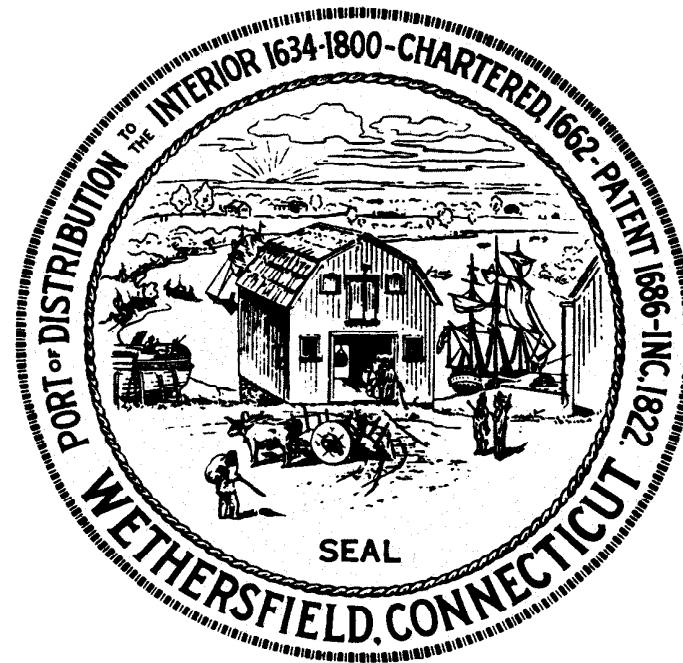


**DRAFT FOR
REVIEW**

TOWN OF WETHERSFIELD, CONNECTICUT

General Permit for the Discharge of Stormwater
from Small Municipal Separate Storm Sewer Systems (MS4)

2020 Annual Report



Prepared by the
Wethersfield Engineering Division

Town of Wethersfield
MS4 General Permit 2020 Annual Report

Existing MS4 Permittee
 Permit Number GSM000031

January 1, 2020 – December 31, 2020

Primary MS4 Contact: Derrick Gregor, P.E., Town Engineer, 860 721-2850, derrick.gregor@wethersfieldct.gov

This report documents the Town of Wethersfield’s efforts to comply with the conditions of the MS4 General Permit to the maximum extent practicable (MEP) from January 1, 2020 to December 31, 2020. Refer to the Town of Wethersfield Stormwater Management Plan (SMP) effective July 1, 2017 for additional information

Stormwater Program Permit Information	
Permitting Authority:	Commissioner of CT DEEP
Permit Number:	GSM000031
Permit Type:	General
Permit Name:	General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems
Date Issued:	1/20/2016
Date Effective:	7/1/2017
Date Expires:	6/30/2022

General Information for MS4 Operator	
Operator Name:	Gary A. Evans
Operator Title:	Town Manager
Represented Entity:	Town of Wethersfield
Mailing Address:	505 Silas Deane Highway
Mail City:	Wethersfield, CT 06109
Phone Number:	860-721-2801
E-Mail Address:	Gary.Evans@wethersfieldct.gov
Co- Permitting With:	Commissioner of CTDEEP
Population:	26,700
Households:	11,100
Area (sq mi):	13
Official Website:	www.wethersfieldct.gov

General Information for Primary Contact Person	
Name:	Derrick Gregor, P.E.
Title:	Town Engineer
Phone Number:	860-721-2853
E-Mail Address:	Derrick.Gregor@wethersfieldct.gov

General Information for Secondary Contact Person	
Name:	Leon Burroughs
Title:	Engineering Technician II
Phone Number:	860-721-2850
E-Mail Address:	Leon.Burroughs@wethersfieldct.gov

General Information for Receiving Waters		
Receiving Water Lists: Listed below are all the identified receiving waterbodies to which outfalls discharge		
Receiving Streams (creek, stream, river etc.)	Receiving Waterbodies (lake, wetland, ocean, etc.)	Receiving Watersheds
Beaver Brook Cemetery Brook Collier Brook Fairlane Brook Folly Brook Goff Brook Two Stone Brook	1860 Reservoir Bell Pond Griswold Pond Millwoods Pond Murphy Pond Wethersfield Cove	Connecticut River Long Island Sound

Part I: Summary of Minimum Control Measure Activities

1. Public Education and Outreach (SMP Table 4 & MS4 Permit Section 6 (a)(1) / Page 19)

1.1 BMP Summary

BMP	Status	Activities in Current Reporting Period	Measurable Goal	Department / Person Responsible	Due Date	Date Completed or Projected Completion Date	Additional Details
Continue to Broadcast Public Service Announcements on Local Government Access Television	Complete	Public Service Announcements (PSAs) have been broadcast on the Local Government Access Channel and available on the Engineering Division page of the Town website	Educate audience about problems caused by pollutant discharges to stormwater systems and how to prevent such discharges	Engineering Division / D. Gregor (Town Engineer)	July 2017	Ongoing BMP	http://www.wethersfieldct.gov/engineering
Continue Targeted Outreach Efforts on Stormwater Management during the Development Permit Review and Approval Process	Complete	Proposed development has been reviewed for stormwater management and water quality for all PZC & IWCC permit applications and best management practice are encouraged in all instances	Ensure all proposed development mitigates any increase in stormwater runoff leaving the site, provides water quality treatment and encourages groundwater recharge / LIDs where feasible	Engineering Division / D. Gregor (Town Engineer)	July 2017	Ongoing BMP	All new developments and many redevelopment projects (depending on scope) are required to provide stormwater treatment and encouraged to implement LID measures in accordance with the 2004 CT Stormwater Quality Manual
Develop and Post Brochures / Fact Sheets on Impacts to Water Quality and Pollutants of Concern	Complete	Staff completed research for required materials and developed informational brochures	Educate public on common pollutants of concern	Engineering Division / L. Burroughs (Engineering Tech)	July 2018	Ongoing BMP	Informational brochure and related information has been developed by staff and posted in various locations in Town Hall
Develop Stormwater Reference Materials Library for Public and Staff Use	Complete	The Engineering Division has assembled a library of various stormwater related material available for public and staff use	Maintain reference materials regarding stormwater management, treatment & runoff reduction	Engineering Division / L. Burroughs (Engineering Tech)	July 2018	Ongoing BMP	Incl. 2004 CT Stormwater Quality Manual, 2002 CT Guidelines for Soil Erosion and Sediment Control and other published documents

BMP	Status	Activities in Current Reporting Period	Measurable Goal	Department / Person Responsible	Due Date	Date Completed or Projected Completion Date	Additional Details
Provide Website Links to Education Materials on Town Website	Complete	Links to valuable stormwater related material has been provided on the Engineering Division page of the Town website	Educate audience about environmental issues caused by pollutant discharges	Engineering Division / D. Gregor (Town Engineer)	July 2018	Ongoing BMP	http://www.wethersfieldct.gov/engineering

Extra space for describing above BMP activities, if needed:

BMP

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

Continue broadcasting PSAs, addressing stormwater management during permit application reviews and continue maintaining reference materials throughout the duration of the MS4 Permit.

