2018 Annual Report - MS4 General Permit

City of Milford Milford, Connecticut

February 2019



Prepared by:



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MS4 General Permit City of Milford 2018 Annual Report Existing MS4 Permittee Permit Number GSM 000037 January 1, 2018 – December 31, 2018

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, 2018 to December 31, 2018.

Part I: Summary of Minimum Control Measure Activities

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

| 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 | |
| 1-1 Implement public education and outreach | Ongoing | Girl Scout Troop 38305 continues to monitored 6 literature distribution boxes along two pond areas on the | Distribute educational materials. | | | Ongoing | |





| BMP | Status | Activities in current reporting period | Measurable goal | Department / Person Responsible | Due | Date completed or projected completion date | Additional details |
|---|---------|--|---|--|---------|---|--------------------|
| (Continued) | | Wepawaug River, checking them weekly. 659 CT DEEP "Don't Feed the Waterfowl" brochures have been distributed in 2018 through their effort. | | | | | |
| 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.

- Install rain garden at East Shore Middle School in spring 2019 which will involve school and public for outreach and maintenance. Efforts will be assisted by CIRCA and UConn.
- 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.
- Prepare a yard waste disposal outreach PowerPoint that will be presented to the public as well as posted on the City's website 2019





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 659 brochures distributed in 2018 | Impact of feeding waterfowl on water quality/pollution | Bacteria | Girl Scout Troop 38305 |
| 2018 Water Quality and Stormwater Public Outreach | 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 |
| "Sustainable Milford" Forum Hosted at the Milford Public Library | 3 events 150 people | Trash, Recycling, Sustainability | • N/A | Open Space and Natural Resource Department Public Works Department Environmental Concerns Coalition (ECC) Milford Public Library |
| Parsons Building Rain Garden | 4 people 8 work events, 3 hours each (96 total hours) | Rain garden weedingNative plant educationStormwater quality | • N/A | Cheryl Cappiali, Master Gardener City of Milford Southwest Conservation District CTDEEP |
| Parsons Building Rain Garden brochure | Distributed at various events | Rain gardens | • N/A | Cheryl Cappiali, Master Gardener City of Milford Southwest Conservation District CTDEEP |
| Gulf Pond Clean-up April 13, 2018 | 20 people 60 hours 20 cubic yards of debris removed | Litter Clean-up | • N/A | Briarpatch Enterprises Public Works Department |
| Milford Mirror News Article "Local oystermen spend day cleaning pond" April 16, 2018 | All City Residents | Litter Clean-up / AwarenessWater Quality | Bacteria | Briarpatch EnterprisesPublic Works Department |
| Mackenzie's 10 th Annual Beach Clean-up May 5, 2018 | 125 people 375 hours / tons of debris | Litter Clean-up | • N/A | City Residents, John & Mackenzie Powers |





| Program Element/Activity | Audience (and number of people reached) | Topic(s) covered | Pollutant of Concern addressed (if applicable) | Responsible dept. or partner org. |
|---|--|------------------------------|--|--|
| Milford Mirror News Article "Mackenzie's Beach Clean-up is Saturday, Environmentalist: Ten years in the making" May 1, 2018 | All City Residents | Litter Clean-up / Awareness | • N/A | City Residents, John & Mackenzie Powers |
| Alice's Reloved Workshop 2018 Litter Clean-ups | 11 events 53 people 94 hours 32+ bags of litter | Litter Clean-ups | • N/A | City Resident, Alice Garlock |
| Milford Mirror News Article "Making a difference is as easy as picking up trash" May 8, 2018 | All City Residents | Litter Clean-ups / Awareness | • N/A | City Resident, Alice Garlock |
| Oyster River Debris Removal November 10, 2018 | Milford Land Conservation Trust Volunteers | Litter Clean-up | • N/A | Milford Land Conservation Trust Public Works Department |





