2021 ANNUAL REPORT

Municipal Separate Storm Sewer System

FARMINGTON, CT

Prepared by

TOWN OF FARMINGTON
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FEBRUARY 2022

MS4 General Permit
Town of Farmington 2021 Annual Report
Existing MS4 Permittee
Permit Number GSM 000090
[January 1, 2021 – December 31, 2021]

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

Part I: Summary of Minimum Control Measure Activities

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

1.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
1-1 Implement public education and outreach	Completed	Year 5: Procure or develop stormwater content related to illicit discharges.	Add to existing library and post to website	DPW	Yearly	Fall 2020 & Summer & Fall 2021	
	Completed	Year 4: Procure or develop stormwater content related to impervious coverage, (metals, oils grease), improper disposal of household waste, preserving wetlands and effects to stormwater, methods of recycling particular materials, and methods of recycling oil and latex paint.	Add to existing library and post to website			Spring, Summer & Winter 2020	
	Completed	Informational material posted to Town Website: http://www.farmington-ct.org/home/showdocument?id=6537	Add to existing library and posted website			ongoing	

1-2 Address education/ outreach for pollutants of concern*	Complete Complete Complete	Year 5: Procure or develop stormwater content related to illicit discharges. Year 4: Procure or develop stormwater content related to impervious coverage, (metals, oils grease), improper disposal of household waste, preserving wetlands and effects to stormwater, methods of recycling particular materials, and methods of recycling oil and latex paint. Informational material posted to Town Website: http://www.farmington-ct.org/home/showdocument?id=6537	Publish Information Publish Information Publish Information	DPW	Yearly	Fall 2020 & Summer & Fall 2021 Spring, Summer & Winter 2020 January 2017	
1-3 Green Efforts Commission	Ongoing	23rd Annual Clean-up Day Committee posted information on social media and newsletters promoting and encouraging residents to participate.	Information posted to website, flyers, Quarterly Town Newsletter, and Everbridge Notification System.	DPW & Green Efforts Committee	Yearly	Spring/Summer 2021	Stormwater Pollution Prevention bookmarks and information pamphlets provided in Town Hall lobby. FRWA: River Cleanup 11/2020 Lawn Watering 06/20 Earth Day Cleanup 04/24/2021 Simple Recycling on-going
1-4 Farmington River Watershed Association	Ongoing	Provided financial assistance to FRWA. Promote FRWA stormwater links and events	Continue to provide assistance to FRWA to assist education efforts, programs and studies of the watershed.	Town of Farmington	Yearly	Spring 2021	
1-5 Stormwater Page on Town Website	Complete	Material has been collected and stormwater website is on-line.	Publish and maintain a stormwater-specific webpage on Town Website	DPW	Jul 1, 2018	Spring 2018	As new information becomes available it is added to the website.

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

- Publish material in the Town's Newsletter
- Host Town-wide Cleanup Day
- Host a Spring and Fall Bulky Waste Collection
- Update Stormwater Page on Town Website as new information becomes available
- Information pamphlets / book marks to be provided at Town Hall in the Spring / Summer

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.
2021 Spring, Summer, Fall and Winter newsletters	All Residents	Clean up day, Pet waste disposal, Illicit Discharges, Household Hazardous Waste disposal of everyday items, Household Hazardous Waste Collections	Pet Waste, Metals, Oils, & Grease Latex Paints	DPW
Stormwater Pollution Prevention bookmarks distributed at Town Hall	Residents	Stormwater Quality	Bacteria, nitrogen and phosphorus	DPW

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

2.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
2-1 Continue availability of Final Stormwater Management Plan to the Public	Complete	Plan is posted to the Town website http://www.farmington-ct.org/departments/engineering/stormwater		DPW	On-going	On-going	Plan is available on Engineering Department page of website
2-1 Comply with public notice requirements for Annual Reports	On-going	Publish Notice about MS4 Plan and Annual Report	Publish Notice on website and through Everbridge	DPW	Jan 31, 2022	Jan 31, 2022	Plan will be posted and available for a 30-day comment period as required.
2-2 Promoted Clean Up Town Event	Ongoing	Publish notice in Town Newsletter, Website, and Everbridge	Residents help remove trash from parks, playgrounds, roadsides and riverbanks	DPW & Green Efforts Committee	Yearly	April 2021	Modified community event took place on April 24, 2021 being mindful of Covid-19 restrictions
2-3 Hosted Household Hazardous Waste Collection Events	Ongoing	Publish notice in Town Newsletter, Website, and Everbridge	Residents dispose of hazardous waste properly	DPW & Green Efforts Committee & Conservation Commission	Yearly	April 24, 2021 June 12, 2021 Oct 16, 2021	
2-4 Hosted Shredding Events	Ongoing	Publish notice in Town Newsletter, Website, and Everbridge	Residents dispose of material properly	DPW Green Efforts Committee	Yearly	April 24,2021 June 12, 2021 Oct 16, 2021	
2-5 Partner with Local Volunteer Organizations	On-going	Provide financial assistance to the FRWA annually. Support Wild and Scenic River Act events.	Financial assistance. Promote & distribute FRWA Wild & Scenic River Act events.	Town of Farmington	Yearly	Spring/Summer 2021	
2-6 Hosted Bulkwaste Pickup	Ongoing	Publish notice in Town Newsletter, Website, and Everbridge	Residents dispose of material properly	DPW	Bi-Annual	April 26-30, 2021 Oct. 18-22, 2021	

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

Host the following Events:

- Household Hazardous Waste Cleanup
- Shredding event
- Townwide Cleanup Day
- Spring and Fall Bulky Waste Collection
- Annual posting of the Stormwater Report for public comment
- Continued posting of the Stormwater Management Plan

2.3 Public Involvement/Participation reporting metrics

Metrics	Implemented	Date	Posted
Availability of the Stormwater Management Plan announced to public	Y	March 15, 2017	http://www.farmington-ct.org/departments/engineering/stormwater
Availability of Annual Report announced to public	Y	January 31, 2022	http://www.farmington-ct.org/departments/engineering/stormwater

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

3.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
3-1 Develop written IDDE program	Completed	Town completed IDDE Plan	Implement IDDE program	DPW	Jul 1, 2018	Plan was completed April 23, 2018	
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas	Completed	Town wide mapping completed	Town wide Mapping	DPW	Jul 1, 2019	Jul 1, 2019	Town continues to update database as needed. Data is stored in town wide GIS mapping database.
3-3 Implement citizen reporting program	Completed	Received and acted on complaints as received	Track citizen complaints	DPW	Jul 1, 2017	Jul 1, 2017	Currently review and act on any complaints as received. Town has included an email link on Town Website.
3-4 Establish legal authority to prohibit illicit discharges	Completed	Reviewed Existing Ordinance for compliance with current MS4 requirements	Enforce ordinance as required	DPW	Jul 1, 2018	July 1, 2018	Existing Ordinance was reviewed and found to satisfy current permit requirements.
3-5 Develop record keeping system for IDDE tracking	On-going	Spreadsheet developed to track IDDE, includes criteria noted in permit	Spreadsheet created	DPW	Jul 1, 2017	July 2018	Current reports in 2021 are limited to erosion control and misuse of a yard drain.
3-6 Address IDDE in areas with pollutants of concern	In Progress	Sampling commenced	Continue with sampling	DPW	Not specified		2018 Wet weather sampling within the Batterson Park Pond Basin (4401-00-1-L1). Due to COVID Pandemic and many property owners working from home, it was determined to refrain from testing during 2020 and 2021due to concerns of coordinating access through private properties. All dry weather screening was completed in 2021 – no

							illicit discharges detected at any outfall during the dry weather screening.