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 Organization
Presentation to Third Grade Class on Nov 20, 2017	Students (approx. 20)	Engineering, Storm Drainage	Pollutants that can enter catch basins and impact environmental resources	Engineering Division (Town Engineer)
New Stormwater Permitting Requirements page printed in 2018 & 2019 Town Guide & Calendar (Provided by the Town of Wethersfield)	Town Residents and Visitors (approx. > 26,000)	Best practices at home to reduce stormwater pollution	Phosphorus, nitrogen, grass clippings, leaves, trash	Town Engineering Division & Planning Dept.
New Stormwater Permitting Requirements page printed in 2020 Town Guide & Calendar (Provided by the Town of Wethersfield)	Town Residents and Visitors (approx.. > 26,000)	Best practices at home to reduce stormwater pollution	Phosphorus, nitrogen, grass clippings, leaves, trash	Town Engineering Division & Planning Dept.

Additional “Clean Water” handouts available to residents in Town Library	Town Residents and Visitors (approx. > 26,000)	Preventing Stormwater runoff pollution	Typical residential sources of pollution	Town Engineering Division & Town Library
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2. Public Involvement/Participation (SMP Table 5 & MS4 Permit (Section 6(a)(2) / Page 21)

2.1 BMP Summary

BMP	Status	Activities in Current Reporting Period	Measurable Goal	Department / Person Responsible	Due Date	Date Completed or Projected Completion Date	Additional Details
Comply with Public Review and Comment Periods for Annual MS4 General Permit Reports	Complete	Annual reports are available for public review and comment on Town website and at Engineering Division office a min. of 45 days prior to submittal	Continue posting annual reports for public review and comment	Engineering Division / D. Gregor (Town Engineer)	July 2017	Ongoing BMP	Announcement of draft report for public review was made in Weekly Town Manager’s Report, direct email to residents and on Town’s homepage, and was posted at http://www.wethersfieldct.gov/engineering
Continue Management of Town Refuse Collection and Recycling Program	Complete	Staff has managed & monitored programs and facilities (incl. Transfer Station) to ensure conformance with all regulations	Continue management of Collection/Recycling Programs and addressing public comments and concerns	Physical Services / S. Katz (Dir. Of Physical Services)	July 2017	Ongoing BMP	Information provided at http://www.wethersfieldct.gov/physical-services
Continue to Schedule Trash Cleanup and Hazardous Waste Collection Events	Complete	See Section 2.3 below	Continue to coordinate with Central CT Health District & MDC to hold annual trash cleanup and hazardous waste collection events	Physical Services / S. Katz (Dir. Of Physical Services), Central CT Health District & MDC	July 2017	Ongoing BMP	

Extra space for describing above BMP activities, if needed:

BMP	

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

Continue to make annual reports available to the public per the Freedom of Information Act requirements and hold annual trash cleanup and hazardous waste collection events that are coordinated with regional agencies.

2.3 Public Involvement/Participation Reporting Metrics

Metrics	Implemented	Date	Posted
2017 Stormwater Management Plan announced to the public	Yes	March 2017	Included in weekly Town Manager’s Report and posted at http://www.wethersfieldct.gov/content/398/408/default.aspx
2017 Free Paper Shredding Event	Yes	May 11, 2017	Coordinated by Town Social Services and Physical Services Divisions
2017 Metropolitan District Commission (MDC) Household Hazardous Waste Collection held at Wethersfield High School	Yes	June 17, 2017	Coordinated by MDC & Town Physical Services Division for proper disposal of hazardous waste
2017 Wethersfield Cove & Connecticut River “Source-to-Sea Clean-up” Day	Yes	Sept 23, 2017	Coordinated by the Connecticut River Watershed Council & Town Physical Services Division for collection of trash in environmentally sensitive areas
2017 Draft Annual Report announced to public for review	Yes	February 2018	Announcement provided on Town’s homepage, included in weekly Town Manager’s Report emailed to public and posted at http://www.wethersfieldct.gov/engineering
2018 Yard Clean-Up Day	Yes	April 21, 2018	Provided for residents by Physical Services Division to properly dispose of debris
2018 Metropolitan District Commission (MDC) Household Hazardous Waste Collection held at Wethersfield High School	Yes	June 16, 2018	Coordinated by MDC & Town Physical Services Division for proper disposal of hazardous waste
2018 Draft Annual Report announced to public for review	Yes	February 2019	Announcement provided on Town’s homepage, included in weekly Town Manager’s Report emailed to public and posted at http://www.wethersfieldct.gov/engineering
2019 Free Paper Shredding Event	Yes	May 9, 2019 & April 6, 2019	Coordinated by Town Social Services and Physical Services Divisions
2019 Metropolitan District Commission (MDC) Household Hazardous Waste Collection held at Wethersfield High School	Yes	June, 15 2019	Coordinated by MDC & Town Physical Services Division for proper disposal of hazardous waste
2019 Wethersfield Cove & Connecticut River “Source-to-Sea Cleanup” Day	Yes	Sept, 28 2019	Coordinated by the Connecticut River Watershed Council & Town Physical Services Division for collection of trash in environmentally sensitive areas

Metrics	Implemented	Date	Posted
2020 Metropolitan District Commission (MDC) Household Hazardous Waste Collection held at Wethersfield High School	Yes	Aug, 22 2020	Coordinated by MDC & Town Physical Services Division for proper disposal of hazardous waste
Provisions for free disposal of organic debris at Town Transfer Station after significant storm events and one free day each spring	Yes	Ongoing	Provided for residents by Physical Services Division to properly dispose of debris

3. Illicit Discharge Detection and Elimination (SMP Table 6 & MS4 Permit 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	Date Completed or Projected Completion Date	Additional Details
Develop Written IDDE Program	Complete	Staff is in process of reviewing final draft of written IDDE program using the published template	Complete written plan for IDDE program	Engineering Division / D. Gregor (Town Engineer)	July 2018	June 2020	Available to the public at Town Hall and the Town's web page at https://wethersfieldct.gov/engineering
Develop Citizen Reporting Program	Complete	Staff has developed standards for the public to report suspected IDDE	Develop a convenient way for the public to report suspected IDDE	Engineering Division / L. Burroughs (Eng. Tech)	July 2018	July 2018	Phone number and email contact information provided in informational brochure and on town webpage.
Develop Record Keeping System for IDDE Tracking	Complete	A spreadsheet/database has been developed by staff to track all IDDE from initial report to final resolution	Develop and maintain spreadsheet/database to track all reported IDDE	Engineering Division / L. Burroughs (Eng. Tech)	July 2018	December 2017	IDDE spreadsheet/database will be maintained by staff
Review and Update Legal Authority to Prohibit Illicit Discharges	Complete	Staff confirmed existence of Town Ordinance for Illicit Discharge	Provide authority to resolve IDDE occurrences immediately	Engineering Division / D. Gregor (Town Engineer)	July 2018	December 2017	Town Ordinance Chapter 141, Article I, Illicit Discharges and Connections to Stormwater Drainage System https://ecode360.com/8362678

BMP	Status	Activities in Current Reporting Period	Measurable Goal	Department / Person Responsible	Due Date	Date Completed or Projected Completion Date	Additional Details
Develop List and Map all MS4 Stormwater Outfalls throughout Municipality	Complete	GIS database and mapping has been developed to identify outfall locations	Complete inventory of all stormwater system outfalls	Engineering Division / L. Burroughs (Eng. Tech)	July 2019	July 2019	All known MS4 Stormwater Outfalls are located on GIS Mapping with individual identification numbers corresponding to the database
Detailed MS4 Infrastructure Mapping in Priority Areas	Complete	GIS database and mapping has been developed to identify drainage infrastructure within Priority Areas	Complete inventory of stormwater system in Priority Areas	Engineering Division / L. Burroughs (Eng. Tech)	July 2020	July 2019	The entire drainage system is shown in GIS Mapping with an associated database, which will be continually updated as new information becomes available
Identify IDDE in Areas with Pollutants of Concern	Ongoing	UConn students assisted staff with IDDE investigations and wet and dry weather sampling was performed by Weston & Sampson	Identify potential sources of pollution	Engineering Division / D. Gregor (Town Engineer)	July 2020	Ongoing	Sample results are being reviewed by staff

Extra space for describing above BMP activities, if needed:

BMP

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

Review of wet and dry weather sampling results and identification of additional investigations required.