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

| 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 StormwaterManagement Plan was madeavailable to the public:An electronic copy wasposted on the City'swebsite. | 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 posted to City website indicating that draft report will be available for public review beginning February 15, 2019 | 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, 2019 | Notice posted Jan 29, 2019 | |
| | In Progress | | Make final annual report available electronically on the City website. | | Apr 1, 2019 | Anticipate completion by Apr 1, 2019 | |
| 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 | |





| BMP | Status | Activities in current reporting period | Measurable goal | Department / Person Responsible | Due | Date completed or projected completion date | Additional details |
|-----|---------|---|---|---------------------------------------|-----|--|--------------------|
| | Ongoing | Coastal Wetland Litter Clean-ups Mackenzie's Annual Walnut Beach Litter Clean-up Alice's Reloved Workshop litter clean-ups Gulf Pond Clean-up Rain Garden/Garden projects Cheryl, Master Master Gardener Program Southwest Conservation District CTDEEP *Sustainable Milford" Forum Environmental Concerns Coalition (ECC) Milford Public Library | 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 qualified for the Bronze Level Sustainable CT program in 2018.
- 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.
- Work on nine ongoing Coastal Resiliency Projects underway for 2019 scheduled to be completed in summer of 2019. Hold related public information and outreach meetings and monthly discussions.
- Submit 2018 Annual Report to DEEP by April 1, 2019.
- Deliver yard waste disposal outreach presentation to the public in 2019.
- Continue to involve the public in annual reporting process.
 - o Post notice of 2018 annual report by January 31, 2019.
- Make draft 2018 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 | Jan 29, 2019 | https://www.ci.milford.ct.us/home/news/ms4-annual-report-notice-0 |





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

| 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 | | Prepare IDDE Plan for the City. | Engineering, Public Works | Jul 1, 2018 | Anticipate completion by Jul 1, 2019 | |
| 3-2 Develop list and maps of all MS4 stormwater outfalls | Complete | | Update GIS MS4 mapping to include all stormwater outfalls in the municipality. | Engineering, Public Works, GIS | Jul 1, 2019 | Dec 31, 2017 | |
| in priority areas | In Progress | The City has started gathering information on outfalls. | 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. | | | Anticipate completion by Jul 1, 2019 | |
| | In Progress | The City has started gathering information on relevant MS4 items. | 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 | Anticipate completion by Jul 1, 2020 | |
| 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 | The City adopted an illicit discharge ordinance. | Review City's existing ordinance related to illicit discharge and revise, as necessary. | Planning and Zoning | Jul 1, 2018 | Jun 4, 2018 | |





| BMP | Status | Activities in current reporting period | Measurable goal | Department / Person Responsible | Due | Date completed or projected completion date | Additional details |
|---|----------------|---|---|---|--------------------------|--|--------------------|
| 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 | Not Started | | Identify areas with high potential for septic system failure. | Engineering, Public Works | Not specified | Anticipate completion by the end of the permit period | |
| 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 | |
| 3-8 Assess and prepare a priority ranking of catchments | In Progress | The City is documenting the amount of debris removal from each batch 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, 2019 | |
| | Not started | | 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, 2019 | |
| 3-9 Conduct outfall and interconnection screening and sampling | Not started | | 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 Jul 1, 2019 | |





| BMP | Status | Activities in current reporting period | Measurable goal | Department / Person Responsible | Due | Date completed or projected completion date | Additional details |
|---|----------------|--|---|---------------------------------------|-------------|--|--------------------|
| 3-10 Conduct catchment investigations and remove illicit | Not started | | Evaluate catchments for System Vulnerability Factors and begin catchment investigations. | Engineering, Public Works | Jul 1, 2018 | Anticipate completion by Jul 1, 2019 | |
| discharges | Not started | | Where System Vulnerability Factors are present, conduct manhole inspections. Isolate and verify sources. Remove identified illicit discharges and conduct confirmatory outfall screening. | | Jul 1, 2020 | Anticipate completion by Jul 1, 2020 | |

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

- Establish written IDDE program. ٠
- ٠
- Evaluate catchments for System Vulnerability Factors and begin catchment investigations. Add 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 ٠ Stormwater page.
- Continue MS4 mapping. ٠