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

Continue with IDDE wet weather screening.
Contract with Consultant to assist with IDDE wet weather screening. Consultant assisted with dry weather screening through 2021.
Maintain master IDDE tracking spreadsheet and ensure all employees involved in IDDE program understand the logging process.
Continue with identifying priority areas and maintaining the detention/retention database.

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

Date of Report	Location / suspected source	Response taken
December 16, 2020	16 Clear Brook	Clear cutting and grading into a conservation easement and alongside a wetland. C&D issued, erosion control installed. New property owner was unaware of the easement area and regulations. Owner filed application with the IWC and worked with a Wetland Scientist on a restoration plan. Plan approved and work completed Spring 2021
November 6, 2020	1200 New Britain Avenue	Clear cutting and grading into a conservation easement and a wetland. C&D issued, erosion control installed. Owner filed application with the IWC and worked with a Wetland Scientist on a restoration plan. Plan approved and awaiting work as part of construction of new home.
May 14, 2021	2 Country Club Drive	Discovered new property owner installed fire pit over yard drain. Drain connects to Town storm drainage system, detention basin, and to nearby stream. Notified owner, and pit was removed and area cleaned.
October 27, 2021	Lot 8383/45 Northwest Drive	Property located in both Farmington and Plainville. Discovered work not completed in conformance with approved plan. Stormwater runoff from rear parking lot was draining directly into an adjacent wetland. Worked with property owner to cut back bit parking area and install WQ infiltration system

3.4 Provide a record of illicit discharges occurring during the reporting period and SSOs occurring July 2014 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)
38 Patrick Flood Rd.	Sept. 21, 2021 (1000 hrs) Sept 22, 2021(2130hrs)	No	20,001 to 50,000 gal	Mechanical Equip. failure – crack in force main	The 14-inch force main out of the pump station broke. Operators and contractors excavated the road to locate the crack and replace the broken pipe. Vac trucks are onsite vacc'ing the inflow from the pump station until the broken pipe is replaced and repair completed.	N/A
South Road Pump Station 181 South Rd.	August 23, 2021 (1930hrs) August 23, 2021 (2115hrs)	No	501 -1,000 gal	Electrical Equip. failure – Eversource transformer blew causing a loss of power at pump station	Operators and maintenance responded within 60 minutes; hooked up generator to get station pumping. The wet well was pumped down and the WPCF crew waited for Eversource to repair.	N/A
	No reported illicit discharges for 2020					
Westfarms Pump Station (500 South Road)	August 25th, 2019 (1000hrs) August 26th, 2019 (0800hrs)	N	N/A	Catastrophic Wear Ring Failure	Critical Spares onsite were installed	N/A
Stanley Pump Station (58 Scott Swamp Rd)	April 17th, 2019 (1230hrs) April 17th, 2019 (1315hrs)	N	<10,000 gal	Station Electrical Failure	New breaker was installed	N/A
7 Wildcat Drive	March 8, 2016 (2000hrs) March 8, 2016 (2100hrs)	N	<100 gal	Mainline backup	Plug was removed from manhole and mainline cleaned	N/A
20 Scott Swamp Road	March 18, 2015 (1330hrs) March 18, 2015 (1430hrs)	N	<1,000 gal	Mainline backup	Manhole and mainline cleaned	N/A
Depot Place (cul-de-sac)	Sept 9, 2014 (0930hrs) Sept 9, 2014 (1030hrs)	N	<500gal	Mainline backup	Manhole and mainline cleaned	N/A
308 Farmington Ave	April 24, 2014 (2230hrs) April 24, 2014 (2330hrs)	N	<1,500gal	Forcemainline backup	Forcemain repaired	N/A

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

Any illicit discharge complaint is received and logged in the tracking spreadsheet, and upon investigation, the DPW Engineering Division is notified as to whether the complaint was valid, the connection removed, or if further action is required. In the case of Erosion Control Violations, the sediment is removed, and the erosion control measures are installed or improved and when necessary, restoration plans are reviewed and approved by the Inland Wetlands Commission.

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
203 Coppermine Road	Repair leaching fields	4300-21-1
56 Carriage Drive	Install new tank and leaching fields	*4315-14-1-L1*
24 Forest Hills Drive	Evaluation Conducted	*4315-00-4-R-13*
22 Hyde Road	Install new tank and leaching fields	*4315-00-4-R5*
124 Mountain Road	Install new tank and leaching fields	*4300-26-1*
52 Northwoods Road	Install new tank and leaching fields	*4300-28-1-L1*
23 Orchard Road	Install new tank and leaching fields	*4401-00-1-L2*
512 Plainville Avenue	Install new tank and leaching fields	*4300-21-1*
513 Plainville Avenue	Install new pipe	*4300-21-1*
11 Poplar Hill Drive	Install new tank and leaching fields	*4300-26-1*
67 Red Oak Hill Road	Install new tank and leaching fields	*4300-00-4+R17*
47 Shady Lane	Install new tank	*4403-01-1*
09 Vine Hill Road	Install new tank	*4300-27-1*
14 White Oak Road	Install new tank	*4300-27-1*
92 Wood Pond Road	Install new tank	*4403-00-1-L1*

Note: All data obtained from Farmington Valley Health District

3.7 IDDE reporting metrics

Metrics	
Estimated or actual number of MS4 outfalls	534
Estimated or actual number of interconnections	137
Outfall mapping complete	100%
Interconnection mapping complete	100%
System-wide mapping complete (detailed MS4 infrastructure)	100%
Outfall assessment and priority ranking	100%
Dry weather screening of all High and Low priority outfalls complete	100%
Catchment investigations complete***	0
Estimated percentage of MS4 catchment area investigated***	0%

***Desktop review of catchment investigations is complete with the intent of conducting field investigations this spring. There are a limited number of catchments that require investigation in Farmington due to the limited System Vulnerability Factors (SVF) that apply to Farmington. The SVFs that apply to Farmington are sewer pump stations, crossing of storm and sanitary sewer alignments, sanitary sewer alignments known or suspected of being constructed with an underdrain system, and sewers in moderate to dense areas that exceed 40 years of age. Should we discover an illicit discharge we will investigate the catchment. To date, no illicit discharges have been detected. No illicit discharges were detected during the dry weather screening of each outfall.

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).

Stormwater training of Town employees is through on-the-job instruction and training by supervisors, consultants, and through employee's attending University of Connecticut Technology Transfer training programs. The primary focus of the training continues to be the cross training of existing employees within the divisions that make up the Department of Public Works, aimed at ensuring a broader understanding of the roles of each member of the staff assigned specific stormwater management responsibilities, and how those activities are integrated to minimize the Town's impact to the environment and to meet the obligations of the stormwater general permit.

The Town held a formal training program for new employees and a refresher for existing employees on March 26, 2019.
During 2020 and 2021, due to gathering limitations imposed by COVID-19 restrictions formal IDDE training was not held. Instead, Highway and Grounds employees were notified during their regular Monday safety meeting to be aware of possible illicit discharges and to report to their supervisor. Formal training will be conducted in 2022.