Continue to manage citizen reporting procedures and maintain master IDDE tracking spreadsheet.

Investigate upstream drainage systems where elevated pollutant levels were encountered during wet weather sampling.

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

Date of Report	Location / Suspected Source	Response Taken
8/29/2019	277 Pine Lane / Suspected dumping down catch basin	Staff visited site and inspected all catch basins and outfall in area. No evidence of dumping observed. Caller mis-identified line striping as dumping
10/18/2019	90 Schoolhouse Crossing / Suspected dumping of motor oil down catch basin	Engineer visited site and inspected all catch basins and outfall in area. No evidence of dumping observed.
12/14/2019	Ridge Road / Debris in Sanitary line caused back flow	MDC Sewer crew responded and removed blockage

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)
226 Longvue Dr. *	7-Jan-12	No	500 (gal)	Debris	MDC Sewer crew responded	
71 Surrey Dr. *	23-Jan-12	No	3 (gal)	Jet Truck Hose Cleaning	MDC Sewer crew responded	
23 Churchill Rd *	17-Feb-12	No	1 (gal)	Jet Truck Hose Cleaning	MDC Sewer crew responded	
540 Ridge Rd *	15-Mar-12	No	2 (gal)	Jet Truck Hose Cleaning	MDC Sewer crew responded	
268 Crest St. *	11-May-12	No	2000 (gal)	Debris	MDC Sewer crew responded	
29 Byrd Rd. *	16-May-12	No	10 (gal)	Issue with sewer lateral	MDC Sewer crew and Inspector responded	
134 Colman Rd. *	20-Feb-13	No	35 (gal)	CIPP Lining Project	Contractor mitigated situation	
138 Coleman Rd. *	5-Mar-13	No	4 (gal)	CIPP Lining Project	Contractor mitigated situation	
7 Railroad Place *	8-Jun-13	No	N/A	Weather	MDC Emergency crew responded	
288 & 272 Crest St. *	16-Nov-13	No	1500 (gal)	Grease	MDC Sewer crew responded	
Church St. *	1-May-14	No	<1000 (gal)	Capacity Limitations	None, surcharge flows must recede to normal operating level	
226 Longvue Dr. *	6-Apr-16	No	350 (gal)	Debris	MDC Sewer crew responded	
Marsh Street Pump Station*	18-Aug-16	No	<100 (gal)	Force Main Break	MDC Sewer crew responded, repaired force main	

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)
780 Wolcott Hill Rd *	21-Feb-17	No	1 (gal)	Jet Truck Hose Cleaning	MDC Sewer crew responded	
135 Robbins Dr. *	29-Apr-17	No	15 (gal)	Jet Truck Hose Cleaning	MDC Sewer crew responded	
58 Monticello Drive / 1860 Reservoir	25-Oct-17	No	Negligible	Automobile Leak	Vehicle has been repaired and is no longer parked where leaks could enter a catch basin.	
Wells Road east of Spring Street	16-Apr-18	No	>1000 (gal)	Extreme Rain	None, surcharge flows receded to normal operating level after rain event	
125 Mill Street	28-Mar-19	No	1 (gal)	Equipment Failure	Contractor cleaned spill	
Ridge Road *	12/14/2019	No	10 (gal)	Debris	MDC Sewer crew responded and removed blockage	
1885 Berlin Turnpike	8/17/2020	Yes	500+/- (gal)	MVA	Collision between multiple trucks cause heavy fire in conjunction with leaking fuel. Burning fuel flowed into storm drainage system causing additional fires downstream. Fire damaged overhead electrical conductors and necessitated limited evacuations. Contaminate did make it to outfall and was removed by DEEP with future monitoring by DEEP	Ongoing
Near 214 Church Street	12/25/2020	Yes	>1000 (gal)	Extreme Rain Event	None, surcharge flows receded to normal operating level after rain event	

* Information provided by MDC

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

A database is maintained to record each IDDE as an “Emergency Incident Report”. This form details the event from initial report to final resolution and is maintained by the Engineering Division.

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
N/A		

3.7 IDDE Reporting Metrics

Metrics	
Estimated or actual number of MS4 outfalls	170
Estimated or actual number of interconnections	86 (estimated based on best available information to date)
Outfall mapping complete	100% (To our knowledge, All MS4 mapping is complete)
Interconnection mapping complete	100%
System-wide mapping complete (detailed MS4 infrastructure)	100%
Outfall assessment and priority ranking	100% (Only in lowest basins discharging directly to the CT River)
Dry weather screening of all High and Low priority outfalls complete	100%
Catchment investigations complete	10%
Estimated percentage of MS4 catchment area investigated	10%

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).

Engineering Division staff are reminded at least annually to look for and identify potential IDDE during completion of MS4 related tasks and general operations.

4. Construction Site Runoff Control (SMP Table 7 & MS4 Permit Section 6(a)(4) / Page 25)

4.1 BMP Summary

BMP	Status	Activities in Current Reporting Period	Measurable Goal	Department / Person Responsible	Due Date	Date Completed or Projected Completion Date	Additional Details
Upgrade and Enforce Land Use Regulations to Meet MS4 General Permit Requirements	Complete	MS4 requirements, have been incorporated into the P&Z and IWCC Regulations approved by Commissions.	Finalize and adopt Zoning and Inland Wetlands and Conservation Commission Regulation updates	Engineering Division / D. Gregor (Town Engineer)	July 2019	IWCC Sept 2020 P&Z Dec 2020	Updates will also be added to Subdivision Regulations as appropriate
Continue Interdepartmental Coordination of Site Plan Review and Approval	Complete	All Town Departments conducted site plan reviews (as applicable) and held meetings/coordinated as needed prior to issuance of permits	Continued use of standardized review procedures	Engineering Division / D. Gregor (Town Engineer) & L. Burroughs (Eng. Tech)	July 2017	Ongoing BMP	Site plan applications are typically reviewed by the Planning Dept., Engineering Division, ZEO and Fire Marshall
Continue Performing Construction Site Inspections	Complete	Staff conducted site inspections throughout construction to ensure conformance with approved plans	Continued site inspections throughout construction period	Engineering Division / D. Stanton (Construction Manager)	July 2017	Ongoing BMP	Engineering Division staff is primarily responsible; however, the ZEO and other staff members also perform inspections as needed
Maintain Procedures to Allow Public Comment on Site Development	Complete	Local Commission meeting schedules and agendas were published, and all meetings were open to the public	Continued publishing of meeting info and responding to questions/concerns from the public	Engineering Division / D. Gregor (Town Engineer)	July 2017	Ongoing BMP	Staff is available to respond to questions and concerns during the approval and construction process
Implement Procedure to Notify Developers and Contractors of Need for DEEP Construction General Permit	Complete	DEEP notification requirements were included in handouts for permit applications to local Commissions and also added to the Engineering Division page of the Town website	Continued distribution of requirements to permit applicants	Engineering Division / D. Gregor (Town Engineer)	July 2017	Ongoing BMP	Info is available at http://wethersfieldct.gov/content/398/408/499.aspx

BMP	Status	Activities in Current Reporting Period	Measurable Goal	Department / Person Responsible	Due Date	Date Completed or Projected Completion Date	Additional Details
Enforce Waste Collection Requirements	Complete	Staff inspected site conditions during construction to ensure waste was properly managed	Continued site inspections for proper waste management	Engineering Division / D. Stanton (Construction Manager)	July 2017	Ongoing BMP	Engineering Division staff is primarily responsible; however, the ZEO and other staff members also perform inspections as needed
Enforce Contaminated / Hazardous Materials Requirements	Complete	Staff inspected site conditions during construction to ensure contaminated /hazardous materials were properly managed	Continued site inspections for proper material management	Engineering Division / D. Stanton (Construction Manager)	July 2017	Ongoing BMP	Engineering Division staff is primarily responsible; however, the ZEO and other staff members also perform inspections as needed

Extra space for describing above BMP activities, if needed:

BMP	

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

Continue applying MCMs required by the MS4 Permit.