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

| Date of Report | Location / suspected source | Response taken |
|----------------|--|--|
| 3/15/2018 | 433 Old Gate Lane / Diesel Fuel Leak | DEEP Dispatch, leaking saddle tank at Pilot Travel Center |
| 3/23/2018 | 157 Cherry Street / 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. |
| 4/25/2018 | 540 New Haven Ave / Unknown green substance, possibly from adjacent car wash | DEEP Dispatch, Fire Dept responded. |
| 5/17/2018 | 714-730 Boston Post Road / Sanitary Sewer Force Main break | City bypassed pump station to stop the leak and did emergency repair. Completed 5/19 – 5/20. |
| 5/22/2018 | 258 Boston Post Road / Gasoline leak at Cumberland Farms | Vac truck dispatched to catch basin at location |
| 6/1/2018 | 75 Edgefield Street / City sanitary sewer | City's WWTF responded to force main break and repaired. |
| 6/10/2018 | 738 Boston Post Road / 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. |
| 6/22/2018 | 44 Rose Street / Diesel from vessel | Spencer's Marina |
| 6/23/2018 | 9 Seaview Ave / Capsized boat leaked fuel | USCG, Fire Dept. dispatched |
| 7/27/2018 | 685 Broadway / Sewage Order Report | DEEP Dispatch |
| 8/3/2018 | 121 North Street / Dump truck fire | Extinguished by Fire Dept. Fuel tanks did not leak. Unknown what other fluids entered catch basin. |
| 9/9/2018 | 1 Helwig Street / 40' Clam boat fire at Milford Harbor | Fire Extinguished by Local Fire Dept. Disconnected fuel connections, only minor seepage occurred. |
| 9/13/2018 | I-95 South Exit 36 / Tractor Trailer & MV Accident | Diesel Fuel into catch basin. CT Tank Removal responded for cleanup. |
| 9/14/2018 | 20 Wall Street / LGB Pool Company dumping water into catch basin | Unknown |
| 10/08/2018 | I-95 South, Exit 40 / Tractor Trailer Accident | Diesel Fuel leak into catch basin. Fire Dept. responded. |

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. | |





| Location | Date and | Discharge to | Estimated | Known or | Corrective measures planned and completed | Sampling data |
|--|------------------------|---|---|---|---|---|
| (Lat long/ street crossing /address and receiving water) | duration of occurrence | MS4 or surface water | volume discharged | suspected cause / Responsible party | (include dates) | (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. | |





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.

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 2018 | | |
| | | |
| | | |

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) | 50% |
| 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).

Topic-specific trainings are provided annually. In 2018, training included:

- Spill Response training for Public Works and Wastewater employees was updated in 2018. Retraining scheduled for February 14, 2019.
- 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)

| 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 | Not Started | | 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 | Anticipate completion by Jul 1, 2019 | The City anticipates that only minor review will be needed. Engineering Department will provide assistance with review upon request. |
| 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 | 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 |
|---|---------|--|--|--|-------------|---|--------------------|
| 4-3 Review site plans for stormwater quality concerns | Ongoing | 98 site plans were reviewed by Engineering for stormwater quality concerns in 2018. This number includes re- review of previously reviewed site plans which had been revised in response to prior Engineering Department review comments. Site plans reviewed included plans submitted for Land Use Permits (Zoning, IWA, and CAM) and As- built Site Plans submitted for CO and/or bond release. Inland Wetlands reviewed 50 site plans for stormwater quality concerns. | 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 | Jul 1, 2017 | Ongoing | |
| 4-4 Conduct site inspections | Ongoing | All properties submitted for Engineering Department review were inspected in the field. Erosion and sedimentation inspections were conducted by Inland Wetlands and/or on-site consultants. | 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 | 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 |
|--|----------|--|---|---------------------------------------|-------------|---|--|
| 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 | Jul 1, 2017 | Jul 1, 2017 | |
| 4-6 Implement procedure to notify developers about DEEP construction stormwater permit | Ongoing | The City continues to informed developers/ contractors of their potential obligations under the DEEP construction general permit. | 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 | Jul 1, 2017 | Ongoing | Developing a physical handout to give out in 2019. |

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.
- Develop 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)