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

4.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
4-1 Implement, upgrade, and enforce land use regulations or other legal authority to meet requirements of MS4 general permit	Complete	Article IV, Sections 11 and 25 of the Farmington Zoning Regulations requires the submission of an E &S plan for all projects with earth disturbance greater than ½ acre and stormwater quality system designs	The Planning and Zoning application checklist requires the submission of an E&S plan and stormwater design and mitigation.	DPW	Jul 1, 2019	Completed.	The zoning regulations require the submission of complete plans and technical documents that include all soil erosion and sedimentation control parameters and stormwater management and mitigation measures.
4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval	Complete	Town Manager Policy and Procedure#0402 outlines the interdepartmental review requirements.	The Interdepartmental review process is implemented with every Land Use Application.	DPW	Jul 1, 2017	Completed. Implemented prior to 2017.	
4-3 Review site plans for stormwater quality concerns	On-going	The review checklist included in Manager Policy and Procedure #0402 includes Stormwater quality elements	Every Land Use Application is reviewed to ensure compliance with the checklist.	DPW	Jul 1, 2017	Completed. Implemented prior to 2017.	
4-4 Conduct site inspections	Complete / on-going (Long Term Maintenance requirements)	The Planning / Engineering Divisions review the installation of all E & S measures during construction; review as-built plans to ensure all storm drain elements are installed per plan; and long-term maintenance of storm drain elements are the responsibility of the owner.	E&S sign-off required prior to issuance of Building Permit. Review of As-built plan required prior to the issuance of C.O. Long term maintenance plan required as part of all Commercial developments.	DPW	Jul 1, 2017	Completed. Implemented prior to 2017. On-going regarding the implementation of the Long-Term Maintenance requirements for Commercial Developments.	

4-5 Implement procedure to allow public comment on site development	Complete	The public hearing process allows for public comment for all proposed Land Use Applications. The public can voice concerns to DPW. Concerns brought to other departments are transferred to DPW for management.	Public Hearing – meetings are recorded and minutes issued. Other Public Concerns – most concerns and resolution are documented in writing	DPW	Jul 1, 2017	Completed. Implemented prior to 2017.	
4-6 Implement procedure to notify developers about DEEP construction stormwater permit	Complete	Notification provided to applicants disturbing over 5 acres of land.	Notification provided via Engineering Comments. All Land Use approvals are subject to the resolution of Engineering Comments.	DPW	Jul 1, 2017	Completed. Implemented prior to 2017.	
4-7 Regulatory Flexibility for Additional Controls as Needed	On-going	Article IV Sections 11 and 25 allow for flexibility in erosion control practices and stormwater management practices	Allowance of innovative water quality techniques	DPW	On-going	On-going	The Engineering Division permits minor modification of erosion control and water quality measures to meet the specific needs of each site.
4-8 Require Maintenance and Operation Plans	On-going	Article IV, Section 11 of the Zoning Regulations	Land Use conditions of approval that require the submission of Long Term Maintenance Reports submitted to the Town.	DPW	On-going	On-going	Land use condition of approval applied to all commercial and subdivision projects requiring the long-term monitoring of stormwater practices with reports submitted annually to the town.
4-9 Interjurisdictional Agreements	On-going	Review of mapping to identify interjurisdictional stormwater discharges / connections		DPW	On-going	On-going	All new developments within 500 ft of a municipal boundary require notification to the adjacent municipality. All interconnections, if needed, are reviewed,

							and coordinated at that time.

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

1. Require Engineer or qualified professional to conduct E & S inspections and to submit E & S monitoring reports from their contractors or engineers for sites that disturb more than 1 acre of land. Reports to be completed monthly and after rainfall events of more than 1-inch.

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

5.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
5-1 Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning	In Progress	Evaluation of existing regulations for conformance to LID regulations and determine revisions as needed.	During engineering review of development projects town staff is requiring the infiltration of at least the water quality volume; where soils permit. Engineering Comments are conditions of approval to each development project.	DPW	Jul 1, 2021	Jul 1, 2021	Engineering comments require the infiltration of the water quality volume for development projects. Zoning regulations to be revised in 2022 to modify Article IV, Section 25.
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects	Ongoing	Currently require no increase in runoff from proposed developments and concurrence with the CT Stormwater Manual through our Land Use Application approvals.	During engineering review of development projects town staff is requiring the infiltration of at least the water quality volume; where soils permit. Engineering Comments are conditions of approval to each	DPW	Jul 1, 2019	Jul 1, 2019	Engineering comments require the infiltration of the water quality volume for development projects. Zoning regulations to be revised in 2022 to modify Article IV, Section 25.

			development project.				
5-3(a) Identify retention and detention ponds in priority areas	Completed	List of public/private detention/retention ponds and water quality measures has been developed.	Maintain list.	DPW	Jul 1, 2019	Jul 1, 2019	Continue to update detention/retention ponds to MS4 Mapping.
5-3(b) Implement long-term maintenance plan for stormwater basins and treatment structures	(TOWN) On-going (PRIVATE) Ongoing	Town currently maintains structures as required. Currently require owners of private stormwater systems to provide long term maintenance plans and annual reports.	Complete list of structures, perform inspections Continue review and requirements through Land Use Applications.	DPW	Jul 1, 2019	Jul 1, 2019	Continue ongoing inspections and maintenance as required. Requested annual reports for developments approved and constructed within last three years.
5-4 DCIA mapping	On-going	Completed calculation of DCIA for entire Town using CTDEEP approved equations as posted on UCONN NEMO site	Review CTDEEP IC Mapping and calculate DCIA using the CTDEEP/EPA Guidance	DPW	Completed	Ongoing	Calculations complete. Continue to update as required.
5-5 Address erosion and sediment problems in areas with pollutants of concern	On-going	Review projects before, during, and after construction. Continue inspections and make corrections as required and/or notify owners of deficiencies consistent with 5-3A & 5-3B above.	Continue review and inspections	DPW	Ongoing	Ongoing	Town currently reviews project before, during, and after construction. Projects are not approved unless area is stabilized. Cash Bonds are secured if work not completed and released after work has been completed.

5-6 Reduction in Turfed Areas	Complete	Current regulations comply.	Continue to enforce regulations.	DPW	Ongoing	Ongoing	Town Zoning Regulations currently limit impervious coverage to 40%. Limits of tree clearing are strictly reviewed and limited. Zoning Regs also allow for smaller lot sizes in an effort to provide greater preservation and protection of open space and other valuable resources.
5-7 Consistency with Stormwater Quality Manual	On-Going	Article IV, Section 25 – Stormwater requires consistency with the 2004 Stormwater Quality Manual.	Stormwater management practices are consistent with the Stormwater Quality Manual.	DPW	Jul 1, 2018	Jul 1, 2018	
5-8 Coordination with Local Health Department	Ongoing	Continue to actively coordinate with local Health Department (FVHD)	Continue to keep Town and FVHD informed about ongoing activities.	DPW	Ongoing		The Town includes FVHD on all Land Use and Building Permit Applications to coordinate comments. FVHD contacts the Town regarding septic systems in need of repair to discuss viability of connecting to the Town Sanitary Sewer System.

