

MS4 General Permit
Town of North Branford 2021 Annual Report
 Existing MS4 Permittee
 Permit Number GSM 000072
 January 1, 2021 – December 31, 2021
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This report documents the Town of North Branford’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	Activities in current reporting period	Sources Used (if applicable)	Method of Distribution	Audience (and number of people reached)	Measurable Goal	Department / Person Responsible	Additional details
1-1 Implement public education and outreach	Met with lead departments	NEMO & CT DEEP	Town Website	Town Staff / 12	Raise Awareness	Town Engineer	Link to NEMO and other sites on Town webpage
1-2 Address education/outreach for pollutants of concern	Farm River Watershed Management Plan committee	CT Southwest Conservation District (SWCD)	CT Conservation Districts Website	Various industry professionals & General Public / 100	Raise Awareness, Reduce Polluted Stormwater, Implement BMPS	CT SWCD / Chris Sullivan	Farm River Watershed Management Plan available of CT SWCD website.
1-3 Brochures & Flyers	Provide information: impact of impervious cover, septic systems & fertilizer use	EPA, CT DEEP, & NEMO	Town Hall & Town Website	Town Residents & Local Developers	Raise Awareness	Planning & Engineering Departments	Similar

1-4 River Smart CT	Think Green, Stay Blue: Clean Water Starts with You! Take the River Smart Pledge!	CT DEEP and Co-op members	Online	Unlimited	Reduce Runoff and encourage LID and BMP's	River Smart Co-op	www.riversmartct.org Farmington River Watershed association is a Co-op member
1-5 RWA Press Release 4/22/2021	On Earth Day, RWA is Helping Customers Use Water Wisely: Harvest the Rain	Zip06, The Sound	Online, local newspaper	Unlimited	Reduce Runoff, use water wisely	Regional Water Authority (RWA)	https://www.zip06.com/news/20210422/on-earth-day-rwa-is-helping-customers-use-water-wisely-harvest-the-rain
1-6 Recycling News	Please Don't Feed the Storm Drain	The Totoket Times	Online, local newspaper	Unlimited	Reduce Pollution	Totoket Times	http://www.totokettimes.com/12-3-21.pdf
1-7 Recycling News	Gather your household chemicals so they can be disposed of properly	The Totoket Times	Online, local newspaper	Unlimited	Reduce Pollution	Totoket Times	http://www.totokettimes.com/10-22-21.pdf

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

The Connecticut Southwest Conservation District to release the final version of Farm River Watershed Management Plan; a public presentation was held on January 25, 2022. Work with public schools to implement MS4 related presentations and/or field trips. Review Land Use Department and town website for MS4 content and consider updating and/or adding MS4 related content.

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

2.1 BMP Summary

BMP	Status (Complete, Ongoing, In Progress, or Not started)	Activities in current reporting period	Measurable Goal	Department / Person Responsible	Date completed or projected completion date (include the start date for anything that is 'in progress')	Location Posted	Additional details
2-1 Final Stormwater Management Plan publicly available	Complete & Ongoing	Posted notice on Town website, provided info to libraries, provided press release	Posted notice and provided press release	Town Engineer	April 3, 2018	Two Town Libraries / Engineering Department- Town Website	Edward Smith Library, 3 Old Post Road & Atwater Memorial Library, 1720 Foxon Road
		https://www.townofnorthbranfordct.com/newweb/resources/site1/General/documents/3-31-2017DraftStormwaterManagementPlan.pdf			https://www.townofnorthbranfordct.com/government/departments/engineering-department.aspx		
2-2 Comply with public notice requirements for Annual Reports (annually by 2/15)	Complete	Posted notice on Town website, provided info to libraries	Post notice on website	Town Engineer	January 28, 2021	Engineering Dept / Engineering Dept Website	Engineering Dept, 909 Foxon Road
					https://www.townofnorthbranfordct.com/government/departments/engineering-department.aspx		
2-3 Formalize Stormwater Committee	In progress	Identified Committee members as Town Engineer, Town Planner, Public Works Director	Provide forum to coordinate SWMP implementation across depts. and commissions	Inland Wetlands / Town Planner	Summer 2018	Twon Website / Wetlands Agency Meeting Minutes	Committee will represent town departments & commissions with stake in stormwater mgmt.

