill was investigated.	
West River Street	6/7/2019	Wepawaug River	200 gallons	Force main leak bubbled up onto roadway	6/7/2019 – Station shut down and flow was redirected to the Rodgers Avenue Pump Station.	
117 Bridgeport Avenue	6/14/2019	MS4	Unknown	Cracked sewer pipe	6/17/2019 – Property owner had contractor repair the cracked sewer pipe and clean the area. 6/24/2019 – The pipe was found leaking again. The issue was identified as a loose cap that was then secured. 6/27/2019 – A follow-up inspection confirmed that the leaking had been addressed.	
I-95 North Reststop	10/16/2019	MS4	~1 gallon	Motor oil from hose failure	Local fire department responded.	
365 Old Gate Lane	10/17/2019	MS4	~60 gallons	Petroleum spill at gas station	Corrective measures completed are unknown.	
734 Naugatuck Ave	12/18/2019	MS4	Unknown	Batter fire with battery acid into storm drains	Fire extinguished by local fire department	



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)
Naugatuck Avenue	12/19/2019	Long Island Sound	51 - 500 gallons	Sewer force main break / Contractor hit force main	12/29/2019 – Contractor repaired sewer force main.	
716 E Broadway	7/21/2020	Long Island Sound	Unknown	Pipe coming out of back of home and depositing sewage onto yard	Complaint was received by Milford Health Department, investigated and handled by Health Department or referred to appropriate City Agency for follow-up. Assigned to Paul Scholz. Resolved.	
Silver Sands	7/21/2020	Marsh	Unknown	Report of sewage in water flowing through the marsh	Complaint was received by Milford Health Department, investigated and handled by Health Department or referred to appropriate City Agency for follow-up. Assigned to Tara Mustakos Wassmer. Material was noted to be all organic material and not sewage.	
1460 Boston Post Road	7/10/2020	Unknown	Unknown	Grease dumpster spill	Complaint was received by Milford Health Department, investigated and handled by Health Department or referred to appropriate City Agency for follow-up. Assigned to Timothy Noia. Resolved.	
1255 Oronoque Road	7/6/2021	n/a	20 gallons	Aerating a full WAS tank caused minor sludge spill on walkway	Sludge returned to tank and area cleaned, increase tank monitoring and cover secured	
590 West Avenue	7/9/2021	Beaverbrook Pond	50,000 gallons	High flow caused generator to trip while trying to run four pumps	Breakers reset, generator planned to be replaced	
1255 Oronoque Road	7/9/2021	Housatonic River	Unknown	Excessive flow caused plant to bulk	Assess for pump station upgrade	
95 Meadowside Drive	9/2/2021	Long Island Sound	1,000 gallons	Valve vault flooded and submerged control panel	Control panel replaced 3' above 100 year flood line	

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 Health, Engineering, and Public Works Departments are responsible for tracking and logging incoming reports and responses. Engineering Department staff track illicit discharge information in the field. The Engineering Department is observant during routine site inspections, which include: Pre-Construction and as-built inspections of curbs, sidewalks, driveway aprons, and sanitary sewer laterals; "Call Before You Dig" mark-outs; site inspections in preparation of Land Use Application (Zoning, ZBA, CAM, IWA) reviews; site inspections in preparation of as-built site plan reviews; performing land surveys. The Fire Department is the lead agency with regards to environmentally sensitive spills or other illicit discharges. They will coordinate the response with other departments as applicable.

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
No septic failures reported during 2021		

3.7 IDDE reporting metrics

Metrics	
Estimated or actual number of MS4 outfalls	873
Estimated or actual number of interconnections	Not yet mapped/counted
Outfall mapping complete	100%
Interconnection mapping complete	0%
System-wide mapping complete (detailed MS4 infrastructure)	80%
Outfall assessment and priority ranking	0%
Dry weather screening of all High and Low priority outfalls complete	0
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).