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

Continue requiring annual stormwater monitoring reports as part of Land Use Applications.
Continue to require erosion and sedimentation control monitoring for active construction projects.
Continue inspections of Town stormwater infrastructure

5.3 Post-Construction Stormwater Management reporting metrics

Metrics	
Baseline (2012) Directly Connected Impervious Area (DCIA)	165.4 acres
DCIA disconnected (redevelopment plus retrofits)	Review and calculations on-going
Retrofits completed (public and private)	8
DCIA disconnected (area)	Review and calculations ongoing
Estimated cost of retrofits (public only)	$10,000.00
Detention or retention ponds identified	22 that are Town owned / maintained

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

CT DEEP from EPA guidance on DCIA. Implemented the use of the EPA formulas for calculating the DCIA.

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

6.1 BMP Summary

BMP	Status	Activities in current reporting period	Measurable goal	Department / Person Responsible	Due	Date completed or projected completion date	Additional details
6-1 Develop/implement formal employee training program	On-going	Weekly staff meetings with Highway and Grounds employees to review Best Management Practices, safety and general housekeeping items. Industrial General Permit and MS4 Permit training session – annually in the spring.	Attendance taken at each meeting.	DPW	Jul 1, 2017	On-going	During 2020 and 2021, due to gathering limitations imposed by COVID-19 restrictions formal IDDE training was not held. Instead, Highway and Grounds employees were notified during their regular Monday safety meeting to be aware of possible illicit discharges and to report their supervisor.
6-2 Implement MS4 property and operations maintenance	On-going	**Highway & Grounds** Annual Fuel System Training – every January; use of spill prevention kits is reviewed annually at training, kits are inspected monthly. Hazardous Material program – SDS sheets are assembled and kept at Highway garage. Sheets are reviewed quarterly at Safety Training.	Attendance taken at each meeting.	DPW	Jul 1, 2018	On-going	Fuel system is part of the Health and Safety program. It is inspected monthly by employees and annually by an independent subcontractor as required by DEEP. Additional training last fall to discuss and evaluate responses to spill scenarios
6-3 Implement coordination with interconnected MS4s	On-going	Continue to coordinate with adjoining municipalities as needed.	Quantify the number of interjurisdictional connections that exist and with which agency coordination is required.	DPW	On-going	On-going	The DPW Directors of adjoining municipalities coordinate as needed regarding the operation and maintenance of overlapping storm systems.

6-4 Develop/implement program to control other sources of pollutants to the MS4	On-Going	Obtained list of Industrial General Permit registrants. Reviewing list and comparing to previous monitoring locations and the results.	List of General Permit registrants.	DPW	On-going	On-going	Existing IDDE Ordinance in effect. Provides legal authority to pursue corrections to illicit discharges.
6-5 Evaluate additional measures for discharges to impaired waters	On-going	*Batterson Park Pond* Nitrogen and Phosphorus pollutant of concern. Identified Town owned properties in watershed. *Pequabuck River & Roaring Brook* Bacteria pollutant of concern. Identified Town owned properties in watersheds	Reviewing use and maintenance practices at Town owned properties. Properties are limited to (2) Schools. Remaining Town-owned properties are Open Space. Town-owned properties are limited to Open Space and Westwoods Golf Course.	DPW	On-going	On-going	Batterson Park Pond: The two schools have very limited applications of fertilizers or pesticides on the athletic fields, in accordance with state regulations. Pequabuck River: Westwoods Golf Course has occasional problems with geese congregation, they employ the use of noise-making devices to disperse the geese. Roaring Brook: Town owned property within the watershed is limited to open space land left in its natural *wooded state.*
6-6(a) Track projects that disconnect DCIA	On-going	Review Land Use Applications for 2019, 2020 and 2021 – 8 redevelopment projects; all include infiltration of the Water Quality Volume.	Review of projects from the last 5 years. Review retrofit options at Town-owned properties	DPW	Jul 1, 2017	On-going	Developed spreadsheet of approved projects and reviewed storm drain improvements for each project.
6—6(b) Implement retrofit projects to disconnect 2% of DCIA	On-going	Review historic Public/Private projects and track current projects to ensure DCIA reduction.	Tracking list annotated with reduction percentages where applicable.	DPW	Jul 1, 2021	On-going	Quantify number of projects for 2019, 2020 and 2021

6-7 Implement infrastructure repair/rehab program	On-going	Highway Superintendent and Director of Public Works evaluate and prioritize infrastructure repairs	Basins and systems in need of repair are addressed during roadway reconstruction projects, and as needed to ensure functionality of system.	DPW	Jul 1, 2021	On-going	IDDE testing and outfall mapping conducted to date has not found deficiencies in the current system.
6-8 Develop/implement plan to identify/prioritize retrofit projects	On-going	Existing DCIA for Farmington calculated by watershed. Watershed areas then ranked by DCIA percentage and areas that drain to impaired waterbodies.	Continue to focus on public/private development and redevelopment projects to reduce DCIA.	DPW	Jul 1, 2020	On-going	Infiltration requirements have been added as a standard engineering comment for all new and redevelopment projects.
6-9 Develop/implement street sweeping program	On-going	All municipally owned streets, parking lots and school parking lots are swept annually each spring.	2021 sweeping activities occurred Summer 2021	DPW	Jul 1, 2017	Completed Annually	
6-10 Develop/implement catch basin cleaning program	On-going	905 catch basins were cleaned in summer 2021	1. Quantity of catch basins cleaned. 2. Volume of material removed. 3. Notification of infrastructure in disrepair where applicable.	DPW	Jul 1, 2020	Completed Annually	Annual spring municipal street and parking lot sweeping greatly reduces the volume of sediment that can enter the drainage system and be trapped in the catch basin sumps. The contractor notes all infrastructure that is in disrepair and any basin that has an unusually large accumulation of sediment.
6-11 Develop/implement snow management practices	On-going	Deicing material is stored in a covered barn / shed. Material used) is Cargill Clearlane (2020/2021) and Morton road salt. Employees receive material handling training each year prior to the start of snow season. Deicing material is dispersed with truck mounted sanders using the automated Cirus Controls.	Volume of deicing agent used per season Lane miles treated per season	DPW	Jul 1, 2018	Fall / Winter 2017/2018	

6-12 Develop / implement Parks and Open Space management procedures	On-going	Fertilizers are used sparingly at many municipal/school properties. Pesticides are used only when needed in accordance with state laws Grass clippings are recycled into the lawns. Leaf collection at all municipal / school lots are composted at the Town's Leaf compost facility. Majority of Town owned land in Farmington is left in natural forested state.	Fertilizer and pesticide use rates for 2021 per manufacturer requirements. Commercial Applicator Pesticide Use Summary Reports issued for applications to Town owned land. Leaf compost available to municipal residents at no-cost at leaf compost facility.	DPW	Jul 1, 2018	On-going	
6- 13 Implement / enforce pet waste management practices	On-going	Pet Waste disposal requirement signs are posted at all parks and trails. There are no dog parks in Farmington. There are no known pet waste issues that pose an immediate threat to wetlands or waterbodies.	Improve Pet Waste disposal signage. Educational material distributed to residents.	DPW	Jul 1 2017	On-going	
6-14 Develop / implement water fowl management practices	On-going	Canada Geese are known to congregate at Westwoods Golf Course. Noise-making devices are used to disperse geese. There is no known issue of residents feeding the geese.	Continued use of noise-making devices to disperse geese.	DPW	Jul 1, 2017	On-going	
6-15 Review and continue implement plan for vehicle storage, maintenance, fueling, washing, etc.	On-going	**Highway and Grounds:** All vehicles stored inside. Vehicle maintenance is conducted at the Highway Garage. There is a Vehicle wash bay at the Highway Garage connected	Ensure compliance with Industrial Stormwater permits.	DPW	Jul 1, 2017	On-going	

		to the POTW through an oil/water separator. There is a vehicle fueling station for all municipal vehicles at the Highway Garage. **Police Dept**. All vehicles are stored outside in a locked enclosure. Vehicle maintenance is conducted at contracted maintenance facilities. Police vehicle washing is done through a contract with a local vendor at an off-site location. Vehicle fueling takes place at the Highway Garage. **Fire Dept.** All fire trucks are stored inside at the respective fire departments. Fire truck maintenance is conducted off-site at contracted maintenance facilities. Fire Truck Fueling occurs at the Highway Garage. All other Municipal vehicles are stored outside; and are maintained off-site at contracted maintenance facilities. Fueling occurs at the Highway Garage.					