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

Hold quarterly stormwater committee meetings to review SMP implementation progress.
 Coordinate quarterly Farm River Watershed Management Plan steering committee meetings.

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

3.1 BMP Summary

BMP	Status (Complete, Ongoing, In Progress, or Not started)	Activities in current reporting period	Measurable Goal	Department / Person Responsible	Date completed or projected completion date (include the start date for anything that is 'in progress')	Additional details
3-1 Develop written IDDE program	In progress	IDDE written program using the CT IDDE program template endorsed in 2019	Develop written plan of IDDE program	Town Engineer	Finalized 4/2019	
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas	In progress	Review finalized program with GIS vendor; update Stormwater Layer on GIS/Town Website	Completion of lists and maps	Town Engineer	April 1, 2021	Town of North Branford Outfall Overview map available at North Branford Engineering Department
3-3 Implement citizen reporting program	Complete / Ongoing	Posted on website	Completion of posting	Town Engineer	May 2018	Created an Illicit Discharge Reporting Form for logging in public reports and FAQ sheet to post on Town Website & Engineering Dept
3-4 Establish legal authority to prohibit illicit discharges	Substantially Complete	Town Attorney reviewed existing ordinance for compliance	Adoption of Ordinance	Town Engineer	Prior to July 2018	
3-5 Develop record keeping system for IDDE tracking (Due 7/1/17)	Substantially Complete	Reviewed reports received. One during this period	Track Reports	Town Engineer	Beginning of 2018	
3-6 Address IDDE in areas with pollutants of concern	In progress	Coordinate Septic Failures with East Shore District Health Department	Address Septic System Failures	Town Engineer	2021 & Ongoing	Give highest priority in areas with potential to discharge bacteria, phosphorus and nitrogen to the MS4

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

Create a Citizen Reporting of "Suspected" Illicit Discharge FAQ sheet and post on Town Website and at the Planning, Engineering, & Building Department.

3.3 Provide a record of all citizen reports of suspected illicit discharges and other illicit discharges occurring during the reporting period and SSOs occurring July 2017 through end of reporting period using the following table. Illicit discharges are any unpermitted discharge to waters of the state that do not consist entirely of stormwater or uncontaminated groundwater except those discharges identified in Section 3(a)(2) of the MS4 general permit when such non-stormwater discharges are not significant contributors of pollution to a discharge from an identified MS4.

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)
41.3965 lat -72.8094 long Off Woodvale Drive in easement	8/17/2017	Surface swamp	5,000 gal	Damaged manhole and line blockage by vandals	Repaired manhole and flushed and cleaned line	
41.3809 lat -72.7894 long 52 Tommys Path	06/30/2021	No	None	N/A	Complainant suspected illicit discharge. Site inspection verified no illicit discharge	N/A
41.3420 lat -72.7505 long 2344 Foxon Road	11/09/2021	No	None	N/A	Suspected septic system outbreak. Investigation by ESDHD verified source as stormwater surface runoff.	N/A
Final Report to include spill information from Fire Marshal's Office, if any.						

3.4 Provide a summary of actions taken to address septic failures using the table below.

Method used to track illicit discharge reports	Location and nature of structure with failing septic systems	Actions taken to respond to and address the failures	Impacted waterbody or watershed, if known	Dept. / Person responsible
East Shore District Health Department reported 38 septic repairs in North Branford for 2021; including tank only, leach field only, and full system repairs.				
East Shore District Health Department reported no site inspections pertaining to failing system from complainants in North Branford for 2021.				

3.5 Briefly describe the method and effectiveness of said method used to track illicit discharge reports.

Town engineer receives reports from public based upon website posting or general phone complaints / contact. He keeps an ongoing list and responds to the complaints with appropriate responses.
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3.6 IDDE reporting metrics

Metrics	
Estimated or actual number of MS4 outfalls	275 Estimated
Estimated or actual number of interconnections	25 Estimated
Outfall mapping complete	95%
Interconnection mapping complete (Coordinate/Update GIS Info with CT DOT)	95%
System-wide mapping complete (detailed MS4 infrastructure)	95%
Outfall assessment and priority ranking	50%
Dry weather screening of all High and Low priority outfalls complete	none
Catchment investigations complete	None in detail
Estimated percentage of MS4 catchment area investigated	unknown

3.7 Briefly describe the IDDE training for employees involved in carrying out IDDE tasks including what type of training is provided and how often it is given (minimum once per year).