| 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 | Not Started | | 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 | Anticipate completion by Jul 1, 2021 | Engineering Department standards currently require, as a minimum, zero artificial increase in runoff due to development, based upon 25 year, 6 hour storm. |
| 5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects | Not Started | | 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 | Anticipate completion by Jul 1, 2021 | |
| 5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects (Continued) | Ongoing | 98 plans were reviewed by Engineering for runoff reduction. None were specifically reviewed for LID. 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. | Planning and Zoning, Engineering | 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 | Not Started | | | | Jul 1, 2019 | Anticipate completion by Jul 1, 2019 | |
| 5-4 Implement long- term maintenance plan for stormwater basins and treatment structures | In progress | Engineering Department required long term maintenance plans to be provided for larger projects (principally commercial, industrial, retail, multi-family, and mixed use). | Develop a long-term maintenance plan for retention/ detention basins and stormwater treatment structures. | Planning and Zoning, Engineering | Jul 1, 2019 | Anticipate completion by Jul 1, 2019 | |
| | Not Started | | Implement maintenance plan including annual inspection of retention/ detention basins and stormwater treatment structures and removal of accumulated sediment and pollutants. | Engineering, DPW | | Anticipate completion by Jul 1, 2019 | |
| 5-5 DCIA mapping | Not Started | | 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, 2020 | |
| | Not Started | | Revise DCIA estimate as development, redevelopment, or retrofit projects effectively add or remove DCIA. | | Jul 1, 2021 | Anticipate completion by Jul 1, 2021 | |





| 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 | Not Started | | 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 | Anticipate completion by the end of the permit period | |

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

- Begin review and updating of existing land use regulations.Begin developing estimates of DCIA.





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)

| 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 provided informal training through trade publications, stormwater-related webinars and seminars, and professional meetings. All employees of Public Works and Waste Water implemented Spill Response as reported in 2018 Public Works employees spill response training scheduled for February 14, 2019. | Implement training program for City employees, building on the City's current program (see topics listed in Section 7.2) | Public Works | Jul 1, 2017 | Ongoing | |
| 6-2 Implement MS4 property and operations | Ongoing | The City has a city-wide ordinance that no fertilizer is to be used on City fields. | Implement turf/fertilizer management BMPs for parks and open space. | Public Works, Highway/Parks Division | Jul 1, 2018 | Ongoing | |
| maintenance | In Progress | The City is enhancing a dog park in 2018 & 2019. Information signage has been included in the construction plans. | Implement pet waste education program and install additional signage, baggies, and disposal receptacles in areas where pet walking is common. | Public Works, Highway/Parks Division | | Anticipate completion by Summer 2019 | |
| | Ongoing | The City installed strobe lights to deter the waterfowl from congregating by the Wepawaug River behind City Hall. | Implement waterfowl management BMPs in targeted areas. | Public Works, Highway/Parks Division | | Ongoing | |





| 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 (Continued) | Ongoing | Public Works has SWPPP and Spill Prevention policies in place. | Evaluate municipal buildings and facilities for spill prevention and pollution prevention practices and implement additional BMPs as necessary. | Public Works, Engineering | Jul 1, 2018 | Ongoing | |
| | Ongoing | Public Works increased frequency of parking lot sweeping for a total of 48 City parking lots. This included 12 sweepings at the PW yard, 83 Ford St. as recommended by MS4 SW Sampling. | Evaluate and modify, as necessary, municipal vehicle and equipment parking, fueling, and maintenance practices. | Public Works | | Ongoing | |
| | 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 | Not started | | Coordinate with neighboring municipalities, institutions, and DOT regarding stormwater management program activities associated with adjacent MS4s. | Public Works, Engineering | Not specified | Anticipate completion by the end of the permit period | |
| 6-4 Develop/implement program to control other sources of pollutants to the MS4 | Not started | | 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 | Anticipate completion by the end of the permit period | |





| BMP | Status | Activities in current reporting period | Measurable goal | Department / Person Responsible | Due | Date completed or projected completion date | Additional details |
|--|----------------|---|---|--|------------------|--|--------------------|
| 6-5 Evaluate additional measures for discharges to impaired waters* | Not started | | Implement the measures and procedures described in Section 7.2 including those measures to address stormwater pollutants of concern. | Public Works, Engineering | Not specified | Anticipate completion by the end of the permit period | |
| 6-6 Track projects that disconnect DCIA | Ongoing | | 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 | Jul 1, 2017 | 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 | Not started | | Develop retrofit plan and list of priority sites. | Engineering | Jul 1, 2020 | Anticipate completion by Jul 1, 2020 | |
| 6-9 Implement retrofit projects to disconnect 2% of DCIA | Not started | | Disconnect 1% per year of Milford's DCIA from the MS4. | Engineering | Jul 1, 2022 | Anticipate completion by Jul 1, 2022 | |





| 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 | 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 | Jul 1, 2017 | Ongoing | |
| | 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 | Walnut Beach Parking Lot sheet flow to infiltrator catch basins |
| 6-11 Develop/implement catch basin cleaning program | Not started | | Inspect and clean 100% of catch basins. | Public Works, Highway/Parks | Jul 1, 2020 | Anticipate completion by Jul 1, 2020 | |
| | 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. | | 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 | Jul 1, 2018 | Ongoing | |