6-16 Leaf Management	On-going	Town-wide Leaf Collection program.	Leaf Collection conducted annually through the month of November along all municipal streets.	DPW	Jul 1, 2017	On-going	

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

January – Annual Fuel System Training

Quarterly – Hazardous Material / Safety Mtgs

Household Hazardous Waste Removal Day – three times

Weekly safety meetings

Stormwater Pollution Prevention Plan / MS4 training – annually in spring

6.3 Pollution Prevention/ Good Housekeeping reporting metrics

Metrics	
Employee training provided for key staff	(yes) / weekly & quarterly, Annual Fuel System Training, Annual Industrial Permit, MS4 training.
Street sweeping	Yes
Curb miles swept	240 miles
Volume (or mass) of material collected – Includes Muni. lots, muni. roads and school lots	552.5cy
Catch basin cleaning	YES
Total catch basins in priority areas	3510
Total catch basins in MS4	3515
Catch basins inspected: basins are inspected for disrepair at time of cleaning and throughout year by DPW personnel	3515 – all catch basins have been inspected during the permit
Catch basins cleaned:	905
Volume (or mass) of material removed from all catch basins	98 CY
Volume removed from catch basins to impaired waters (if known)	22 CY
Snow management	
Type(s) of deicing material used – Cargill Clearlane and Morton Road Salt	Salt
Total amount of deicing material applied	1486.18 Tons for January 1, 2021 through December 31, 2021
Type(s) of deicing equipment used	Truck mounted spreader with Cirus Controls
Lane-miles treated	120 miles / storm
Snow disposal location	Tunxis Mead gravel parking lot when needed due to accumulation.
Staff training provided on application methods & equipment	Yes/Annually prior to snow season.

Municipal turf management program actions (for permittee properties in basins with N/P impairments) (East Farms and IAR are in the Batterson Park Pond Basin)	
Reduction in application of fertilizers (since start of permit)	0%
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) (No Dog Parks, Batterson Pond Park – owned by City of Hartford, no public sites with failing septic systems.)	
Cost of mitigation actions/retrofits	$

6.4 Catch basin cleaning program

Briefly describe the method used to optimize your catch basin inspection and cleaning schedule.
In 2019 approximately 25% of the town's catch basins were cleaned. The basins were located in the southwest quadrant of town, including the industrial areas of Spring Lane and Hyde Road. In 2020 due to COVID and the freezing of expenditures, there were no catch basins cleaned. In 2021 approximately 25% of the town's catch basins were cleaned. The basins were located in the northwest corner of the Town consisting of (Snow Routes 7-9 and 11). The town plans to continue to clean catch basins each year on a rotating basis. Additionally, catch basin inspections are performed throughout the year by DPW personnel.

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.
Work on this section commenced in 2018 and has been optimized in 2019 with the updated impervious coverage numbers available on the NEMO website. The Town of Farmington has calculated the baseline DCIA utilizing the equations posted on the CT NEMO website. The Town of Farmington used the equations to estimate the DCIA based on the land use in each basin. The basins were then ranked from highest DCIA percentage to lowest and the basins that drain to an impaired waterbody were highlighted and were also moved to the top of the list. The next tasks will involve the Town of Farmington reviewing the list, determining where town owned property is located within the priority areas and evaluating the opportunity for retrofit projects. The Town will then review options for appropriate retrofit projects. Additionally, the Town has begun issuing standard engineering comments to all new development and redevelopment projects requiring the infiltration of the water quality volume, as soil conditions permit. The engineering comments are adopted as conditions of approval by the Plan and Zoning Commission. Since beginning this practice the Town has required infiltration on numerous projects. Within the last two to three years there have been 7 private development / redevelopment projects, and 1 town redevelopment project, that have been constructed. Upcoming projects which will include infiltration practices include the redevelopment of the high school.

Bridgehampton subdivision has sand filters installed at the back of catch basins for infiltration of the water quality volume. Once the road is accepted by the town, these systems will come online; they have been kept offline during construction to preserve their integrity. This will further reduce the DCIA in a critical tributary to the Farmington River.

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. Section to be completed for the 2019 Annual Report.]

The goal of achieving a 1% DCIA disconnection in years 4 and 5 of the permit will be accomplished through a combination of redevelopment projects and retrofit projects, as projects become available through the permitting process. This will involve a combination of private and public projects.

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.]

The goal of achieving a 1% DCIA disconnection in the 5 years following the permit will be accomplished through a combination of redevelopment projects and retrofit projects, as projects become available through the permitting process. This will involve a combination of private and public projects.

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.
Town had commenced wet weather sampling of impaired waterbodies in April 2018. Initial focus was to review the Batterson Park Pond area (Basin 4401-00-1-L1). Sampling consisted of (8) outlets flowing immediately upstream of the pond. Of the (8) samples (2) were found to exceed Total Nitrogen (N) which is one of the two pollutants of concerns. The storm drainage connects to multiple properties with large professional office developments.

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?**
D4-0075	4/25/18	Nitrogen/Phosphorus	Total N <1.7 mg/L Total P = 0.108 mg/L	Tunxis Laboratories	No
GGG-0075	4/25/18	Nitrogen/Phosphorus	Total N = 3.8 mg/L Total P = 0.06 mg/L	Tunxis Laboratories	Yes
PPP-075	4/25/18	Nitrogen/Phosphorus	Total N = 2.7 mg/L Total P = 0.080 mg/L	Tunxis Laboratories	Yes
F4-0075	4/25/18	Nitrogen/Phosphorus	Total N <1.7 mg/L Total P = 0.074 mg/L	Tunxis Laboratories	No
G4-0075	4/25/18	Nitrogen/Phosphorus	Total N <1.7 mg/L Total P = 0.092 mg/L	Tunxis Laboratories	No
K4-0075	4/25/18	Nitrogen/Phosphorus	Total N <1.7 mg/L Total P = 0.054 mg/L	Tunxis Laboratories	No
F5A-0075	4/25/18	Nitrogen/Phosphorus	Total N <1.7 mg/L Total P = 0.087 mg/L	Tunxis Laboratories	No
F5B-0075	4/25/18	Nitrogen/Phosphorus	Total N <1.7 mg/L Total P = 0.064 mg/L	Tunxis Laboratories	No

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
GGG-0075	Investigation of outfall drainage area continues. Area located in Professional Office Zone with multiple properties.	Contact has been made with owners/property management to discuss lawn care and work to develop acceptable BMP's and IPM Plan.
PPP-075	Investigation of outfall drainage area continues. Area located in Professional Office Zone with multiple properties.	Contact has been made with owners/property management to discuss lawn care and work to develop acceptable BMP's and IPM Plan.