5. Post-Construction Stormwater Management (SMP Table 8 & MS4 Permit Section 6(a)(5) / Page 27)

5.1 BMP Summary

BMP	Status	Activities in Current Reporting Period	Measurable Goal	Department / Person Responsible	Due Date	Date Completed or Projected Completion Date	Additional Details
Establish Legal Authority and Guidelines Regarding LID and Runoff Reduction in Site Planning	Complete	P&Z and Inland Wetlands and Conservation Commission Regulations have been updated to include LID/Runoff Reduction	Finalize and adopt Zoning and Inland Wetlands and Conservation Commission Regulation updates	Engineering Division / D. Gregor (Town Engineer)	July 2021	IWCC Sept 2020 P&Z Dec 2020	Updates will also be added to Subdivision Regulations as appropriate
Promote LID/Runoff Reduction for Development and Redevelopment Projects	Complete	Staff has drafted updates to the Zoning and Inland Wetlands and Conservation Commission Regulations to include LID/Runoff Reduction	Finalize and adopt Zoning and Inland Wetlands and Conservation Commission Regulation updates	Staff has drafted updates to the Zoning and Inland Wetlands and Conservation Commission Regulations to include LID/Runoff Reduction	July 2019	July 2020	Updates will also be added to Subdivision Regulations as appropriate
Complete DCIA Mapping for all MS4 Outfalls	Complete	Staff utilized DCIA maps from UConn CLEAR to finalize mapping	Identify DCIA that contributes to runoff at MS4 outfalls	Engineering Division / D. Moisa (Operations Coordinator)	July 2020	December 2019	DCIA has been calculated for each basin
Implement Long-Term Maintenance Plan for Stormwater Basins and Treatment Structures	N/A	N/A	Implement Maintenance Plans for Town-owned facilities and Private Developments	Physical Services / S. Katz (Dir. of Physical Services) & Engineering Division / D. Gregor (Town Engineer)	July 2019	N/A	The Town does not own any detention basins or treatment structures at this time; however, plans for maintenance will be developed in the future if needed.

BMP	Status	Activities in Current Reporting Period	Measurable Goal	Department / Person Responsible	Due Date	Date Completed or Projected Completion Date	Additional Details
Address Post-Construction Issues in Areas with Pollutants of Concern	Areas are being evaluated		Prioritize areas for DCIA retrofits based on conditions during annual inspections	Engineering Division / D. Gregor (Town Engineer)	July 2020	Ongoing	No E&S issues have been identified in these areas; however, they will be continually monitored.

Extra space for describing above BMP activities, if needed:

BMP

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

Areas with pollutants of concern will be continually monitored by staff.

5.3 Post-Construction Stormwater Management Reporting Metrics

Metrics	
Baseline (2012) Directly Connected Impervious Area (DCIA)	351 acres (Revised from previous report by use of Sutherland Equations and updated mapping received from NEMO in Dec 2018)
DCIA disconnected this year (redevelopment plus retrofits, acres this year / acres total)	0.228 Ac / 1.214 Ac
Retrofits completed	0
Percentage of DCIA disconnected since 2012 (% this year / % total since 2012)	0.013% / 0.036%
Estimated cost of retrofits	Unknown
Detention or retention ponds identified (# this year /# total)	2 / 7 constructed (from Jan 2017 to Dec 2020)

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

Baseline DCIA has been determined using impervious cover information throughout Town provided by UConn CLEAR/NEMO, the Sutherland Equations and general knowledge of the area.

6. Pollution Prevention/Good Housekeeping (SMP Table 9 & MS4 Permit Section 6(a)(6) / Page 31)

6.1 BMP Summary

BMP	Status	Activities in Current Reporting Period	Measurable Goal	Department / Person Responsible	Due Date	Date Completed or Projected Completion Date	Additional Details
Continue Formal Employee Training Program	Complete	Employee training/direction on standard operating procedures was held on an ongoing basis throughout year	Continued training to increase awareness of water quality issues	Physical Services / S. Katz (Dir. of Physical Services) & Engineering Division / D. Gregor (Town Engineer)	July 2017	Ongoing BMP	Procedures such as spill response, reporting issues observed in the field and general guidelines are reviewed with staff during 'tailgate' meetings
Implement Infrastructure Repair and Rehab Program	Complete	Staff is maintaining lists of local bridges/culverts and other drainage system issues, which require repairs that will be addressed as funding allows.	Development of a Program to record drainage system deficiencies and complete repairs	Physical Services / S. Katz (Dir. of Physical Services) & Engineering Division / D. Gregor (Town Engineer)	July 2020	November 2019	See additional information below.
Document Projects that Disconnect DCIA	Complete	Spreadsheet has been maintained to record all disconnected DCIA and track total impervious area	Development of record-keeping system for tracking disconnected DCIA in Town	Engineering Division / D. Gregor (Town Engineer)	July 2017	Ongoing BMP	All development and redevelopment applications must include a standard table identifying pre- and post-construction Impervious Area and Disconnected Impervious Area
Disconnect DCIA through Retrofit Projects	Ongoing	Reduced road width along Highland Street	Identify potential retrofit sites within MS4 Priority Areas and complete retrofit projects	Engineering Division / D. Gregor (Town Engineer)	July 2022	Ongoing BMP	Approximately 3 ft of road width was eliminated along Highland St from the Rocky Hill town line to Thornbush Rd (0.228 Ac)

BMP	Status	Activities in Current Reporting Period	Measurable Goal	Department / Person Responsible	Due Date	Date Completed or Projected Completion Date	Additional Details
Implement Property and Operations Maintenance Procedures – Parks and Open Space	Complete	<ul style="list-style-type: none"> • Application of slow release fertilizer reduced from 2x to 1x per year • Fertilizer applied in June during dry season • Soil testing of ball fields completed annually • Fertilizers are stored in enclosed cabinets/sheds • Supervisors hold Pesticide Licenses and appropriate staff have Applicator Licenses • Staff removes trash receptacles from Town parks and buildings • Residents are notified when containers are delivered not to put grass clippings & leaves in trash barrels 	Implement procedures for maintaining Town properties, parks and other facilities to minimize discharge of pollutants to MS4	Physical Services / S. Katz (Dir. of Physical Services)	July 2018	Ongoing BMP	Town collects curbside leaves annually and transports them to a stockpile yard for composting/mulching, and uses a vehicle wash bay located within the Town Garage that has DEEP-approved wash water controls
Implement Property and Operations Maintenance Procedures – Pet Waste Management	Complete	<ul style="list-style-type: none"> • Parks have stations with bag dispensers for collecting pet waste • Bag dispensers are refilled weekly • Signs are posted to pick up after pets 	Reduce potential sources of bacteria entering stormwater from pet waste	Physical Services / S. Katz (Dir. of Physical Services)	July 2018	Ongoing BMP	