IDDE Training is typically completed March/April following snow season. Town engineer wrote procedure and is responsible for follow up. Town Engineer provides informational email with video link to Town Management group. Town Engineer completes PowerPoint training and video review with Public Works Employees. East Shore District Health Department responds to needs and complaints of the public regarding septic systems.

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

4.1 BMP Summary

BMP	Status (Complete, Ongoing, In Progress, or Not started)	Activities in current reporting period	Measurable Goal	Department / Person Responsible	Date completed or projected completion date (include the start date for anything that is 'in progress')	Additional details
4-1 Implement, upgrade, and enforce land use regulations or other legal authority to meet requirements of MS4 general permit	Complete	Zoning regs amended to add sect 62.5.6 Stormwater Management Plan for stormwater design and operation and maintenance	Adoption of Regulation	Town Planner & Town Engineer	Effective 07/26/19	Zoning Regulations include Purpose, Contents, Inspections, and Operations & Maintenance Plan sub-sections
4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval	Complete, Ongoing	Ongoing discussions during review	Finalize Process	Town Planner	July 2017	Part of Town Planner's existing referral process
4-3 Review site plans for stormwater quality concerns	Ongoing	Approximately 13 Site Plan reviews	Address concerns in individual reviews	Town Planner & Town Engineer	Ongoing	Includes Site Plan, Subdivision, Special Permit Applications for Wetlands Agency and P&Z Commission
4-4 Conduct site inspections	Ongoing	Approximately 29 Site Plans and new house inspections	Quantity of inspections	ZEO, Town Planner, Town Engineer	Ongoing	Tracking/Approval Software through Building Department
4-5 Implement procedure to allow public comment on site development	Complete, Ongoing	Procedure exists in Zoning Regulations and procedures	Establishment of Procedure	Town Planner	July 2017	
4-6 Implement procedure to notify developers about DEEP construction stormwater permit	Complete, Ongoing	Included as Approval condition	Establishment of Procedure	Town Planner	July 2017	
4-7 Develop stormwater compliance checklist	In Progress	Developing checklist to provide developers on stormwater mgmt compliance requirements	Standardize plan review	Town Planner	Jul 1, 2022	Reason for addition: Make it easier to ensure compliance with stormwater regulations

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

Integrate stormwater compliance checklist into review process once completed.

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

5.1 BMP Summary

BMP	Status (Complete, Ongoing, In Progress, or Not started)	Activities in current reporting period	Measurable Goal	Department / Person Responsible	Date completed or projected completion date (include the start date for anything that is 'in progress')	Additional details
5-1 Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning (Due 7/1/22)	Complete	Stormwater Management Plan (SMP) submittal requirement, control construction related impact, implement additional measures to protect and/or improve water quality, include BMP's & LID's, provide zero net increase in runoff	Revision to Zoning Regulations	Town Planner, Town Engineer	07/26/19	Zoning Regulations Section 62.5.6.A. & B. Stormwater Management Plan, Effective 7/26/19
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects (Due 7/1/22)	Complete	Periodic inspections of the construction site shall be conducted by the Town designated inspector to ensure compliance with the plan to control construction related impacts to stormwater.	Revision to Zoning Regulations	Town Planner, Town Engineer	07/26/19	Zoning Regulations Section 62.5.6.C. Stormwater Management Plan, Inspections, Effective 7/26/19
5-3 Identify retention and detention ponds in priority areas	Complete	All municipal detention basins are identified	Creation of List	Town Engineer	End of 2019	Beginning process of determining impervious surfaces contributing to detention podns for 2012 Retrofit calculation
5-4 Implement long-term maintenance plan for stormwater basins and treatment structures	Ongoing	Informal planto clean annually, Town Engineer assigns Work Order Requests to Department of Public Works. Priority areas are main focus, then the rest of the system.	Catch basin cleaning	Town Engineer & Director of Public Works	Ongoing	Town Jet/Vac Truck