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, 2021.

Screening to be conducted Spring / Summer 2022.

Outfall	Sample Date	Parameter(s)	Results	Name of Laboratory (if used)

Part III: Additional IDDE Program Data

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

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

1. Catchment ID (DEEP Basin ID)	2. Category	3. Rank	Comments
4300-28-1-L2	High	1	Dense Zoning. Past testing of outlet DDD-0190 (Lakeshore/Brickyard) revealed high bacteria/coliform inspections and further investigations has not revealed cause.
4300-00-4+R15	High	2	Very old sanitary sewers in UNVL Center area. Potential for I/I. High DCIA. Old commercial development area.
4315-13-2-L2	High	3	Large area of older manufacturing uses. High DCIA. Most other areas consist of areas with modern sanitary sewers and manufacturing uses. Located within the Aquifer Protection Zone.
4314-09-1	High	4	High DCIA. Area fully sewered.
4401-00-1-L2	High	5	Mostly sewered. Concerns with Fairview Drive and Orchard Road area with no sanitary sewer and history of septic system repairs and failures. (Proposed sewer project declined by neighborhood.)
4315-13-1	High	6	High DCIA. Area fully sewered. Many modern residential developments with stormwater quality control. Should review older manufacturing on Spring Lane.
4403-04-1-L1	High	7	High DCIA. Most area along Rte 4 is under State of CT control. Fully sewered. Many commercial developments with modern stormwater quality controls. Should review older commercial developments along north side of Farmington Avenue.
4300-20-1-L2	High	8	Residential developments. Fully sewered. Very dense zoning. Drains to Lake Garda.
4403-01-1	High	9	Mostly sewered. Concerns with Woodruff/Ridgeview/ and Woodpond areas area with no sanitary sewer and history of septic system repairs and failures.
4300-00-5+R1	High	10	Very old sanitary sewers. Potential for I/I. High DCIA.
4315-00-4-R5	High	11	Mainly residential developments. Limited public sewer.
4315-15-1	High	12	Very old sanitary sewers. Potential for I/I. High DCIA.
4401-00-1-L1	High	13	Old residential developments. Fully sewered.

4315-13-1-L1	High	14	Mainly residential developments. Mostly sewered.
4315-00-4-R6	High	15	Mainly residential developments. Limited sewer availability.
4300-00-4+R16	Low	16	Fully sewered and no signs of illicit discharges.
4300-20-2-R1	Low	17	Fully Sewered. Large Open Space Area.
4312-00-2-R2	Low	18	Mostly private and State of CT outlets.
4403-00-1-L1	Low	19	Fully Sewered. Large Open Space Areas.
4300-28-1	Low	20	Fully sewered. Large golf course. Limited storm drainage outlets. Many drywells located along edge of road in Devonwood sections.
4300-20-1	Low	21	Mostly sewered. Large area of Open Space.
4300-21-1	Low	22	Mostly sewered. Large areas of Open Space.
4300-26-1	Low	23	Mostly sewered. Large area of Open Space. Limited number of storm outlets.
4300-28-1-L1	Low	24	Fully sewered. Limited number of storm drainage outlets. Many drywells located along edge of road in Devonwood sections. Large Open Space Area.
4300-00-4+R14	Low	25	Fully sewered. Modern residential construction with stormwater quality controls.
4300-25-1	Low	26	Fully sewered. Large areas of Open Space. Limited number of storm drainage outlets.
4300-27-1	Low	27	No sewer. Large residential zoning.
4300-00-5+R4	Low	28	Large golf course. Limited number of storm drainage outlets. Drywells located along edge of road in Devonwood sections.
4300-00-5+R3	Low	29	No sewer. Large residential zoning. Limited number of storm drainage outlets.
4315-14-1-L1	Low	30	Mostly sewered. Large amounts of Open Space.
4300-29-1	Low	31	No sewer. Large residential zoning. Limited number of storm drainage outlets.
4300-00-4+R17	Low	32	Fully sewered. Large areas of Open Space, Parks, and athletic fields.
4403-02-1	Low	33	No sewer. Large residential zoning. Limited number of storm drainage outlets.
5200-01-1	Low	34	Large amounts of Open Space. Large Residential Zoning. Fully sewered. Only (2) storm outlets with no signs of illicit discharges.

4300-22-2-R1	Low	35	Mostly sewered. Large areas of Open Space. Large recent residential development with stormwater quality controls.
4315-15-1-L1	Low	36	Large amounts of Open Space and undevelopable land. No sewers, however no signs of any illicit discharges to storm.
4403-02-1-L1	Low	37	Large areas of open reserved farmland. Only one storm drainage outlet.
4403-00-1-L2	Low	38	No sewer. Only (2) storm drainage outlets.
4401-02-1	Excluded	39	Majority of area outside of Farmington. No Town owned outlet's
4401-01-1	Excluded	40	Majority of area outside of Farmington. No business's or other areas for illicit discharges.
4315-14-1	Excluded	41	High DCIA. Area fully sewered. No Town stormwater outlets.
4315-11-1	Excluded	42	Area fully sewered. No Town stormwater outlets.
4300-20-3-R1	Excluded	43	No Town owned storm drainage outlet's
4300-23-1	Excluded	44	Majority of area outside of Farmington. No business's or other areas for illicit discharges.
4315-13-2-R1	Excluded	45	No storm drainage inlets/outlets. No Development at this time.
4300-00-4+R13	Excluded	46	Majority of area outside of Farmington. No business's or other areas for illicit discharges.
4300-00-5+R5	Excluded	47	Large areas of open reserved farmland. Only one storm drainage outlet. No potential for illicit discharges.
4300-00-5+R2	Excluded	48	Large golf course. Only one storm drainage outlet (cross culvert). No potential for illicit discharges.
5200-00-1-L1	Excluded	49	Open Space Area. No business's or other areas for illicit discharges.
4300-24-1	Excluded	50	Majority of area outside of Farmington. No business's or other areas for illicit discharges.
4300-22-1	Excluded	51	Majority of area outside of Farmington. No business's or other areas for illicit discharges.

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 / Interconn. ID	Latitude / Longitude	Screening / sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or enterococcus	Surfactants	Water Temp	Pollutant of concern	If required, follow-up actio taken
0	41.74868 -72.87398	8/10/2021	0	0	305	0.03			72.1		
0	41.74907 -72.87437	8/10/2021	0	0	327	0.03			72.1		
512	41.75591 -72.85808	8/18/2021									
513	41.75587 -72.8581	8/18/2021									
514	41.75587 -72.85823	8/18/2021									
516	41.75584 -72.85813	8/11/2021	0	0	367	0.03			79.2		
517	41.75652 -72.85779	8/11/2021	0	0	245	0.02			78.4		
522	41.75655 -72.85781	8/11/2021	0	0	245	0.02			78.4		
524	41.7574 -72.85768	8/18/2021	0	0	267	0.02			70.2		
528	41.75973 -72.85799	8/16/2021									
533	41.76034 -72.85775	8/11/2021	0	0	378	0.02			76.5		
557	41.75711 -72.81513	8/10/2021	0	0	369	0.02			73.7		
568	41.75134 -72.89573	8/18/2021	0	0	276	0.01			72		
623	41.75477 -72.85821	8/18/2021									
630	41.75181 -72.86297	8/16/2021									

Outfall / Interconn. ID	Latitude / Longitude	Screening / sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or enterococcus	Surfactants	Water Temp	Pollutant of concern	If required, follow-up actio taken
674	41.75078 -72.84132	8/11/2021									
696	41.75303 -72.81738	8/10/2021									
929	41.73793 -72.86439	8/11/2021									
1106	41.69212 -72.83443	8/18/2021									
1204	41.73438 -72.87623	8/10/2021	0	0	479	0.02			68.5		
1209	41.73668 -72.87432	8/10/2021	0	0	485	0.02			68.5		
1214	41.7348 -72.87574	8/10/2021	0	0	433	0.02			68.9		
1221	41.73436 -72.87624	8/10/2021	0	0	521	0.03			69.2		
1241	41.73715 -72.87249	8/10/2021									
1834	41.74626 -72.90141	8/18/2021									
1842	41.74511 -72.90148	8/10/2021									
1852	41.74845 -72.89501	8/18/2021	0	0	402	0.03			72.4		
1865	41.74767 -72.89936	8/18/2021									
1893	41.74562 -72.89046	8/10/2021	0	0	665	0.04			74.8		
2033	41.74609 -72.86661	8/11/2021									
2047	41.74526 -72.86328	8/11/2021									
2060	41.74892 -72.85931	8/18/2021									
2114	41.74755 -72.85529	8/11/2021									
2116	41.74517 -72.85442	8/18/2021									
2157	41.74932 -72.83697	8/11/2021									

Outfall / Interconn. ID	Latitude / Longitude	Screening / sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or enterococcus	Surfactants	Water Temp	Pollutant of concern	If required, follow-up actio taken
2160	41.74779 -72.83527	8/11/2021									
2165	41.74777 -72.83533	8/11/2021									
2176	41.74494 -72.83532	8/11/2021									
2195	41.749 -72.83064	11/2/2021									
2199	41.74942 -72.83045	11/2/2021									
2245	41.74588 -72.81099	8/10/2021									
2257	41.74668 -72.80833	8/10/2021									
2335	41.74429 -72.90021	11/3/2021									
2345	41.74364 -72.89571	8/10/2021									
2420	41.73988 -72.88318	8/10/2021									
2421	41.73998 -72.88012	8/10/2021									
2423	41.74131 -72.88346	8/10/2021	0	0	246	0.02			71.5		
2424	41.74067 -72.88624	8/10/2021	0	0	375	0.01			71.1		
2472	41.74136 -72.87337	8/18/2021									
2473	41.74093 -72.87404	8/18/2021	0	0	212	0.02			75.6		
2475	41.74338 -72.87759	8/10/2021	0	0	247	0.03			71.6		
2479	41.7438 -72.86476	8/11/2021									
2494	41.74183 -72.86194	8/18/2021									
2495	41.74245 -72.87035	8/10/2021	0	0	212	0.01			74.1		
2534	41.74168 -72.86551	11/2/2021									

Outfall / Interconn. ID	Latitude / Longitude	Screening / sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or enterococcus	Surfactants	Water Temp	Pollutant of concern	If required, follow-up actio taken
2575	41.74304 -72.84234	8/11/2021	0	0	248	0.02			78.8		
2591	41.74271 -72.8375	8/11/2021									
2594	41.74365 -72.84128	8/11/2021									
2633	41.74362 -72.82883	8/11/2021	0	0	200	0.01			74.8		
2637	41.74091 -72.81287	8/10/2021	0	0	495	0.02			74.6		
2722	41.73704 -72.90029	8/10/2021	0	0	365	0.02			77.2		
2756	41.73667 -72.89881	8/10/2021									
2781	41.73473 -72.88212	8/10/2021									
2828	41.73836 -72.86822	8/11/2021									
2831	41.73885 -72.87316	8/10/2021									
2835	41.73369 -72.87703	8/10/2021	0	0	661	0.02			68.4		
2836	41.73402 -72.87656	8/10/2021	0	0	607	0.01			68.7		
2843	41.73587 -72.86576	8/11/2021									
2896	41.73372 -72.83201	8/11/2021									
2928	41.75014 -72.87366	8/17/2021									
2996	41.73282 -72.87844	8/10/2021	0	0	557	0.03			69.4		
3001	41.73057 -72.88075	8/10/2021	0	0	105	0.01			69.4		
3140	41.73301 -72.89778	8/10/2021									
3142	41.73275 -72.89764	11/3/2021									
3143	41.73313 -72.89732	8/10/2021									

Outfall / Interconn. ID	Latitude / Longitude	Screening / sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or enterococcus	Surfactants	Water Temp	Pollutant of concern	If required, follow-up actio taken
3151	41.73287 -72.89652	8/10/2021	0	0	253	0.01			73.4		
3166	41.73104 -72.89925	8/10/2021									
3167	41.72925 -72.8996	8/10/2021	0	0	234	0.02			73.2		
3194	41.73222 -72.89697	8/10/2021									
3354	41.73027 -72.88041	8/10/2021	0	0	145	0.01			69.5		
3368	41.72953 -72.87122	8/11/2021									
3398	41.73296 -72.87767	8/10/2021	0	0	448	0.02			67.8		
3402	41.73298 -72.87763	8/10/2021									
3403	41.73294 -72.87769	8/10/2021	0	0	467	0.02			68.3		
3404	41.73289 -72.87803	8/10/2021	0	0	503	0.02			69.2		
3450	41.73151 -72.86979	8/11/2021									
3462	41.72933 -72.86014	8/11/2021									
3856	41.72679 -72.85893	8/11/2021									
4991	41.70507 -72.8742	8/11/2021	0	0	312	0.04			78.7		
5298	41.7073 -72.80421	8/11/2021									
5302	41.70758 -72.80423	8/11/2021	0	0	917	0.11			76.1		
5348	41.7105 -72.80167	8/18/2021	0	0	314	0.03			74.7		
5966	41.72264 -72.85057	8/18/2021									
6648	41.75023 -72.89469	8/10/2021									
6816	41.75869 -72.8269	8/18/2021									

Outfall / Interconn. ID	Latitude / Longitude	Screening / sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or enterococcus	Surfactants	Water Temp	Pollutant of concern	If required, follow-up actio taken
6838	41.75404 -72.85882	8/11/2021	0	0	312	0.03			78.6		
6839	41.75475 -72.8584	8/18/2021	0	0	315	0.03			71.2		
6840	41.75082 -72.85797	8/18/2021									
6847	41.75463 -72.81863	8/10/2021									
6857	41.75433 -72.81665	8/10/2021	0	0	401	0.02			73.4		
6860	41.75244 -72.81869	8/10/2021									
6862	41.75079 -72.80996	8/11/2021									
6887	41.74526 -72.90141	8/10/2021	0	0	355	0.02			73.7		
6889	41.74563 -72.89045	8/10/2021									
6890	41.74905 -72.89349	8/10/2021									
6894	41.74784 -72.88564	8/10/2021									
6907	41.74784 -72.873	8/10/2021	0	0	428	0.03			71.9		
6912	41.74915 -72.87462	8/10/2021	0	0	312	0.02			72.2		
6915	41.74856 -72.85919	8/18/2021									
6925	41.74261 -72.85329	8/16/2021									
6926	41.74927 -72.83634	8/11/2021									
6927	41.74932 -72.83623	8/11/2021									
6928	41.74254 -72.84006	8/11/2021									
6932	41.73906 -72.84249	8/11/2021									
6934	41.74366 -72.82867	8/11/2021	0	0	205	0.01			74.8		

Outfall / Interconn. ID	Latitude / Longitude	Screening / sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or enterococcus	Surfactants	Water Temp	Pollutant of concern	If required, follow-up actio taken
6937	41.74454 -72.80685	8/10/2021									
6938	41.7465 -72.80405	8/10/2021									
6939	41.74847 -72.80417	8/10/2021	0	0	245	0.01			73.7		
6941	41.74316 -72.89853	8/10/2021									
6947	41.73932 -72.90073	8/10/2021	0	0	405	0.02			72.4		
6952	41.73808 -72.89829	8/10/2021									
6953	41.73784 -72.8988	8/10/2021									
6956	41.73699 -72.90173	8/10/2021									
6958	41.74144 -72.88702	8/10/2021	0	0	319	0.01			71.2		
6959	41.7414 -72.88454	8/10/2021									
6960	41.74211 -72.88551	8/10/2021	0	0	137	0.02			71.3		
6963	41.74322 -72.88357	11/2/2021									
6965	41.73492 -72.86673	8/11/2021									
6967	41.74218 -72.87098	8/10/2021	0	0	212	0.01			74.1		
6968	41.74185 -72.86815	11/2/2021									
6969	41.74086 -72.86329	11/2/2021									
6981	41.74351 -72.79274	8/18/2021									
6999	41.73509 -72.90118	11/2/2021									
7000	41.73507 -72.90116	11/2/2021									
7001	41.73352 -72.89491	8/10/2021									

Outfall / Interconn. ID	Latitude / Longitude	Screening / sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or enterococcus	Surfactants	Water Temp	Pollutant of concern	If required, follow-up actio taken
7003	41.73715 -72.88729	8/10/2021	0	0	308	0.01			72.4		
7005	41.73732 -72.88672	8/10/2021	0	0	319	0.01			72.3		
7007	41.73623 -72.88628	8/10/2021									
7010	41.73499 -72.86153	8/12/2021									
7011	41.73733 -72.84322	8/11/2021									
7015	41.73529 -72.84374	8/11/2021									
7025	41.73795 -72.81282	8/10/2021									
7026	41.73711 -72.81297	8/10/2021									
7090	41.73245 -72.86783	8/11/2021									
7092	41.73244 -72.86782	8/11/2021									
7094	41.73243 -72.8678	8/11/2021									
7096	41.73242 -72.86779	8/11/2021									
7098	41.73288 -72.86294	8/11/2021									
7099	41.73117 -72.86321	8/11/2021									
7100	41.73003 -72.86298	8/11/2021									
7155	41.72233 -72.85855	8/11/2021	0	0	515	0.03			72.1		
7158	41.72465 -72.85721	8/11/2021									
7168	41.72353 -72.8334	11/2/2021									
7177	41.7224 -72.80737	8/18/2021									
7245	41.7134 -72.83824	8/18/2021									

Outfall / Interconn. ID	Latitude / Longitude	Screening / sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or enterococcus	Surfactants	Water Temp	Pollutant of concern	If required, follow-up actio taken
7249	41.71595 -72.83418	8/12/2021									
7258	41.71607 -72.81658	8/18/2021									
7296	41.70725 -72.83476	8/12/2021									
7324	41.70574 -72.87404	8/11/2021	0	0	547	0.04			78.9		
7364	41.74772 -72.85783	8/11/2021	0	0	782	0.04			82.4		
7367	41.75459 -72.81035	8/11/2021	0	0	236	0.02			73.8		
7369	41.73548 -72.81358	8/10/2021	0	0	433	0.03			74.8		
7372	41.74029 -72.81301	8/10/2021	0	0	561	0.02			74.4		
7576	41.75196 -72.89539	8/18/2021	0	0	314	0.02			73.4		
7584	41.75317 -72.89533	8/10/2021									
7587	41.75323 -72.89535	8/10/2021									
7597	41.75513 -72.89628	8/10/2021									
7598	41.75554 -72.89677	8/10/2021									
7601	41.75517 -72.89624	8/10/2021									
7769	41.73035 -72.83177	8/18/2021									
7778	41.73001 -72.83382	8/17/2021									
7804	41.7306 -72.83191	11/2/2021									
7805	41.7306 -72.83191	8/18/2021									
7806	41.7306 -72.83191	8/18/2021									
7848	41.73103 -72.83572	11/2/2021									

Outfall / Interconn. ID	Latitude / Longitude	Screening / sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or enterococcus	Surfactants	Water Temp	Pollutant of concern	If required, follow-up actio taken
7849	41.73101 -72.83571	11/2/2021									
7850	41.73099 -72.83573	11/2/2021									
7852	41.73098 -72.83574	11/2/2021									
7853	41.73103 -72.83577	11/2/2021									
7860	41.75317 -72.8953	8/10/2021									
7889	41.75167 -72.89554	8/18/2021									
7894	41.75176 -72.89615	8/18/2021									
7928	41.75194 -72.89926	11/2/2021									
7933	41.75157 -72.89957	8/10/2021									
7956	41.75067 -72.90168	11/2/2021									
8295	41.73665 -72.87606	8/10/2021									
8329	41.70385 -72.85087	8/10/2021									
8330	41.70385 -72.85087	8/10/2021									
8500	41.76186 -72.85921	8/11/2021									
8571	41.72106 -72.89213	8/10/2021	0	0	758	0.04			72.4		
8640	41.72106 -72.89209	8/10/2021	0	0	678	0.04			72.6		
9107	41.73237 -72.86748	8/11/2021									
9144	41.74373 -72.89183	8/10/2021									
9146	41.74234 -72.84335	8/11/2021									
9423	41.75309 -72.90007	8/10/2021									

Outfall / Interconn. ID	Latitude / Longitude	Screening / sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or enterococcus	Surfactants	Water Temp	Pollutant of concern	If required, follow-up actio taken
9424	41.7531 -72.89977	8/10/2021									
9500	41.75047 -72.80856	8/11/2021									
9502	41.74932 -72.80796	8/10/2021									
9528	41.7415 -72.81229	8/10/2021	0	0	506	0.03			74.7		
9529	41.74238 -72.80922	8/10/2021									
9535	41.73614 -72.84403	8/11/2021									
9547	41.73709 -72.84616	8/11/2021									
9804	41.71422 -72.87184	8/13/2021									
9830	41.71127 -72.87305	11/2/2021									
9831	41.71141 -72.873	8/10/2021									
9998	41.73499 -72.88672	8/18/2021									
10006	41.70676 -72.80329	8/16/2021									
10140	41.72688 -72.82332	8/18/2021	0	0	313	0.01			74.9		

*NOTE: We have completed dry-weather outlet screening. We have not experienced any outlets with any unknown flow or illicit discharges.

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

*NOTE: We have completed dry-weather outlet screening and have inspected 100% of the outlets. We have not experienced any outlets with any unknown flow or illicit discharge.

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
***NOTE: No illicit discharges have been identified during dry weather testing.**		

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
No illicit discharges have been identified during dry weather screening.					

3.3 Wet weather investigation outfall sampling data

Outfall ID	Sample date	Ammonia	Chlorine	Surfactants
None at this time				

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
None at this time							

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

Print name:
Kathleen A Blonski

Signature / Date:
Kathleen A Blonski
4/1/22

Document Prepared by

Print name:
Russell M Arnold Jr

Signature / Date:
Russell M Arnold Jr 4/1/22