BMP	Status	Activities in Current Reporting Period	Measurable Goal	Department / Person Responsible	Due Date	Date Completed or Projected Completion Date	Additional Details
Implement Property and Operations Maintenance Procedures – Waterfowl Management	Complete	<ul style="list-style-type: none"> • Town has conducted “light therapy”, installed decoys and all-natural grass sprays to keep geese away from Mill Woods Swimming Pond. • ‘No Feeding’ signs are present at Spring St Pond 	Reduce waste, vermin and bacteria associated with congregating water fowl	Parks & Recreation / Kathy Bagley (Dir. of Parks & Recreation)	July 2018	Ongoing BMP	Additional ‘Do Not Feed Waterfowl’ signs have been installed in areas where waterfowl congregate such as Wethersfield Cove, Mill Woods Park, Spring St Pond and Cloverdale Pond
Implement Property and Operations Maintenance Procedures – Town Buildings and Facilities	Complete	<ul style="list-style-type: none"> • Staff has completed Globally Harmonized System (GHS) Training for Hazard Communication • SWPPP for Physical Services Facility has been implemented • Parking lots at Town facilities are periodically swept to remove pollutants • Staff removes trash receptacles from Town parks and buildings • Staff cleans and maintains Transfer Station area, which is only operational during limited hours 	Continue proper maintenance of Town facilities in accordance with DEEP requirements	Physical Services / S. Katz (Dir. of Physical Services)	July 2018	Ongoing BMP	The Town Fire Chief is also the Asst. Dir. of Physical Services and aware of federal & state regulations regarding spill control. Town is also in process of obtaining new waste bins for the Transfer Station.

BMP	Status	Activities in Current Reporting Period	Measurable Goal	Department / Person Responsible	Due Date	Date Completed or Projected Completion Date	Additional Details
Implement Property and Operations Maintenance Procedures – Vehicles and Equipment	Complete	<ul style="list-style-type: none"> • Vehicle wash bay at the Physical Services Facility has DEEP-approved wash water controls with drains that discharge to a holding tank. • All leaks are cleaned immediately with proper disposal of associated material • Full-time Fleet Maintenance staff are available to repair vehicle leaks when needed 	Continue proper maintenance of Town vehicles and equipment in accordance with DEEP requirements	Physical Services / S. Katz (Dir. of Physical Services)	July 2018	Ongoing BMP	The Town Fire Chief is also the Asst. Dir. of Physical Services and knowledgeable regarding federal & state regulations for spill control. The Town Fire Department and DEEP are notified of significant leaks (5 gal or greater) as required.
Implement Property and Operations Maintenance Procedures – Leaf Management	Complete	<ul style="list-style-type: none"> • Town provides a curbside leaf collection program each fall • Residents can also bring leaves to the Transfer Station • All leaf material is composted by the Town 	Continue to offer services for proper disposal of leaves to minimize discharge stormwater	Physical Services / S. Katz (Dir. of Physical Services)	July 2018	Ongoing BMP	Town offers free disposal of organic debris after severe storm events
Continue Street Sweeping Program	Complete	All local roads were swept from April to May 2020	Continued annual sweeping of all Town-owned roads	Physical Services / S. Katz (Dir. of Physical Services)	July 2017	Ongoing BMP	Work completed by Nickel Site Services, LLC, collected material is typically organic (not sand)

BMP	Status	Activities in Current Reporting Period	Measurable Goal	Department / Person Responsible	Due Date	Date Completed or Projected Completion Date	Additional Details
Continue Catch Basin Cleaning Program	Complete	Approx. 36.5% of Town-owned catch basins were cleaned and 4.8% were formally inspected	Continued annual cleaning & inspection of all Town-owned catch basins	Physical Services / S. Katz (Dir. of Physical Services)	July 2017	Ongoing BMP	Work completed by Nickel Site Services, LLC, who also completed inspection reports that were used to schedule repairs as needed
Snow Management Practices - Deicing Material Management	Complete	<ul style="list-style-type: none"> Automated salt application equipment was used to manage application rates (no brine was stored and applied by Town) Town has completed installation of a new salt storage shed at the Physical Services Facility, which is at a higher elevation with respect to the FEMA flood plain 	Continued use of Standard Operating Procedures and BMPs for deicing material management	Physical Services / S. Katz (Dir. of Physical Services)	July 2018	Ongoing BMP	Town has demolished old wooden, lean-to salt shed
Snow Management Practices – Snow and Ice Control Practices	Complete	<ul style="list-style-type: none"> Automated salt application equipment (zero velocity spreaders) were used to manage application rates Excess snow is stockpiled at the Town yard along Jordan Lane and within parking lots along Greenfield St and Mill Woods Park as needed 	Continued use of Standard Operating Procedures and BMPs for snow and ice control practices	Physical Services / S. Katz (Dir. of Physical Services)	July 2018	Ongoing BMP	Town treats approx. 105 miles of local roads and typically applies 250-275 tons of rock salt per storm event (Town does not apply brine)

BMP	Status	Activities in Current Reporting Period	Measurable Goal	Department / Person Responsible	Due Date	Date Completed or Projected Completion Date	Additional Details
Coordinate with Interconnected MS4s	Complete	Town has identified all interconnected MS4s with neighboring Towns and CT DOT	Identified locations of interconnected MS4s and sharing annual report information with associated owners	Engineering Division / D. Gregor (Town Engineer)	July 2020	July 2020	86 total interconnections identified to date (estimated to be 84 with the State and 2 with Rocky Hill)
Implement Program to Control Other Sources of Pollutants to MS4	Completed	All proposed development was reviewed for stormwater management, water quality and potential pollution sources during PZC & IWCC applications	Continue to control potential pollutant sources through plan reviews, citizen input and site inspections	Engineering Division / D. Gregor (Town Engineer)	July 2017	Ongoing BMP	All new developments and many retrofit projects (depending on scope) are required to provide stormwater treatment in accordance with the 2004 CT Stormwater Quality Manual, which assist in controlling pollution
Implement Additional Measures for Discharge to Impaired Waters	Ongoing	UConn students conducted sampling and testing to confirm that the City of Hartford was the source of bacterial impairment at Outfall #M1-214002 (bacteria & fecal coliform >24,200)	Implementation of retrofit/source management projects for bacterial impairment as funding allows	Engineering Division / D. Gregor (Town Engineer)	July 2020	Ongoing BMP	The City of Hartford and MDC were notified of the findings and asked to address the source of contamination

Extra space for describing above BMP activities, if needed:

BMP	
Implement Infrastructure Repair and Rehab Program	The Physical Services Dept. is currently using Facility Dude as a work order and reporting system for these repairs. In addition, DOT recently screened local bridges (culverts) to identify those that require further inspections, which was to be completed by a consultant in 2020. In addition, staff have been able to obtain funds to complete dam repairs at various locations in Town.
Catch Basin Inspection	Nickel Site Services, LLC was retained to inspect catch basins as were are cleaned and associated reports have been used to establish priorities for catch basin maintenance and repair.