5-5 DCIA mapping (Due 7/1/20)	Complete	Update accounts for impervious surfaces in CT DOT right-of-ways.	Calculate DCIA	Town Engineer	7/17/20, Updated 11/2021	
5-6 Address post-construction issues in areas with pollutants of concern	Ongoing	Catch basin cleaning Work Order requests sent to Department of Public Works; order of importance based on DCIA Priority Areas	Correct Stormwater Pollutant of Concern	Town Engineer Town Planner	Not Specified	Farm River – Bacteria Muddy River - Bacteria
5-7 Investigate alternative retention pond maintenance options	Ongoing	Coordinated locations of treatment pond locations and easements with Director of Public Works.	ID sustainable means of maintaining town owned detention ponds	Town Engineer Director of Public Works	Ongoing	Public Works working off season in these locations to reduce amount of vegetation that needs clearing and for ease of access to overgrown locations

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

Coordinate with Public Works to maintain highest priority retention ponds. Prioritize catch basin cleaning work order requests based on sections of stormwater management system contributing to the impaired sections of the Farm River and the Muddy River.
 Review management procedures for existing stormwater basins with Town of North Branford Public Works Department.
 *Note: Continue processing/updating 2012 Retrofit Town property locations on Impervious Cover Tracking Spreadsheet.

5.3 Post-Construction Stormwater Management reporting metrics

For details on this requirement, visit <https://nemo.uconn.edu/ms4/tasks/post-construction.htm>. Scroll down to the DCIA section.

Metrics	
Baseline (2012) Directly Connected Impervious Area (DCIA) – Excluding DOT R.O.W.’s	480.4 acres
DCIA disconnected (redevelopment plus retrofits)	2.1 acres this year / 2.1 acres total
Retrofit projects completed* (Refer to Note Section 5.2 above)	3
DCIA disconnected* (Refer to Note Section 5.2 above)	0.4% this year / 0.4% total since 2012
Estimated cost of retrofits	\$ Zero \$
Detention or retention ponds identified	2 this year /7 total

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

Excel Spreadsheet, Interactive NEMO Mapping of Impervious Surfaces, and DCIA Connectivity Level Equations (Sutherland Equations/EPA).

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

6.1 BMP Summary

BMP	Status (Complete, Ongoing, In Progress, or Not started)	Activities in current reporting period	Measurable Goal	Department / Person Responsible	Date completed or projected completion date (include the start date for anything that is 'in progress')	Additional details
6-1 Develop/implement formal employee training program (Ongoing)	Ongoing	Completed PowerPoint Presentation for use in Training with supplemental training video by MN Stormwater	Implement O&M Training Program, Increase water quality awareness	Town Engineer Director of Public Works	Ongoing	Ref YouTube: Parks Maintenance and Stormwater Protection Employee Training
6-2 Implement MS4 property and operations maintenance (Ongoing)	Ongoing	Completed Inspection of Public Works Garage based on Stormwater Pollution Prevention Plan	Maintain Town Owned Properties and other Facilities	Town Engineer Director of Public Works	Ongoing	
6-3 Implement coordination with interconnected MS4s	Not Started	Worked with CT Southwest Conservation District to identify interconnected MS4's in the Farm River Watershed	Coordinate with CT DOT MS4 Stormwater Quality Management Program	Town Engineer Director of Public Works	Not Specified	Work to exchange stormwater GIS layers with CT DOT MS4 Program
6-4 Develop/implement program to control other sources of pollutants to the MS4	Ongoing	Site Plan review & approvals coordinated with on-ste inspection of E&S control measures	Develop and Enforce Erosion & Sedimentation Control Program	Town Planner Town Engineer	Ongoing	Subdivision, Zoning & Wetlands Regulations support implementation of E&S control measures
6-5 Evaluate additional measures for discharges to impaired waters*	Ongoing	Review Town owned properties and facilities with high potential to contribute bacteria (dog waste, waterfowl, failing septic systems)	Develop source management program	Town Engineer	Ongoing	Farm River – Bacteria Muddy River – Bacteria Researched Pet Waste Brochure; consider implementing in 2022.
6-6 Track projects that disconnect DCIA (Ongoing)	Ongoing	Began process of analyzing Town owned properties to determine impervious cover areas that may already be treated for water quality	Track Disconnect of DCIA	Town Engineer	Ongoing	Retrofit projects added to Impervious Cover Tracking Spreadsheet