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

- Include bag dispensers at the new dog park that will be installed in the summer of 2019.
- Continue to utilize green-certified cleaning products.
- Offer ongoing training and refresher courses on spills and maintenance in February 2019.
- Investigate parks equipment stored at the Academy and evaluate and modify, as necessary, any vehicle and equipment parking, fueling, and maintenance practices.
- Generate a list of municipal facilities with oil storage, etc., and evaluate the need for additional BMPs.
- Continue to evaluate salt alternatives for de-icing.
- For the 2019 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 (<u>http://www.ct.gov/deep/lib/deep/waste_management_and_disposal/solid_waste/street_sweepings.pdf</u>) and acknowledge that they have done so and that they are familiar with the Best Management Practices.





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 | 134.46 tons |
| Catch basin cleaning | |
| Total catch basins in priority areas | Unknown |
| Total catch basins in MS4 | Approximately 8,000 |
| Catch basins inspected | 536 |
| Catch basins cleaned | 536 |
| Volume (or mass) of material removed from all catch basins | Estimated 318 cubic yards / 883.99 tons |
| Volume removed from catch basins to impaired waters | Not calculated |
| (if known) | |
| Snow management | |
| Type(s) of deicing material used | Untreated 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 2018) | Untreated Salt – 225.91 tons Treated Salt (Ice B Gone alcohol by product additives and molasses with green dye to reduce salt usage and lower melting temp) – 408 tons Liquid Brine solution (CalMag) – 2,500 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 | 200 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 / November 1, 2018 and November 5, 2018 |
| Municipal turf management program actions (for permittee properties | |
| 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, <u>http://www.ci.milford.ct.us/public-works/webforms/dpw-service-request-form</u>.

6.5 Retrofit program

Briefly describe the Retrofit Program identification and prioritization process, the projects selected for implementation, the rationale for the selection of those projects and the total DCIA to be disconnected upon completion of each project. [Provide information if available in 2018 report. Section to be completed for the 2019 Annual Report.]

N/A

Describe plans for continuing the Retrofit program and how to achieve a goal of 1% DCIA disconnection in future years. [Provide information if available in 2018 report.]

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. [Provide information if available in 2018 report. Section to be completed for the 2019 Annual Report.]

N/A





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

1. Impaired waters investigation and monitoring program

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

| 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.

In Box 1.2, add this: 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 rep | 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 | Copper Dioxin PCBs Zinc E. Coli | Not Sampled Not Sampled Not Sampled Not Sampled 8160 MPN/100 mL | Phoenix Environmental | |
| BC #162438 Factory Lane | 11/15/16 | E. Coli | 680 MPN/100 mL | Phoenix Environmental | |
| BC #162439 MayFlower | 11/15/16 | Ammonia TKN NO ₃ +NO ₂ | 0.22 mg/L 0.74 mg/L 0.18 mg/L | Phoenix Environmental | |
| BC #162440 Naugatuck Ave by VFW | 08/11/15 | Copper Dioxin PCBs Zinc E. Coli | Not Sampled Not Sampled Not Sampled Not Sampled 900 CFU/100 mL | EML | |
| BC #162438 Factory Lane | 08/11/15 | E. Coli | 560 CFU/100 mL | EML | |
| BC #162439 Mayflower | 08/11/15 | Ammonia TKN NO ₃ +NO ₂ | 1.7 mg/L 1.5 mg/L 0.24 mg/L | CET Inc | |
| BC #162440 Naugatuck Ave by VFW | 04/30/14 | Copper Dioxin PCBs Zinc E. Coli | Not Sampled Not Sampled Not Sampled Not Sampled 480 CFU/100 mL | Baron Consulting | |
| BC #162438 Factory Lane | 04/30/14 | E. Coli | 780 CFU/100 mL | Baron Consulting | |
| BC #162439 Mayflower | 04/30/14 | Ammonia TKN NO ₃ +NO ₂ | 0.74 mg/L 1.86 mg/L 0.25 mg/L | Baron Consulting | |
| BC #157418 Factory Lane | 10/27/11 | E. Coli | <1 CFU/100 mL | Baron Consulting | |
| [No BC Listed] Mayflower | 10/27/11 | Ammonia TKN NO ₃ +NO ₂ | 0.76 mg/L 1.61 mg/L 1.04 mg/L | Baron Consulting | |
| [No BC Listed] Factory Lane | 11/04/10 | E. Coli | >2000 ČFU/100 mL | Baron Consulting | |
| [No BC Listed] Mayflower | 11/04/10 | Ammonia TKN NO ₃ +NO ₂ | 0.6 mg/L 1.26 mg/L 0.34 mg/L, ND<0.05resp | Baron Consulting | |
| BC #1528040 Factory Lane | 10/15/09 | E. Coli | >2500 CFU/100 mL | Baron Consulting | |





| Outfall | Sample date | Parameter (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern) | Results | Name of Laboratory (if used) | Follow-up required? |
|------------------------------|----------------|--|-------------------------------------|------------------------------|------------------------|
| BC #152841 Mayflower | 10/15/09 | Ammonia TKN NO ₃ +NO ₂ | 0.6 mg/L 1.33 mg/L 1.78 mg/L | g/L | |
| BC #150630-1 Factory Lane | 11/13/08 | E. Coli | 1900 CFU/100 mL | Baron Consulting | |
| BC #150630-2 Mayflower | 11/13/08 | Ammonia TKN NO ₃ +NO ₂ | 0.83 mg/L 0.35 mg/L 0.87 mg/L | Baron Consulting | |
| BC #147472A Factory Lane | 09/11/07 | E. Coli | ТИТС | Baron Consulting | |
| BC #147472B Mayflower | 09/11/07 | Ammonia TKN NO ₃ +NO ₂ | 1.40 mg/L 2.62 mg/L 0.94 mg/L | Baron Consulting | |
| BC #145121A Factory Lane | 10/17/06 | E. Coli | 17000 CFU/100 mL | Baron Consulting | |
| BC #145121B Mayflower | 10/17/06 | Ammonia TKN NO ₃ +NO ₂ | 123 mg/L 5.80 mg/L 2.01 mg/L | Baron Consulting | |
| BC #140055D Factory Lane | 12/07/04 | E. Coli | 850 CFU/100 mL | Baron Consulting | |
| BC #140055C Mayflower | 12/07/04 | Ammonia TKN NO ₃ +NO ₂ | 125 mg/L 3.21 mg/L 0.48 mg/L | mg/L | |

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 [This section required beginning with 2018 Annual Report]

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

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

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

Where SVFs are:

- 1. History of SSOs, including, but not limited to, those resulting from wet weather, high water table, or fat/oil/grease blockages.
- 2. Sewer pump/lift stations, siphons, or known sanitary sewer restrictions where power/equipment failures or blockages could readily result in SSOs.
- 3. Inadequate sanitary sewer level of service (LOS) resulting in regular surcharging, customer back-ups, or frequent customer complaints.
- 4. Common or twin-invert manholes serving storm and sanitary sewer alignments.
- 5. Common trench construction serving both storm and sanitary sewer alignments.
- 6. Crossings of storm and sanitary sewer alignments.
- 7. Sanitary sewer alignments known or suspected to have been constructed with an underdrain system;





- 8. Sanitary sewer infrastructure defects such as leaking service laterals, cracked, broken, or offset sanitary infrastructure, directly piped connections between storm drain and sanitary sewer infrastructure, or other vulnerability factors identified through Inflow/Infiltration Analyses, Sanitary Sewer Evaluation Surveys, or other infrastructure investigations.
- 9. Areas formerly served by combined sewer systems.
- 10. Any sanitary sewer and storm drain infrastructure greater than 40 years old in medium and densely developed areas.
- 11. Widespread code-required septic system upgrades required at property transfers (indicative of inadequate soils, water table separation, or other physical constraints of the area rather that poor owner maintenance).
- 12. History of multiple local health department or sanitarian actions addressing widespread septic system failures (indicative of inadequate soils, water table separation, or other physical constraints of the area rather that poor owner maintenance).

3.2 Key junction manhole dry weather screening and sampling data

| 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: |
| Signature / Date: | Signature / Date: |