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

All new catch basin tops installed are engraved with “DRAINS TO WATERWAY”.
Continue catch basin inspections, repairs and investigations of illicit discharge to MS4

6.3 Pollution Prevention/ Good Housekeeping Reporting Metrics

Metrics		2018	2019	2020
Employee training provided for key staff	Staff continues to attend MS4 permit seminars/webinars and is actively involved in managing the MS4 Program	Staff continues to attend MS4 permit seminars/webinars and is actively involved in managing the MS4 Program	Staff continues to attend MS4 permit seminars/webinars and is actively involved in managing the MS4 Program	Staff continues to attend MS4 permit seminars/webinars and is actively involved in managing the MS4 Program
Street Sweeping				
Curb miles swept	209.2 miles incl. State roads (104.6 miles paved roads & 3.3 miles of unimproved roads)	209.2 miles incl. State roads (104.6 miles paved roads & 3.3 miles of unimproved roads)	104 Miles of Local Roads	
Volume (or mass) of material collected	Approx. 300 tons (est)*	Approx. 600 tons (est)*	Approx. 400 tons (est)*	
Catch Basin Cleaning				
Total catch basins in priority areas	To be determined	3,161 (135 in lowest basins near CT River)	3,161	
Total catch basins in MS4	3,161	3,161	3,161	
Catch basins inspected	3,161***	2,805***	152****	
Catch basins cleaned	3,161	2,805**	1156	
Volume (or mass) of material removed from all catch basins	Unknown	Approx. 600 tons (est)*	Approx. 400 tons (est)*	
Volume removed from catch basins to impaired waters (if known)	Unknown	Unknown	Unknown	
Snow management				
Type(s) of deicing material used	Rock Salt	Rock Salt	Rock Salt	
Total amount of each deicing material applied	2,221 tons	2,048 tons	1,200 tons	
Type(s) of deicing equipment used	Trucks	Trucks	Trucks	
Lane-miles treated	209.2 miles (104.6 miles paved roads & 3.3 miles of unimproved roads)	209.2 miles (104.6 miles paved roads & 3.3 miles of unimproved roads)	209.2 miles (104.6 miles paved roads & 3.3 miles of unimproved roads)	

Snow disposal location	Jordan Lane Stockpile Yard (located west of the Berlin Tpke)	Jordan Lane Stockpile Yard (located west of the Berlin Tpke)	Jordan Lane Stockpile Yard (located west of the Berlin Tpke)
Staff training provided on application methods & equipment	Staff is informed of and follows standard operating procedures	Staff is informed of and follows standard operating procedures	Staff is informed of and follows standard operating procedures
Municipal turf management program actions (for permittee properties in basins with N/P impairments)			
Reduction in application of fertilizers (since start of permit)	(6000 lb in 2017) – (5100 lb in 2018) = 900 lb reduction (Approx.)	(5100 lb in 2018) – (4500 lb in 2019) = 600 lb reduction (Approx.)	(12,000 lb in 2020)-(4500 lb in 2019) = 7500 lb increase (Approx.) due to 2 applications instead of one
Reduction in turf area (since start of permit)	0.0 Acres	0.0 Acres	0.0 Acres
Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems)			
Cost of mitigation actions/retrofits	Estimated Cost = \$1,000 All parks have stations with bag dispensers for collecting dog waste (refilled weekly) and signs to pick up after pets, and Town has conducted “light therapy”, installed decoys and all-natural grass sprays to keep geese away from Mill Woods Swimming Pond. Town has installed additional “No Feeding” signs in areas where waterfowl congregate, which are paid for with Operating Funds.		

* *Estimated by the Town’s contractor and Physical Services Dept.*

** *Approx. 89% of Town-owned catch basins were cleaned and inspected in 2019; however, the contractor had issues removing some structure frames and remaining work continued into 2020*

*** *Catch basin inspections were informal and based on routine cleaning operations*

**** *Catch basins inspections in 2020 include formal inspections of structures in priority areas with conditions documented on inspection logs*

6.4 Catch basin cleaning program

Provide any updates or modifications to your catch basin cleaning program

The Physical Services Department ensures all Town-owned catch basins are cleaned and inspected annually as soon as practical after the winter season by a private contractor and system repairs are completed as needed.

In 2020, 152 catch basin inspections were completed and required maintenance was scheduled.

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.

All new and redevelopment projects in Town are encouraged to minimize impervious cover, to direct as much runoff as possible towards pervious areas on the site and to treat runoff prior to entering the MS4 system.

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

All new and redevelopment projects in Town are encouraged to minimize impervious cover, to direct as much runoff as possible towards pervious areas on the site and to treat runoff prior to entering the MS4 system.

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

Continue encouraging all new and redevelopment projects in Town to minimize impervious cover, to direct as much runoff as possible towards pervious areas on the site and to treat runoff prior to entering the MS4 system.

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.

1. 2018 - Consultant employed to sample and test 19 outfalls discharging to the Connecticut River (only impaired watercourse in Town). Results indicated that 16 outfalls exceeded the maximum Enterococci Bacteria threshold and 8 outfalls exceeded the Fecal Coliform threshold as noted below.
2. 2019 to 2020 - UConn students assisted staff with IDDE investigations, sampling for discharges of concern and identifying options for retrofit projects at outfall location M1-214002 that had the highest contaminant levels. In addition, the investigations determined that the City of Hartford was the source of bacterial impairment. The City and MDC were notified and are investigating the source(s). The CT DMV facility at 60 State St was also notified of high bacteria and coliforms results at their private outfall mistakenly tested in our screening.
3. 2020 - Wet and dry weather sampling was performed by Weston & Sampson with lab work performed by Phoenix Environmental Laboratories. Results of sampling are being examined by staff and the consultant, and notable findings will be investigated for cause.

2.

Screening Data for Outfalls to Impaired Waterbodies (Section 6(i)(1) / page 41)

2.1 Screening data collected under 2017 Permit

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

Outfall ID	Latitude / Longitude	Sample Date	Allowable Parameter(s) (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	Results	Name of Laboratory (if used) *	Follow-up required?
M1-214002	41°43'40.563"N 72°40'2.295"W	12/21/2018	Enterococci Bacteria <500 Fecal Coliforms <260	Enterococci Bacteria 24,200 Fecal Coliforms >24,200	Phoenix Environmental Laboratories, Inc.	Yes Yes
M1-251020	41°43'19.426"N 72°39'17.115"W	12/21/2018	Enterococci Bacteria <500 Fecal Coliforms <260	Enterococci Bacteria 1,790 Fecal Coliforms 52	Phoenix Environmental Laboratories, Inc.	Yes No
M1-250026A	41°43'12.778"N 72°39'15.765"W	12/21/2018	Enterococci Bacteria <500 Fecal Coliforms <260	Enterococci Bacteria 19,900 Fecal Coliforms 4,350	Phoenix Environmental Laboratories, Inc.	Yes Yes
M1-250026	41°43'12.66"N 72°39'15.634"W	12/21/2018	Enterococci Bacteria <500 Fecal Coliforms <260	Enterococci Bacteria 3,780 Fecal Coliforms 41	Phoenix Environmental Laboratories, Inc.	Yes No
M1-258005	41°43'16.984"N 72°39'4.454"W	12/21/2018	Enterococci Bacteria <500 Fecal Coliforms <260	Enterococci Bacteria 1,720 Fecal Coliforms 52	Phoenix Environmental Laboratories, Inc.	Yes No
M1-259004	41°43'9.925"N 72°39'2.438"W	12/21/2018	Enterococci Bacteria <500 Fecal Coliforms <260	Enterococci Bacteria 2,050 Fecal Coliforms 74	Phoenix Environmental Laboratories, Inc.	Yes No
M1-259005	41°43'8.784"N 72°39'2.108"W	12/21/2018	Enterococci Bacteria <500 Fecal Coliforms <260	Enterococci Bacteria 350 Fecal Coliforms 41	Phoenix Environmental Laboratories, Inc.	No No
M1-261001	41°42'53.973"N 72°39'1.79"W	12/21/2018	Enterococci Bacteria <500 Fecal Coliforms <260	Enterococci Bacteria 6,870 Fecal Coliforms 6,870	Phoenix Environmental Laboratories, Inc.	Yes Yes
M1-286004A	41°42'56.481"N 72°38'53.423"W	12/21/2018	Enterococci Bacteria <500 Fecal Coliforms <260	Enterococci Bacteria 10 Fecal Coliforms 10	Phoenix Environmental Laboratories, Inc.	No No