6-7 Implement infrastructure repair/rehab program (Due 7/1/21)	Ongoing	Repaired and/or replaced approximately 46 catch basins throughout the MS4	Repair & Rehabilitation to Reduce Discharge of Pollutants	Director of Public Works	July 1, 2021	Training available thru UCONN T2; Principls of Drainage for Local Roads
6-8 Develop/implement plan to identify/prioritize retrofit projects (Due 7/1/20)	Ongoing	Incorporate retrofit projects into road paving projects and prioritize sites that may be suitable for retrofit projects	Develop Plan and Budget	Director of Public Works Town Engineer	July 1, 2020	
6-9 Implement retrofit projects to disconnect 2% of DCIA (Due 7/1/22)	Ongoing	Continue process of reviewing Town owned properties and facilities to credit existing LID practices to the Impervious Cover Tracking Spreadsheet	Reduce DCIA with goal of 2% disconnect	Director of Public Works Town Engineer	July 1, 2022	Continue to incorporate retrofit projects into road paving program
6-10 Develop/implement street sweeping program (Ongoing)	Complete	Annually sweep 75 miles of entire Town road system	Increase water quality of surface runoff to impaired waters	Director of Public Works	Ongoing beginning July 1, 2017	Typically completed with minimum frequency of once per year and/or following winter maintenance activities
6-11 Develop/implement catch basin cleaning program (Ongoing)	Complete	Completed approximately 15% of system plus critical and problem areas	# of Catch Basins Cleaned	Director of Public Works	Ongoing beginning July 1, 2020	Town Engineer provides work Order Requests focusing on Priority Areas
6-12 Develop/implement snow management practices (Due 7/1/18)	Complete	Plan already in place; includes prewetting trouble areas in order to reduce the amount of salt used during storm	Reduce de-icing chemicals and other pollutants	Director of Public Works	Ongoing beginning July 8, 2018	Training available thru UCONN T2; Green Snow Pro:Sustainable Winter Operations
6-13 Recycling/Trash Information	Complete	Curbside pickup & recycling info, what to recycle and where	Increase recycling and decrease MSW; educate public	Public Works Hazardous Waste & Recycling Committee	Ongoing January 2021	Posted on the Town Website and in multiple Town facilities

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

Training PowerPoint and YouTube video to be incorporated into Employee Training program.

Reach out to CT DOT MS4 Program and coordinate with Town’s GIS host to exchange GIS stormwater layers.

Complete a Pet Waste Brochure and make available on Town Website and in the Office of the Planning, Building, Engineering Departments. Consider location(s) and funding source(s) for Pet Waste Stations; include weatherproof holder for Brochure.

6.3 Pollution Prevention/ Good Housekeeping reporting metrics

Metrics	
Employee training provided for key staff	Yes
Street sweeping	
Curb miles swept	116 miles
Volume (or mass) of material collected	100 tons (Estimate)
Catch basin cleaning	
Total catch basins in priority areas (value will be less than or equal to total catch basins town or institution-wide)	660 (Estimate)
Total catch basins town- (or institution-) wide	2,225
Catch basins inspected	335
Catch basins cleaned	335
Volume (or mass) of material removed from all catch basins	270 tons
Volume removed from catch basins to impaired waters (if known)	80 tons (Estimate)
Snow management	
Type(s) of deicing material used	Magic-0 (minus zero) and Pro Melt Ultra 1000
Total amount of each deicing material applied	4000 gal ea (Estimate)
Type(s) of deicing equipment used	In-Cab Cirrus Smart Spread Controls Systems, Vehicle mounted 100 gal tanks, pump control spray nozzles
Lane-miles treated (A lane-mile is a mile of roadway in a single driving lane)	75 miles (Estimate)
Snow disposal location	
Staff training provided on application methods & equipment	Yes
Municipal turf management program actions (for permittee properties in basins with N/P impairments)	
Reduction in application of fertilizers (since start of permit)	3 %
Reduction in turf area (since start of permit)	
Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems)	
Cost of mitigation actions/retrofits	\$500 Estimate

6.4 Catch basin cleaning program

Provide any updates or modifications to your catch basin cleaning program.

Town Engineer issues Work Order Requests for catch basin cleaning with order of completion based catch basins located in priority areas and impaired water bodies.

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.

Projects are coordinated with the Town's Pavement Management Plan for the upcoming year. Projects are prioritized based on their location within Priority Areas or where stormwater conveyance systems discharge to impaired water bodies.

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

Will continue to coordinate Retrofit projects with the Town's Pavement Management Plan. Town owned properties and facilities will also be further analyzed to consider implementing retrofit projects.

Part II: Impaired waters investigation and monitoring

1. Impaired waters investigation and monitoring program

For details on this requirement, visit <https://nemo.uconn.edu/ms4/tasks/monitoring.htm>. Refer to the yellow column of the Monitoring comparison chart and the Impaired waters monitoring flowchart.

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.

Samples taken over past 4 years. Building inventory of baseline information. The Farm River watershed study will provide additional information to supplement the sampling.

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

2.1 Screening data

Complete the table below to report data for any wet weather sampling completed for MS4 outfalls that discharge directly to a stormwater impaired waterbody during the reporting period. For details on this requirement, visit www.nemo.uconn.edu/ms4/tasks/monitoring.htm. Refer to the yellow column of the Monitoring comparison chart and the Impaired waters monitoring flowchart.

Each Annual Report will add on to the previous year's data showing a cumulative list of sampling data. **You may also attach an excel spreadsheet with the same data rather than copying it into this table.** If you do attach a spreadsheet, please write "See Attachment" below.

Outfall ID	Latitude / Longitude	Sample date	Parameter (Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern)	Results	Name of Laboratory (if used)	Follow-up required? *
NB-1	41.3302 -72.7675	11/12/19	Other pollutant of concern	-Turbidity 6.25 NTU	EML	No
NB-2	41.3293 -72.7667	11/12/19	Other pollutant of concern	-Turbidity 7.32 NTU	EML	No
NB-3	41.3231 -72.7680	11/12/19	Other pollutant of concern	-Turbidity 15.6 NTU	EML	No
NB-4	41.3227 -72.7674	11/12/19	Other pollutant of concern	-Turbidity 10.5 NTU	EML	No
NB-5	41.3389 -72.8149	8/13/19	Bacteria, Other pollutant of concern	- E.coli 387 MPN/100mL -Turbidity 12.1 NTU	EML	No

NB-6	41.3389 -72.8147	8/13/19	Bacteria, Other pollutant of concern	- E.coli 816 MPN/100mL -Turbidity 5.45 NTU	EML	Yes
NB-7	41.3335 -72.8150	8/13/19	Bacteria, Other pollutant of concern	- E.coli 1986 MPN/100mL -Turbidity 24.6 NTU	EML	Yes
NB-8	41.3271 -72.8159	11/12/19	Bacteria, Other pollutant of concern	-E.coli 326 MPN/100mL -Turbidity 10.7 NTU	EML	No
NB-10	41.3229 -72.8225	11/12/19	Bacteria, Other pollutant of concern	-E.coli 66 MPN/100mL -Turbidity 8.71 NTU	EML	No
NB-1	41.3302 -72.7675	10/20/20	Other pollutant of concern	-Turbidity 5.75 NTU	EML	No
NB-4	41.3227 -72.7674	10/20/20	Other pollutant of concern	-Turbidity 1.14 NTU	EML	No
NB-6	41.3389 -72.8147	10/20/20	Bacteria, Other pollutant of concern	-E.coli 2826 MPN/100mL -Turbidity 3.07 NTU	EML	Yes
NB-7	41.3335 -72.8150	10/20/20	Bacteria, Other pollutant of concern	- E.coli 2022 MPN/100mL -Turbidity 0.6 NTU	EML	Yes
NB-12	41.3254 -72.8116	10/20/20	Other pollutant of concern	-Turbidity 2.67 NTU	EML	No
NB-17	41.3326 -72.8000	10/20/20	Other pollutant of concern	-Turbidity 0.21 NTU	EML	No
NB-1	41.3302 -72.7675	9/28/21	Other pollutant of concern	-Turbidity 27.4 NTU	EML	No
NB-4	41.3227 -72.7674	9/28/21	Other pollutant of concern	-Turbidity 3.67 NTU	EML	No
NB-6	41.3389 -72.8147	9/28/21	Bacteria, Other pollutant of concern	-E.coli 388 MPN/100mL -Turbidity 21.4 NTU	EML	No
NB-7	41.3335 -72.8150	9/28/21	Bacteria, Other pollutant of concern	- E.coli 2092 MPN/100mL -Turbidity 2.27 NTU	EML	Yes
NB-12	41.3254 -72.8116	9/28/21	Other pollutant of concern	-Turbidity 6.70 NTU	EML	No
NB-17	41.3326 -72.8000	9/28/21	Other pollutant of concern	-Turbidity 3.04 NTU	EML	No