Although there is no specific training directly to IDDE, the City Engineer routinely attends in person (not in 2021) and web-based training and seminars where IDDE is addressed as a portion of the program. Topic-specific trainings are provided annually to staff. In 2021, training included:

- Spill Response training for Public Works and Wastewater employees
- Fuel pump training ; New fuel system for Public Works City vehicles
- Salt brine spill training for Public Works employees
- Training through trade publications, stormwater-related webinars and seminars, and professional meetings
- Use of the EPA IDDE Guidance Manual for reference as needed

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	Complete	Land use regulations were reviewed and revised to address construction site stormwater runoff control measures. Changes were adopted on July 26, 2019.	Review and update, as necessary, existing land use regulations and implementation policies for compliance with the MS4 General Permit construction site stormwater runoff control requirements.	Planning and Zoning, Zoning Enforcement Officers	Jul 1, 2019	Jul 26, 2019	
4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval	Ongoing	Department of Permitting and Land Use (DPLU) provides copies of applications to Engineering Department for review and comments. Sewer/Health and Inland Wetlands also review and report back.	Implement interdepartmental coordination procedures as described in Section 5.2 of this Plan.	Planning and Zoning, Engineering, Public Works, Inland Wetlands Agency	Ongoing	Ongoing	
4-3 Review site plans for stormwater quality concerns	Ongoing	100 Site Plans were reviewed by the Engineering Division and Inland Wetlands for stormwater quality concerns in 2021. Site Plans reviewed include those plans submitted for Land Use Permits (Zoning, IWA, and CAM) and As-built Site Plans submitted for CO and/or bond release.	Continue to complete site plan reviews for all projects subject to the land use regulations listed in BMP 4-1.	Planning and Zoning, Engineering, Inland Wetlands Agency	Ongoing	Ongoing	Developers/Contractors are made aware that the City Engineering Department is available for any questions they may have.



BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
4-4 Conduct site inspections	Ongoing	The Engineering Division routinely reviews all plans submitted to it through Zoning and Inland Wetlands for compliance with stormwater treatment and mitigation and potential for Illicit Discharge. Reviews routinely include site visits by Engineering Division staff. In addition, Engineering Division encourages Applicants and their Professional Consultants to make pre-application submission so that potential issues may be identified and corrected in the earliest planning stages.	Continue to conduct inspections and enforcement to assess and ensure the adequacy of the installation, maintenance, operation, and repair of construction and post-construction control measures.	Engineering, Planning and Zoning Zoning Enforcement Officers, Inland Wetlands Agency	Ongoing	Ongoing	
4-5 Implement procedure to allow public comment on site development	Complete		Continue to use the online comment area on the City's webpage as a citizen reporting 'hotline' and advertise it on the City website and in municipal offices.	Planning and Zoning	Ongoing	Jul 1, 2017	



BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
4-6 Implement procedure to notify developers about DEEP construction stormwater permit	Ongoing	The City continues to inform developers/contractors of their potential obligations under the DEEP construction general permit. A physical draft notification has been prepared and is under internal review. This notification was included as a handout in the permitting process in 2021, and will be printed on the back of City applications moving forward.	Continue to inform developers/contractors of their potential obligation to register under the DEEP construction general permit and to provide a copy of the Storm Water Pollution Control Plan to Milford upon request.	Planning and Zoning	Ongoing	Ongoing	

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

- Continue to implement interdepartmental coordination in plan review, involving DPLU, Engineering, and Inland Wetlands.
- Continue inspections and enforcement of current regulations, review regulations to consider including provisions for controlling construction wastes such as discarded building materials, concrete truck washout, chemicals, litter, and sanitary wastes at the construction site that may cause adverse impacts to water quality.
- Continue to document the number (per permit year) of construction plan submittals, construction startups, and construction inspections and report these numbers in their annual reports.
- Implement a handout or bookmark to give out to inform developers/contractors of obligation to register under the construction general permit.

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	Engineering Division published standards currently require, as a minimum, zero net increase due to development due to development, based upon 25 year, 6 hour storm. In practice, Engineering Division requires zero net increase based upon a 25 year, 24 hour storm. In addition, all site plans are reviewed for compliance with the CtDEEP requirements for WQV. For large developments, or for developments located in sensitive watersheds, the Engineering Division requires mitigation based upon a 100 year, 24 hour storm.	Review and update, as necessary, existing land use regulations and implementation policies (including Engineering Division design guidelines) for compliance with the General Permit post-construction stormwater management requirements.	Planning and Zoning, Engineering	Jul 1, 2021	Completed in 2020	Engineering Department regularly reviews regulations and checks compliance with DEEP standards.



BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects	Ongoing	Engineering Division published standards currently require, as a minimum, zero net increase due to development due to development, based upon 25 year, 6 hour storm. In practice, Engineering Division requires zero net increase based upon a 25 year, 24 hour storm. In addition, all site plans are reviewed for compliance with the DEEP requirements for WQV. For large developments, or for developments located in sensitive watersheds, the Engineering Division requires mitigation based upon a 100 year, 24 hour storm.	Review and update, as necessary, current regulations to identify, reduce, or eliminate existing regulatory barriers to implementation of LID and runoff reduction practices.	Planning and Zoning, Engineering	Jul 1, 2021	Ongoing	
	Ongoing	100 plans were reviewed by Engineering for runoff reduction. All were reviewed for elements of LID practices. Plans were also reviewed for compliance with DEEP minimum standards for Water Quality Volume ("WQV"), runoff generated by first 1" of rainfall.	Complete plan reviews and ensure compliance for all projects subject to the legal authority and/or guidelines listed in BMP 5-1.		Ongoing beginning Jul 1, 2019	Ongoing	



BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
5-3 Identify retention and detention ponds in priority areas	In Process	The City will document the City-owned detention and retention ponds.	Identify stormwater basins and treatment systems in priority areas and include them in GIS mapping.		Jul 1, 2019	Anticipate completion by Jul 1, 2022	The City will begin mapping City-owned detention and retention ponds beginning in Spring 2022.
5-4 Implement long-term maintenance plan for stormwater basins and treatment structures	Ongoing	Engineering Department requires submission of detailed operations and maintenance plans for all developments larger than individual single family residences.	Develop a long-term maintenance plan for retention/ detention basins and stormwater treatment structures.	Planning and Zoning, Engineering	Ongoing beginning Jul 1, 2019	Ongoing	
	Ongoing	Engineering Department requires submission of detailed operations and maintenance plans for all developments larger than individual single family residences.	Implement maintenance plan including annual inspection of retention/ detention basins and stormwater treatment structures and removal of accumulated sediment and pollutants.	Engineering, DPW		Ongoing	
5-5 DCIA mapping	In Process		Calculate the Directly Connected Impervious Area (DCIA) of outfall catchment areas using guidance provided by DEEP and UConn CLEAR.	Planning and Zoning, Engineering	Jul 1, 2020	Anticipate completion by Jul 1, 2022	
	In Process		Revise DCIA estimate as development, redevelopment, or retrofit projects effectively add or remove DCIA.		Annually beginning Jul 1, 2021	Anticipate completing annually beginning Jul 1, 2022	The City will implement their tracking software in order to document these metrics to include in mapping.

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
5-6 Address post-construction issues in areas with pollutants of concern	Ongoing	Although the Engineering Division does not have a formal schedule for post-construction monitoring, staff makes observations in the conduct of other field work. We also respond in response of resident complaints, as applicable.	Address erosion and sediment problems noted during inspections conducted under BMP 5-3 through the retrofit program developed under BMP 6-7.	Engineering, Public Works	Not specified	Ongoing	

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

- Develop estimates of baseline DCIA.
- Identify City-owned detention and retention ponds and other stormwater treatment structures.
- Prepare an O&M manual for City-owned and/or maintained stormwater treatment structures.

5.3 Post-Construction Stormwater Management reporting metrics

Metrics	
Baseline (2012) Directly Connected Impervious Area (DCIA)	Unknown
DCIA disconnected (redevelopment plus retrofits)	0 acres this year / 0 acres total
Retrofits completed	0
DCIA disconnected	0 % this year / 0 % total since 2012
Estimated cost of retrofits	\$0
Detention or retention ponds identified	0 this year / 0 total

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

DCIA will be estimated from high-resolution impervious cover and land use/cover data available from UConn NEMO and empirical equations (Sutherland Equations) relating DCIA and Total Impervious Area (TIA). The DCIA estimates will be developed at the CTDEEP Local Basin scale.

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	Ongoing	Engineering provides informal training through trade publications, stormwater related webinars and seminars (web based only in 2021) and professional meetings. The City has a city-wide ordinance that no fertilizer is to be used on City fields. The City has one dog park. Information signage has been installed at this dog park regarding cleanup. There are doggy bag dispenser provided at the dog park.	Implement training program for City employees, building on the City's current program (see topics listed in Section 7.2) Implement turf/fertilizer management BMPs for parks and open space. Implement pet waste education program and install additional signage, baggies, and disposal receptacles in areas where pet walking is common.	Public Works	Ongoing	Ongoing	
6-2 Implement MS4 property and operations maintenance	Ongoing			Public Works, Highway/Parks Division	Ongoing beginning Jul 1, 2018	Ongoing	
	Complete			Public Works, Highway/Parks Division		May 2019	
	Ongoing	Girl Scout Troop 38305 continues the CT DEEP "Don't Feed the Waterfowl" education program, targeting the bacteria pollution problem, which is a pollutant of concern for 6 impaired waters in the City.	Implement waterfowl management BMPs in targeted areas.	Public Works, Highway/Parks Division		Ongoing	
	In Progress	Public Works has SWPPP and Spill Prevention policies in place. More formal facility evaluations are needed.	Evaluate municipal buildings and facilities for spill prevention and pollution prevention practices and implement additional BMPs as necessary.	Public Works, Engineering	Jul 1, 2018	Anticipate completing by Dec 31, 2022	The City is currently undergoing an OSHA Compliance process that will address these issues.



BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
6-2 Implement MS4 property and operations maintenance <i>(continued)</i>	Ongoing	The City continues to evaluate and modify, as necessary, municipal vehicle and equipment parking, fueling, and maintenance practices.	Evaluate and modify, as necessary, municipal vehicle and equipment parking, fueling, and maintenance practices.	Public Works		Ongoing	In 2018, Public Works increased frequency of parking lot sweeping for a total of 48 City parking lots.
	Ongoing	Leaf management continued per standard City protocol.	Continue and augment current leaf management program.	Public Works, Highway/Parks Division		Ongoing	
6-3 Implement coordination with interconnected MS4s	Ongoing	The City is in dialog with DOT with respect to interconnections. There are no interconnections with Stratford and interconnections with Orange and West Haven are minimal.	Coordinate with neighboring municipalities, institutions, and DOT regarding stormwater management program activities associated with adjacent MS4s.	Public Works, Engineering	Not specified	Ongoing	
6-4 Develop/implement program to control other sources of pollutants to the MS4	Ongoing	The City implements all components described throughout this report to control and limit illicit discharges and sources of pollution to the MS4.	Control through IDDE program, water quality monitoring, the City's illicit discharge ordinance, and targeted education and outreach to commercial, industrial, municipal, institutional facilities owners/operators (see BMP 1-1).	Engineering, Public Works	Not specified	Ongoing	
6-5 Evaluate additional measures for discharges to impaired waters*	Ongoing	The City analyzes measures being undertaken to control and limit illicit discharges and sources of pollution to impaired waters to look for additional measures that could be implemented.	Implement the measures and procedures described in Section 7.2 including those measures to address stormwater pollutants of concern.	Public Works, Engineering	Not specified	Ongoing	Most pollutants of concern in Milford are bacteria related. Public outreach has been developed to educate the public about collecting dog waste.



BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
6-6 Track projects that disconnect DCIA	Ongoing	The City will implement their tracking software in order to document these metrics to include in mapping.	Annually track total acreage of DCIA that is disconnected as a result of redevelopment or retrofits (see BMPs 5-4 and 6-7).	Engineering, Planning and Zoning	Ongoing	Ongoing	
6-7 Implement infrastructure repair/rehab program	Ongoing	MS4 infrastructure continues to be repaired as needed in a timely manner.	Repair, rehabilitate, or retrofit MS4 infrastructure (e.g., conveyances, structures, outfalls) as needed in a timely manner.	Public Works	Jul 1, 2021	Ongoing	
6-8 Develop/ implement plan to identify/ prioritize retrofit projects	Ongoing	The City prioritizes potential retrofit projects in an ongoing process dependent on budget to implement retrofit designs.	Develop retrofit plan and list of priority sites.	Engineering	Jul 1, 2020	Ongoing	
6-9 Implement retrofit projects to disconnect 2% of DCIA	In Process	The City implements retrofit projects in an ongoing process dependant on budget.	Disconnect 1% per year of Milford's DCIA from the MS4.	Engineering	Jul 1, 2022	Ongoing	The City will begin to track DCIA via their Municipity system.
6-10 Develop/implement street sweeping program	Ongoing		Continue to inspect and sweep all municipally-owned or -operated streets and parking lots annually in spring following the cessation of winter maintenance activities (i.e., sanding, deicing).	Public Works, Highway/Parks	Ongoing beginning Jul 1, 2017	Ongoing	



BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
6-10 Develop/implement street sweeping program (continued)	Ongoing		Evaluate runoff reduction measures such as permeable pavement or other measures to promote sheet flow of stormwater for all new and redeveloped municipal parking lots.	Engineering, Public Works	Ongoing beginning Jul 1, 2017	Ongoing	Trucking Project – Old Gate Lane catch basins to sheet flow to infiltrator catch basins with overflow to discharge basins from the City streets.
6-11 Develop/implement catch basin cleaning program	In Progress	The City has inspected and cleaned 841 catch basins in 2021.	Inspect and clean 100% of catch basins.	Public Works, Highway/Parks	Ongoing beginning Jul 1, 2020	Anticipated completion by the end of the Permit.	
	Complete		Develop a plan for optimizing catch basin cleaning (i.e., reduced frequency in certain areas) based on inspection findings, such that no catch basin is more than 50% full.		Ongoing beginning Apr 1, 2018	Aug 2007	
6-12 Develop/implement snow management practices	Ongoing		Implement practices for deicing material management and snow and ice control.	Public Works, Highway/Parks	Ongoing beginning Jul 1, 2018	Ongoing	



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

- Continue to include bag dispensers at the new dog park.
- Continue to utilize green-certified cleaning products.
- Offer ongoing training and refresher courses on spills and maintenance in 2022.
- Continue to Investigate equipment stored at City facilities and evaluate and modify, as necessary, any vehicle and equipment parking, fueling, and maintenance practices.
- Continue to generate a list of municipal facilities with oil storage, etc., and evaluate the need for additional BMPs.
- For the 2022 calendar year, the City will continue recording the streets swept and the debris tonnage collected for those streets. This will help to identify any high priority areas that require additional sweeping.
- The City will inspect catch basins when they are cleaned and document the inspection findings.
- The City's Public Works department will continue to respond to service requests for street sweeping, clean out storm drains, and other services that are submitted in person, by phone, e-mail, or through our DPW Service Request Form on our City's website.
- City employees and contractors responsible for street sweeping and catch basin cleaning in Milford will continue to review the CT DEEP Guidelines for Municipal Practices for Street Sweepings & Catch Basin Cleanings (http://www.ct.gov/deep/lib/deep/waste_management_and_disposal/solid_waste/street_sweepings.pdf) and acknowledge that they have done so and that they are familiar with the Best Management Practices.
- Develop and begin implementing stormwater retrofit plan.

6.3 Pollution Prevention/ Good Housekeeping reporting metrics

Metrics	
Employee training provided for key staff	Yes by Highway Foreman during season
Street sweeping	
Curb miles swept	410 estimated miles (100%)
Volume (or mass) of material collected	995 cy
Catch basin cleaning	
Total catch basins in priority areas	Unknown
Total catch basins in MS4	Approximately 8,000
Catch basins inspected	841
Catch basins cleaned	841
Volume (or mass) of material removed from all catch basins	Approximately 650 cubic yards
Volume removed from catch basins to impaired waters (if known)	Unknown
Snow management	
Type(s) of deicing material used	• Straight Salt • Treated Salt (Ice B Gone alcohol by product additives and molasses with green dye to reduce salt usage and lower melting temp) • Liquid Brine Solution (CalMag)
Total amount of each deicing material applied (Purchased 2021)	• Straight Salt – 400 tons • Treated Salt (Ice B Gone alcohol by product additives and molasses with green dye to reduce salt usage and lower melting temp) – 1,800 tons • Liquid Brine solution (CalMag) – 11,000 gallons
Type(s) of deicing equipment used	Salt is dispensed by truck with calibrated spreaders at a concentration of about 50% of what CT DOT uses per lane mile. Brine is applied as a pre-treatment with holding tanks and a dispenser.
Lane-miles treated	205 miles
Snow disposal location	If excess snow needs to be removed from roadways, Milford has two locations: • Eisenhower Park – Foote Field Parking lot North Street, opposite Kozlowski Road • Eisenhower Park – Lower parking lot from entrance at 780 North Street
Staff training provided on application methods & equipment	Yes
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 – City does not apply fertilizers, per ordinance
Reduction in turf area (since start of permit)	0 acres
Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems)	
Cost of mitigation actions/retrofits	Not Calculated



6.4 Catch basin cleaning program

Provide any updates or modifications to your catch basin cleaning program

The City is continuing to inspect and measure catch basin debris to document estimated capacity & rate of accumulation. The City will monitor cleaned basins and document cleaning frequency based on the rate of accumulation.

The City's Public Works department will continue to respond to service requests for street sweeping, clean out storm drains, and other services that are submitted in person, by phone, e-mail, or through our DPW Service Request Form on our City's website, <http://www.ci.milford.ct.us/public-works/webforms/dpw-service-request-form>.

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

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

N/A

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

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.

All waterbodies in the state are subject to the Northeast Regional Mercury TMDL, however no specific monitoring or sampling is required in association with this TMDL.

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

2.1 Screening data

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?
Nothing to report.					

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	Name of Laboratory (if used)	Follow-up required?
BC #162440 Naugatuck Ave by VFW	11/15/16	E. Coli	8160 MPN/100 mL	Phoenix Environmental	Yes
BC #162438 Factory Lane	11/15/16	E. Coli	680 MPN/100 mL	Phoenix Environmental	Yes
BC #162439 Mayflower	11/15/16	TKN NO ₃ +NO ₂ Total Nitrogen	0.74 mg/L <u>0.18 mg/L</u> 0.92 mg/L	Phoenix Environmental	No
BC #162440 Naugatuck Ave by VFW	08/11/15	E. Coli	900 CFU/100 mL	EML	Yes
BC #162438 Factory Lane	08/11/15	E. Coli	560 CFU/100 mL	EML	Yes
BC #162439 Mayflower	08/11/15	TKN NO ₃ +NO ₂ Total Nitrogen	1.5 mg/L <u>0.24 mg/L</u> 1.74 mg/L	CET Inc	No
BC #162440 Naugatuck Ave by VFW	04/30/14	E. Coli	480 CFU/100 mL	Baron Consulting	Yes
BC #162438 Factory Lane	04/30/14	E. Coli	780 CFU/100 mL	Baron Consulting	Yes
BC #162439 Mayflower	04/30/14	TKN NO ₃ +NO ₂ Total Nitrogen	1.86 mg/L <u>0.25 mg/L</u> 2.11 mg/L	Baron Consulting	No
BC #157418 Factory Lane	10/27/11	E. Coli	<1 CFU/100 mL	Baron Consulting	No
[No BC Listed] Mayflower	10/27/11	TKN NO ₃ +NO ₂ Total Nitrogen	1.61 mg/L <u>1.04 mg/L</u> 2.65 mg/L	Baron Consulting	Yes
[No BC Listed] Factory Lane	11/04/10	E. Coli	>2000 CFU/100 mL	Baron Consulting	Yes
[No BC Listed] Mayflower	11/04/10	TKN NO ₃ +NO ₂ Total Nitrogen	1.26 mg/L <u>0.34 mg/L</u> 1.60 mg/L	Baron Consulting	No
BC #1528040 Factory Lane	10/15/09	E. Coli	>2500 CFU/100 mL	Baron Consulting	Yes
BC #152841 Mayflower	10/15/09	TKN NO ₃ +NO ₂ Total Nitrogen	1.33 mg/L <u>1.78 mg/L</u> 3.11 mg/L	Baron Consulting	Yes

Outfall	Sample date	Parameter (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	Results	Name of Laboratory (if used)	Follow-up required?
BC #150630-1 Factory Lane	11/13/08	E. Coli	1900 CFU/100 mL	Baron Consulting	Yes
BC #150630-2 Mayflower	11/13/08	TKN NO ₃ +NO ₂ Total Nitrogen	0.35 mg/L <u>0.87 mg/L</u> 1.22 mg/L	Baron Consulting	No
BC #147472A Factory Lane	09/11/07	E. Coli	TNTC	Baron Consulting	Yes
BC #147472B Mayflower	09/11/07	TKN NO ₃ +NO ₂ Total Nitrogen	2.62 mg/L <u>0.94 mg/L</u> 3.56 mg/L	Baron Consulting	Yes
BC #145121A Factory Lane	10/17/06	E. Coli	17000 CFU/100 mL	Baron Consulting	Yes
BC #145121B Mayflower	10/17/06	TKN NO ₃ +NO ₂ Total Nitrogen	5.80 mg/L <u>2.01 mg/L</u> 7.81 mg/L	Baron Consulting	Yes
BC #140055D Factory Lane	12/07/04	E. Coli	850 CFU/100 mL	Baron Consulting	Yes
BC #140055C Mayflower	12/07/04	TKN NO ₃ +NO ₂ Total Nitrogen	3.21 mg/L <u>0.48 mg/L</u> 3.69 mg/L	Baron Consulting	Yes

*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)	E. coli > 235 col/100ml for swimming areas or 410 col/100ml for all others - Total Coliform > 500 col/100ml
Bacteria (salt waterbody)	- Fecal Coliform > 31 col/100ml for Class SA and > 260 col/100ml for Class SB - Enterococci > 104 col/100ml for swimming areas or 500 col/100 for all others
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	Status of drainage area investigation	Control measure implementation to address impairment
Nothing to report.		

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)
Nothing to report.				

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
Nothing to report.		

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
Nothing to report.										

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
Nothing to report.									

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
---------------	-----------------	------------------------------

Nothing to report.

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
Nothing to report.					

3.3 Wet weather investigation outfall sampling data

Outfall ID	Sample date	Ammonia	Chlorine	Surfactants
Nothing to report.				

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
Nothing to report.							

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:
Benjamin G. Blake, Mayor	Lindsay Silcox, EIT – Fuss & O'Neill, Inc.
Signature / Date:	Signature / Date:
	
	March 21, 2022