M1-286004	41°42'56.591"N 72°38'53.377"W	12/21/2018	Enterococci Bacteria <500 Fecal Coliforms <260	Enterococci Bacteria 4,110 Fecal Coliforms 836	Phoenix Environmental Laboratories, Inc.	Yes Yes
M1-285001B	41°42'44.547"N 72°38'42.509"W	12/21/2018	Enterococci Bacteria <500 Fecal Coliforms <260	Enterococci Bacteria 455 Fecal Coliforms 41	Phoenix Environmental Laboratories, Inc.	No No
M1-262010	41°42'42.546"N 72°38'52.167"W	12/21/2018	Enterococci Bacteria <500 Fecal Coliforms <260	Enterococci Bacteria 3,260 Fecal Coliforms 1,380	Phoenix Environmental Laboratories, Inc.	Yes Yes
B5-242002	41°41'56.919"N 72°39'17.49"W	12/21/2018	Enterococci Bacteria <500 Fecal Coliforms <260	Enterococci Bacteria 4,610 Fecal Coliforms 250	Phoenix Environmental Laboratories, Inc.	Yes No
B5-279001	41°41'54.135"N 72°38'41.733"W	12/21/2018	Enterococci Bacteria <500 Fecal Coliforms <260	Enterococci Bacteria 645 Fecal Coliforms 63	Phoenix Environmental Laboratories, Inc.	Yes No
B5-269005	41°41'40.282"N 72°39'3.095"W	12/21/2018	Enterococci Bacteria <500 Fecal Coliforms <260	Enterococci Bacteria 4,610 Fecal Coliforms 345	Phoenix Environmental Laboratories, Inc.	Yes Yes
B5-270026	41°41'31.875"N 72°39'0.519"W	12/21/2018	Enterococci Bacteria <500 Fecal Coliforms <260	Enterococci Bacteria 3,260 Fecal Coliforms 52	Phoenix Environmental Laboratories, Inc.	Yes No
B5-271039	41°41'26.718"N 72°38'54.569"W	12/21/2018	Enterococci Bacteria <500 Fecal Coliforms <260	Enterococci Bacteria 1,660 Fecal Coliforms 63	Phoenix Environmental Laboratories, Inc.	Yes No
B5-272009	41°41'12.068"N 72°38'58.861"W	12/21/2018	Enterococci Bacteria <500 Fecal Coliforms <260	Enterococci Bacteria 3,080 Fecal Coliforms 281	Phoenix Environmental Laboratories, Inc.	Yes Yes
B5-272009A	41°41'10.194"N 72°38'58.36"W	12/21/2018	Enterococci Bacteria <500 Fecal Coliforms <260	Enterococci Bacteria 3,650 Fecal Coliforms 393	Phoenix Environmental Laboratories, Inc.	Yes Yes

* Phoenix Environmental Laboratories, Inc., 587 East Middle Tpke, P.O. Box 370, Manchester CT 06045

2.2 Credit for screening data collected under 2004 permit

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

*Follow-up investigation required (last column) if the following pollutant thresholds are exceeded:

Pollutant of concern	Pollutant threshold
Nitrogen	Total N > 2.5 mg/l
Phosphorus	Total P > 0.3 mg/l
Bacteria (fresh waterbody)	<ul style="list-style-type: none"> • E. coli > 235 col/100ml for swimming areas or 410 col/100ml for all others • Total Coliform > 500 col/100ml
Bacteria (salt waterbody)	<ul style="list-style-type: none"> • 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
M1-214002	Ongoing	On-going investigation
M1-251020	To be scheduled	TBD
M1-250026A	To be scheduled	TBD
M1-250026	Investigation Pending	TBD
M1-258005	To be scheduled	TBD
M1-259004	To be scheduled	TBD
M1-261001	Investigation Pending	TBD
M1-286004	Investigation Pending	TBD
M1-262010	To be scheduled	TBD
B5-242002	Investigation Pending	TBD
B5-279001	To be scheduled	TBD
B5-269005	Investigation Pending	TBD
B5-270026	To be scheduled	TBD
B5-271039	To be scheduled	TBD
B5-272009	To be scheduled	TBD
B5-272009A	To be scheduled	TBD

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	Latitude / Longitude	Sample Date	Allowable Parameter(s)	Results	Name of Laboratory (if used) *
M1-214002	41°43'40.57"N 72°40'2.284"W	12/21/2018	Enterococci Bacteria <500 Fecal Coliforms <260	TBD	TBD
M1-250026A	41°43'13.463"N 72°39'16.157"W	12/21/2018	Enterococci Bacteria <500 Fecal Coliforms <260	TBD	TBD
M1-261001	41°42'53.939"N 72°39'2.945"W	12/21/2018	Enterococci Bacteria <500 Fecal Coliforms <260	TBD	TBD
B5-269005	41°41'40.316"N 72°39'3.078"W	12/21/2018	Enterococci Bacteria <500 Fecal Coliforms <260	TBD	TBD
B5-272009A	41°41'8.41"N 72°38'57.235"W	12/21/2018	Enterococci Bacteria <500 Fecal Coliforms <260	TBD	TBD
M1-262010	41°42'42.566"N 72°38'52.147"W	12/21/2018	Enterococci Bacteria <500 Fecal Coliforms <260	TBD	TBD
M1-214002	41°43'40.57"N 72°40'2.284"W	2/20/2020	Enterococci Bacteria <500 Fecal Coliforms <260	Enterococci Bacteria 4,880 Fecal Coliforms 24200	Phoenix Environmental Laboratories, Inc.

* Phoenix Environmental Laboratories, Inc., 587 East Middle Tpke, P.O. Box 370, Manchester CT 06045

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).

Catchment ID (DEEP Basin ID)	Category	Rank
4005	High Priority	1
4000	High Priority	2
4010	High Priority	3

Note:
 These rankings were determined from outfall locations where wet weather stormwater sampling and testing conducted in 2018 identified high pollutant concentrations. Remaining catchments will be prioritized when additional information is available in those areas.