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 ID	Status of drainage area investigation	Control measure to address impairment
NB-7	Completed investigation of outfall drainage area – farming activities are prevalent in this watershed. Crop & milk cattle fields.	Consider providing education material to local farmers; Small Farms Manure Storage Solutions brochure by the Eastern Connecticut Conservation District.

4. Prioritized outfall monitoring (Section 6(i)(1)(D) / page 43)

Once outfall sampling 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. **You may also attach an excel spreadsheet with the same data rather than copying it to this table.** If you do attach a spreadsheet, please write “See Attachment” below.

Outfall	Latitude / Longitude	Sample Date	Parameter(s)	Results	Name of Laboratory (if used)
NB-1	41.3302 -72.7675	9/28/21	Other pollutant of concern	-Turbidity 27.4 NTU	EML
NB-4	41.3227 -72.7674	9/28/21	Other pollutant of concern	-Turbidity 3.67 NTU	EML
NB-6	41.3389 -72.8147	9/28/21	Bacteria, Other pollutant of concern	-E.coli 388 MPN/100mL -Turbidity 21.4 NTU	EML
NB-7	41.3335 -72.8150	9/28/21	Bacteria, Other pollutant of concern	- E.coli 2092 MPN/100mL -Turbidity 2.27 NTU	EML
NB-12	41.3254 -72.8116	9/28/21	Other pollutant of concern	-Turbidity 6.70 NTU	EML
NB-17	41.3326 -72.8000	9/28/21	Other pollutant of concern	-Turbidity 3.04 NTU	EML

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

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

For details on this requirement, visit <https://nemo.uconn.edu/ms4/tasks/monitoring.htm>. Refer to the blue column of the Monitoring comparison chart and the IDDE baseline monitoring flowchart.

Provide sample data for outfalls where flow is observed. Only include Pollutant of concern data for outfalls that discharge into stormwater impaired waterbodies. **You may also attach an excel spreadsheet with the same data rather than copying it to this table.** If you do attach a spreadsheet, please write "See Attachment" below.

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

2.2 Wet weather sample and inspection data

For details on this requirement, visit <https://nemo.uconn.edu/ms4/tasks/monitoring.htm>. Refer to the green column of the Monitoring comparison chart and the IDDE catchment investigation flowchart.

Provide sample data for outfalls and key junction manholes of any catchment area with at least one System Vulnerability Factor. **You may also attach an excel spreadsheet with the same data rather than copying it to this table.** If you do attach a spreadsheet, please write “See Attachment” below.

Outfall / Interconnection ID	Latitude / Longitude	Sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or Enterococcus	Surfactants	Water Temp	Pollutant of concern

1. Catchment Investigation data (Appendix B (A)(7)(e) / page 9)

For details on this requirement, visit www.nemo.uconn.edu/ms4/tasks/monitoring.htm. Refer to the green column of the Monitoring comparison chart and the IDDE catchment investigation flowchart.

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

Where SVFs are:

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

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

3.2 Key junction manhole dry weather screening and sampling data

You may also attach an excel spreadsheet with the same data rather than copying it to this table. If you do attach a spreadsheet, please write “See Attachment” below.

Key Junction Manhole ID	Latitude / Longitude	Screening / Sample date	Visual/ olfactory evidence of illicit discharge	Ammonia	Chlorine	Surfactants

3.3 Wet weather investigation outfall sampling data

You may also attach an excel spreadsheet with the same data rather than copying it to this table. If you do attach a spreadsheet, please write “See Attachment” below.

Outfall ID	Latitude / Longitude	Sample date	Ammonia	Chlorine	Surfactants

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

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: Michael T. Paulhus, Town Manager	Print name: Victor A. Benni, P.E., Town Engineer
Signature / Date: DRAFT / February 14, 2022	Signature / Date: DRAFT / February 14, 2022
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