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	Latitude / Longitude	Screening / Sample Date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or enterococcus	Total Coliforms	Water Temp	Pollutant of Concern	If required, follow-up actions taken
* M1-214002	41°43'40.57"N 72°40'2.284"W	8/17/2020	N/A	N/A	N/A	N/A	-	-	N/A	Bacteria	TBD
M1-250026	41°43'12.66"N 72°39'15.634"W	8/17/2020	N/A	N/A	N/A	N/A	20	8660	N/A	Bacteria	TBD
*M1-261001	41°42'53.973"N 72°39'1.79"W	8/17/2020	N/A	N/A	N/A	N/A	-	-	N/A	Bacteria	TBD
*M1-286004	41°42'56.591"N 72°38'53.377"W	8/17/2020	N/A	N/A	N/A	N/A	-	-	N/A	Bacteria	TBD
*B5-242002	41°41'56.919"N	8/17/2020	N/A	N/A	N/A	N/A	-	-	N/A	Bacteria	TBD

Outfall / Interconnection ID	Latitude / Longitude	Screening / Sample Date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or enterococcus	Total Coliforms	Water Temp	Pollutant of Concern	If required, follow-up actions taken
	72°39'17.49"W										
*B5-269005	41°41'40.282"N 72°39'3.095"W	8/17/2020	N/A	N/A	N/A	N/A	-	-	N/A	Bacteria	TBD

* No Flow from Outfall

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	Latitude / Longitude	Screening / Sample Date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or Enterococcus	Surfactants	Water Temp	Pollutant of Concern	If required, follow-up actions taken
M1-214002	41°43'40.563"N 72°40'2.295"W	12/21/18	N/A	N/A	N/A	N/A	Yes	N/A	N/A	Bacteria	IDDE investigations are ongoing
M1-251020	41°43'19.426"N 72°39'17.115"W	12/21/18	N/A	N/A	N/A	N/A	Yes	N/A	N/A	Bacteria	TBD
M1-250026A	41°43'12.778"N 72°39'15.765"W	12/21/18	N/A	N/A	N/A	N/A	Yes	N/A	N/A	Bacteria	TBD
M1-250026	41°43'12.66"N 72°39'15.634"W	12/21/18	N/A	N/A	N/A	N/A	Yes	N/A	N/A	Bacteria	TBD
M1-258005	41°43'16.984"N 72°39'4.454"W	12/21/18	N/A	N/A	N/A	N/A	Yes	N/A	N/A	Bacteria	TBD
M1-259004	41°43'9.925"N 72°39'2.438"W	12/21/18	N/A	N/A	N/A	N/A	Yes	N/A	N/A	Bacteria	TBD
M1-261001	41°42'53.973"N 72°39'1.79"W	12/21/18	N/A	N/A	N/A	N/A	Yes	N/A	N/A	Bacteria	TBD

Outfall / Interconnection ID	Latitude / Longitude	Screening / Sample Date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or Enterococcus	Surfactants	Water Temp	Pollutant of Concern	If required, follow-up actions taken
M1-286004	41°42'56.591"N 72°38'53.377"W	12/21/18	N/A	N/A	N/A	N/A	Yes	N/A	N/A	Bacteria	TBD
M1-262010	41°42'42.546"N 72°38'52.167"W	12/21/18	N/A	N/A	N/A	N/A	Yes	N/A	N/A	Bacteria	TBD
B5-242002	41°41'56.919"N 72°39'17.49"W	12/21/18	N/A	N/A	N/A	N/A	Yes	N/A	N/A	Bacteria	TBD
B5-279001	41°41'54.135"N 72°38'41.733"W	12/21/18	N/A	N/A	N/A	N/A	Yes	N/A	N/A	Bacteria	TBD
B5-269005	41°41'40.282"N 72°39'3.095"W	12/21/18	N/A	N/A	N/A	N/A	Yes	N/A	N/A	Bacteria	TBD
B5-270026	41°41'31.875"N 72°39'0.519"W	12/21/18	N/A	N/A	N/A	N/A	Yes	N/A	N/A	Bacteria	TBD
B5-271039	41°41'26.718"N 72°38'54.569"W	12/21/18	N/A	N/A	N/A	N/A	Yes	N/A	N/A	Bacteria	TBD
B5-272009	41°41'12.068"N 72°38'58.861"W	12/21/18	N/A	N/A	N/A	N/A	Yes	N/A	N/A	Bacteria	TBD
B5-272009A	41°41'10.194"N 72°38'58.36"W	12/21/18	N/A	N/A	N/A	N/A	Yes	N/A	N/A	Bacteria	TBD
M1-214002	41°43'40.57"N 72°40'2.284"W	8/7/2020	N/A	N/A	N/A	N/A	>24200	N/A	N/A	Bacteria	TBD
M1-250026	41°43'12.66"N 72°39'15.634"W	8/7/2020	N/A	N/A	N/A	N/A	465	N/A	N/A	Bacteria	TBD
M1-261001	41°42'53.973"N 72°39'1.79"W	9/2/2020	N/A	N/A	N/A	N/A	1500	N/A	N/A	Bacteria	TBD
M1-286004	41°42'56.591"N 72°38'53.377"W	9/2/2020	N/A	N/A	N/A	N/A	5170	N/A	N/A	Bacteria	TBD
B5-242002	41°41'56.919"N 72°39'17.49"W	9/2/2020	N/A	N/A	N/A	N/A	650	N/A	N/A	Bacteria	TBD

Outfall / Interconnection ID	Latitude / Longitude	Screening / Sample Date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or Enterococcus	Surfactants	Water Temp	Pollutant of Concern	If required, follow-up actions taken

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
M1-214002	Connecticut River	6,10
M1-251020	Connecticut River	6,10
M1-250026A	Connecticut River	10
M1-250026	Connecticut River	6,10
M1-258005	Connecticut River	6,10
M1-259004	Connecticut River	6,10
M1-261001	Connecticut River	6,10
M1-286004	Connecticut River	6,10
M1-262010	Connecticut River	2,6,10
B5-242002	Connecticut River	6,10
B5-279001	Connecticut River	6,10
B5-269005	Connecticut River	10
B5-270026	Connecticut River	6,10

Outfall ID	Receiving Water	System Vulnerability Factors
B5-271039	Connecticut River	-
B5-272009	Connecticut River	6,10
B5-272009A	Connecticut River	6,10

Where SVFs are:

- History of SSOs, including, but not limited to, those resulting from wet weather, high water table, or fat/oil/grease blockages.
- Sewer pump/lift stations, siphons, or known sanitary sewer restrictions where power/equipment failures or blockages could readily result in SSOs.
- Inadequate sanitary sewer level of service (LOS) resulting in regular surcharging, customer back-ups, or frequent customer complaints.
- Common or twin-invert manholes serving storm and sanitary sewer alignments.
- Common trench construction serving both storm and sanitary sewer alignments.
- Crossings of storm and sanitary sewer alignments.
- Sanitary sewer alignments known or suspected to have been constructed with an underdrain system;
- 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.
- Areas formerly served by combined sewer systems.
- Any sanitary sewer and storm drain infrastructure greater than 40 years old in medium and densely developed areas.
- 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).
- 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	Latitude / Longitude	Screening / Sample date	Visual/ olfactory evidence of illicit discharge	Ammonia	Chlorine	Surfactants
N/A						

3.3 Wet Weather Investigation Outfall Sampling Data

Outfall ID	Latitude / Longitude	Sample date	Ammonia	Chlorine	Surfactants
See Part II, Section 2.1					

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
High bacteria count detected at outfall M1_214002 was determined, by GIS mapping and field investigation to be a result of sanitary cross connections in Hartford. Hartford and MDC were notified of the sampling data.							

DRAFT

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: Gary A. Evans, Town Manager	Print name: Derrick Gregor, P.E., Town Engineer
Signature / Date:	Signature / Date: