

MS4 General Permit  
Town of Branford 2023 Annual Report

Permit Number GSM 000068

January 1, 2023 – December 31, 2023

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This report documents the Town of Branford's efforts to comply with the conditions of the MS4 General Permit to the maximum extent practicable (MEP) from January 1, 2023 to December 31, 2023.

### Part I: Summary of Minimum Control Measure Activities

The Annual Report describes the status of compliance with the 2017 CTDEEP General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4s). The Town has the Permit Number GSM 000068. The report includes an assessment of the identified best management practices (BMPs) in the Stormwater Management Plan (SWMP) and the progress towards achieving the implementation dates and measurable goals for each of the Minimum Control Measures. The report also includes stormwater monitoring data results for samples collected in 2023.

The six Minimum Control Measures included:

1. Public Education and Outreach
2. Public Involvement / Participation
3. Illicit Discharge Detection and Elimination
4. Construction Site Stormwater Runoff Control
5. Post-Construction Stormwater Management
6. Pollution Prevention / Good Housekeeping

The Town of Branford covers an area of approximately 28.0 square miles and is home to approximately 28,273 residents according to the 2020 Census. Approximately 20 square miles of the Town is classified as Urbanized Area (UA) according to the 2010 Census. Approximately 6.0 square miles of the Town is comprised of waterbodies and watercourses. An outfall map that included urbanized area is included in Appendix A.

Sub regional drainage basins and major watercourses include Branford River, Farm River and South Central Shoreline. Additionally, there are several significant lakes and ponds within the Town including the Branford Supply Ponds and Linsley Pond.

The Town of Branford has Representative Town Meeting form of Government, which is led by the First Selectman. The Department of Public Works is responsible for roads and parking lots. The General Government Buildings is responsible for buildings. Parks and Recreation is responsible for parks. The Board of Education is responsible for their facilities. Several commissions within the Town have jurisdiction over development and include the following:

- Inland Wetlands and Natural Resources Department
- Planning & Zoning Department

As part of the development of the Annual Report, a project team as established with representatives of the Town and the Town’s consultant assigned to sampling, Weston & Sampson. A list of the project team is provided below.

Name	Organization & Title
James B. Cosgrove	Town of Branford, First Selectman
John Hoeffler, P.E., CFM	Town of Branford, Town Engineer
Jennifer Acquino	Town of Branford, Assistant Town Engineer
Kevin Ortiz, E.I.T	Town of Branford, Civil Design Engineer
Gary Zielinski	Town of Branford, Public Work Director
Harry Smith	Town of Branford, Town Planner
Jaymie Frederick	Town of Branford, Director of Inland Wetlands
Tyler Bowne	Town of Branford, Sustainability and Compliance Manager
Raju Vasamsetti, P.E.	Weston & Sampson, Project Manager

## 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	<p>Display handouts in Town Hall.</p> <p>Display and distribute stormwater information at Annual Branford Festival and Arbor Day.</p> <p>Links to the Stormwater Management Plan and Website/Fact Sheets are posted on the Town website.</p> <p>Pet waste fliers handed out with dog licenses.</p>		<p>Information available through Brochure/Fact Sheets at Town Hall and Website.</p> <p>Catch Basin artwork conducted in partnership with Town of Branford Camps, DEEP</p>	General Public (Approx. 400)	Information Available through Brochure/Fact Sheets at Town Hall and Website.	Assistant Town Engineer, Town Engineer, Sustainability and Compliance Manager	The Town will continue to display brochures/fact sheets at the Town Hall and at the Annual Branford Festival. The Town will continue to look for opportunities with communities to conduct additional catch basin art.

	Catch Basin artwork to educate kids and the general public about pollutants affecting our stormwater systems.		and Lots of Fish.				
1-2 Address education/ outreach for pollutants of concern	Ongoing education and outreach targeting pollutants of concern. Outreach conducted through various methods, such as Catch Basin Artwork program.		Information available through Brochure/Fact Sheets at Town Hall and Website.	General Public (Approx. 400)	Provide residents with educational events and information about water quality and stormwater pollutants.	Assistant Town Engineer, Town Engineer	
<b>1-3 Septic System Maintenance</b>	The Town runs a low cost pump out service for non-sewered areas of Town and also provides information to the Health District if inspections of systems show problems. Regional solar powered pump out boat services by ESDHD.		Information available through Brochure/Fact Sheets at Town Hall and Website.	General Public (Approx. 400)	Pump septic tanks as needed.	East Shore District Health Department	The pump out program is ongoing. The Health Department is working on a system to track all septic system pump outs including private vendors.

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

The Town will continue to display brochures/fact sheets at the Town hall and at the Annual Branford Festival. The links to stormwater information online will be updated as new materials become available. The information in the printed and online fact sheets will be update when new information becomes available. Dog waste receptacles are located in public parks. Possible partnership with condo associations to provide dog waste receptacles and 1-year supply of bags to reduce roadside polluting. Outreach to educate the public on the effects of bacteria in waterways through Annual Litter Day/Earth Day Event hoset by the Branford Land Trust and Branford River Project. Annual mandatory dog licenses are sent with pet waste brochures. The Engineering Depratment will continue to look for opportunities to partner with camps, schools and organizations to provide the Catch Basin Artwork Program.

## 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	Posted Stormwater Management Report online.	Post Stormwater Management Report online.	Town Engineer	Ongoing	<a href="#">Stormwater Management Plan</a>	
2-2 Comply with public notice requirements for Annual Reports (annually by 2/15)	Ongoing	Post Annual Report online.	Post Annual Report online.	Town Engineer	Report will be posted 2/15/2024	<a href="#">Annual Reports</a>	
2-3 Brochures/Factsheets at Town Hall.	Complete	Updated Brochures/Factsheets. Continue to display in Town Hall.	Place Brochure/Factsheets at Town Hall.	Town Engineer	Ongoing	<a href="#">Brochures and Factsheets</a>	

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

Brochures / Factsheets will remain posted at Town Hall.  
 Brochures / Factsheets will remain posted on the Town Website.  
 Next year's Annual Report will continue to be posted online.  
 Town holds quarterly Stormwater Stakeholder meetings to review SMP implementation progress.

### 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 (Due 7/1/19)	Complete	The Town developed an IDDE program based on the IDDE program template from UCONN's CT NEMO. The IDDE program was completed in 2019. The report is complete except for the ordinance that is still under review.	Develop written plan of IDDE program.	Town Engineer, Inland Wetlands, DPW, Planner	Complete 4/25/2019	
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas (Due 7/1/20)	Complete	Mapping forms setup to add unmapped outfalls.	Map and list all outfalls, collect attributes on newly discovered outfalls.	Town Engineer, DPW	Complete 7/1/2019	In the Spring of 2019, dry weather screening of outfalls in priority areas was conducted. New outfalls were not found.
3-3 Implement citizen reporting program (Ongoing)	Complete	The Town receives complaints via online reporting to DPW. Calls are logged into this system.	Post point of contact phone number and Contact Us form listed on the Town website.	Town Engineer, DPW	Complete 7/1/2017	"Report an Issue" on Town Homepage
3-4 Establish legal authority to prohibit illicit discharges (Due 7/1/19)	In Progress	The Town wrote a Town Ordinance regarding a non-stormwater discharges based on the template produced by UCONN's CT NEMO Program.	Write and implement a Town Ordinance.	Town Engineer, DPW	Projected 7/1/2023	
3-5 Develop record keeping system for IDDE tracking (Due 7/1/17)	Complete	The Town receives complaints via online reporting to DPW and Fire Department. Calls are logged into this system.	Document IDDE findings in Annual Reports.	Town Engineer, DPW	Completed 7/1/2018	
3-6 Address IDDE in areas with pollutants of concern	Ongoing / In Progress	IDDE program prioritizes areas with pollutants of concern. Work with East Shore District	IDDE program will address priority areas	Town Engineer, ESDHD	Ongoing	The Town of Branford provides low-cost septic pump out program.

		Health Department to assess septic areas.	with high levels of bacteria.			
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**3.2 Describe any IDDE activities planned for the next year, if applicable.**

The IDDE program was finalized in 2019 except for the ordinance, which is still under review. The written IDDE program will be updated as need throughout the permit term. Updates will be included in the Annual Report. IDDE presentation developed by CT NEMO will continue to be used for training key personnel. Maintain master IDDE tracking spreadsheet and ensure all employees involved in IDDE program understand the logging process. The Town continues to collaborate with East Shore District Health Department to identify sewer areas within the Short Beach neighborhood. East Shore District Health Department is developing a septic pump-out program for the Islands surrounding the Town.

**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)
44 Maltby Street	9/5/2020	No	51-100 gallons	Mechanical equipment failure	Pumped	N/A
75 Block Island Road	10/28/2020	No	501-1000 gallons	Approved bypass	Pumped	N/A
102 Jerimoth Road	12/13/2020	No	No overflow	Mechanical equipment failure	Pumped	N/A
81 Mountain Top Lane	9/18/2020	No	No overflow	Leaching out to lawn	Pumped	N/A

Seventh Avenue @ Seaview Avenue	10/16/2020	No	No overflow	Fluid spill from privately owned truck	Placed oil absorbent sock and speedy dry.	N/A
Lanphier Road	12/7/2020	No	No overflow	Auto repair facility allowing oil to flow to catch basin.	Fire Chief/Marshal, DEEP, ZEO notified	N/A
5 Heritage Hill Road	12/28/2022	No	No overflow	Illicit discharge from property	ZEO notified	N/A

**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
ESDHD receives illicit discharge reports	Location: 205 Northford Road Issue: Failing Septic Tank	Homeowner repaired failing septic tank	Wetlands	Health Department
ESDHD receives illicit discharge reports	Location: 89 Rose Hill Road Issue: Septic Bleeding Out	ESDHD notified homeowner	Long Island Sound	Health Department
ESDHD receives illicit discharge reports	Location: 15 Sachem Road Issue: Tank Leaking	ESDHD notified homeowner	Stony Creek (West)	Health Department

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

The DPW is responsible for tracking and responding to illicit discharge reports. The ESDHD is responsible for tracking septic records for the Town. The Town Engineering Department is responsible for tracking sanitary sewer records.

**3.6 IDDE reporting metrics**

Metrics	
Estimated or actual number of MS4 outfalls	252
Estimated or actual number of interconnections	31 Interconnections with CTDOT infrastructure

Outfall mapping complete	100(%)
Interconnection mapping complete	100(%) Town will utilize CTDOT's GIS viewer for interconnections
System-wide mapping complete (detailed MS4 infrastructure)	100(%)
Outfall assessment and priority ranking	0(%)
Dry weather screening of all High and Low priority outfalls complete	100%
Catchment investigations complete	100% Outfalls with reported issues have been investigated
Estimated percentage of MS4 catchment area investigated	100%

**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).**

The Town uses CT NEMO's training material to train key employees on identifying and reporting illicit discharges, latest permit updates, tasks completed and best management practices. The training will be conducted by the Engineer Department at least once per year.



## 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 (Due 7/1/20)	Complete	Reviewed current Town land use regulations to verify reference to specific documents for design of sedimentation and erosion control BMPs.	Upgrade and enforce land use regulations.	Town Planner, Inland Wetlands Enforcement Officer (IWEO), Zoning Enforcement Officer (ZEO)	Completed 7/1/2019	Regulations will be updated to be consistent with the updated Connecticut Stormwater Quality Manual and Connecticut Guidelines for Soil Erosion and Sediment Control. UCONN Stormwater Corp conducted an independent review of Branford's regulations and provided suggestions to be more consistent with MS4 requirements.
4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval (Ongoing)	Complete	Multidepartmental site plan review meetings occur monthly.	Continue site plan review with peers.	Town Planner	Ongoing	
4-3 Review site plans for stormwater quality concerns (Ongoing)	Complete	Conducted site plan reviews.	Continue site plan review according to regulations.	Town Planner, IWEO	Ongoing	
4-4 Conduct site inspections (Ongoing)	Complete	Zoning Enforcement Officer (ZEO) and inland Wetlands Enforcement Officer (IWEO) conduct regulatory site inspections.	ZEO and IWEO conduct site inspections.	ZEO and IWEO	Ongoing	
4-5 Implement procedure to allow public comment on site development (Ongoing)	Complete	The Town utilizes their government structure for processing information submitted by the public for receipt and	Public comments are forwarded to the appropriate department.	ZEO, IWEO and DPW	Ongoing	

		consideration. Special Excepetions have public hearing requirements.				
4-6 Implement procedure to notify developers about DEEP construction stormwater permit (Ongoing)	Complete	Continue notifying construction site developers and operators of requirements for registration.	Communicate to developers about DEEP construction stormwater permit through permitting process.	Town Planner	Ongoing	Stormwater Pollution Control Plans (SPCP) as required by CTDEEP.

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

The Zoning Commission and Town Engineer will continue to review site plans in accordance with the various Town regulations. Interdepartmental coordination will be continued.  
 The ZEO and IWEO will continue to conduct site inspections.  
 The Town Departments will continue to communicate to developers about DEEP construction stormwater permit through permitting process.  
 Update to Town regulations to include updated Connecticut Stormwater Quality Manual and Connecticut Guidelines for Soil Erosion and Sediment Control.

**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)	In Progress	Continue procedures for addressing post-construction BMPs including projects with 1 to 5 acres in disturbance.	Update regulations	Town Planner, IWEO	Projected 7/1/2024	Regulations will be updated to be consistent with Connecticut Stormwater Quality Manual and Connecticut Guidelines for Soil Erosion and Sediment Control.

5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects (Due 7/1/22)	Ongoing	Enforce LID / runoff reduction regulations through site plan review.	Development and redevelopment projects will include LID / runoff reduction measures	Town Planner, IWEO	Ongoing	
5-3 Identify retention and detention ponds in priority areas (Due 7/1/20)	Complete	Identify retention and detention ponds in priority areas.	Identify retention and detention ponds in priority areas.	Planning & Zoning, IWEO, ZEO and DPW	Completed 1/1/2021	
5-4 Implement long-term maintenance plan for stormwater basins and treatment structures (Ongoing)	Complete	Implementing long-term maintenance of stormwater basins and treatment structures through scheduled maintenance.	Inspect and maintain basins and structures in accordance with long-term plan.	Planning & Zoning, IWEO, ZEO and DPW	Completed 7/1/2021	Only ponds owned by the Town are maintained by the DPW
5-5 DCIA mapping (Due 7/1/20)	Complete	A baseline DCIA map was developed. The map will be used to develop Retrofit Program.	Update DCIA Mapping.	Town Engineer	Complete 7/1/2019	
5-6 Address post-construction issues in areas with pollutants of concern	Ongoing	Inspect areas with pollutants of concern.	Enforce construction BMPs.	ZEO, IWEO, DPW	Ongoing	

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

Development and redevelopment projects will include LID / runoff reduction measures.  
 Inland Wetlands, Planning & Zoning, Engineering Department and Public Works Department to identify priority areas and develop maintenance program.  
 The DPW or property owners will maintain highest priority retention ponds.

### 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)	625.32 acres
DCIA disconnected (redevelopment plus retrofits)	0.48 ac (post 2022)
Retrofit projects completed	0 (2023) In progress
DCIA disconnected	12.83 acres (2.1% since 2017)
Estimated cost of retrofits	Unknown (projects are being designed)
Detention or retention ponds identified	9

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

The Town utilized method 2 as developed by CT NEMO: Method 2 involves using the equations on UConn NEMO's website to estimate DCIA based on the development density in each basin. Five (5) locations have been identified for DCIA disconnections and are currently being designed.

## 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)	Complete	Town's Engineering Department uses UCONN NEMO's Training Material for annual training.	Implement annual training meetings.	Town Engineer	Ongoing	Training will be conducted in 2024 by the Town Engineer.
6-2 Implement MS4 property and operations maintenance (Ongoing)	Ongoing	Review current operation and maintenance procedures. Town parks have optimal fertilizer application, pet waste programs and scheduled trash collection. DPW has procedures for vehicle maintenance.	Update and implement MS4 operation and maintenance procedures.	Parks and Rec, DPW	Ongoing	Employees are trained in spill response and kits are available where products are stored. Plastic bags are provided at parks for pet waste.
6-3 Implement coordination with interconnected MS4s	Complete	Coordinate operations and maintenance procedures of interconnected MS4s.	Coordinate with interconnected MS4s.	Town Engineer, DPW	Ongoing	The Town will utilize the CTDOT GIS viewer for interconnected MS4s (31 in Branford) to coordinate operations and maintenance when issues arise.
6-4 Develop/implement program to control other sources of pollutants to the MS4	Ongoing	Continue to monitor outfalls for other pollutant sources	Develop program to control other pollutant sources if detected through sampling.	Town Engineer, DPW	Ongoing	
6-5 Evaluate additional measures for discharges to impaired waters*	Ongoing	Conduct preventative maintenance and fund retrofits to reduce pollutants to impaired water bodies.	Evaluate additional measures for discharges to impaired waters.	Town Engineer, DPW	Ongoing	The Short Beach area of Town underwent a study to identify the cause of high pollutant levels in the waterbody. The study identified pet waste as the cause to the high pollutant level. Public outreach will be conducted consistently to inform residents on how to properly dispose of their pet waste.

6-6 Track projects that disconnect DCIA (Ongoing)	Ongoing	Research past projects for DCIA disconnections. Track projects that disconnect DCIA.	Report projects that disconnect DCIA in annual reports.	Planning & Zoning, Inland Wetlands, Town Engineer	Ongoing	
6-7 Implement infrastructure repair/rehab program (Due 7/1/21)	Ongoing	Program for repairing and rehabilitating the MS4 infrastructure in a timely manner is ongoing.	Implement infrastructure repair / rehab program	DPW	Ongoing	Structures are repaired or replaced during roadway rehab or on an as-needed basis.
6-8 Develop/implement plan to identify/prioritize retrofit projects (Due 7/1/20)	Complete	Develop plan to identify / prioritize retrofit projects.	Report of identified / prioritized retrofit projects.	Town Engineer, DPW	Completed 7/1/2022	All Town projects take retrofits/BMPs into consideration. UCONN Stormwater Corps identified retrofit opportunities that the Town is currently developing or seeking funding to develop.
6-9 Implement retrofit projects to disconnect 2% of DCIA (Due 7/1/22)	Complete	Track projects that disconnect DCIA, and include in annual report.	Implement retrofit projects.	Town Engineer, DPW	Completed 7/1/2022	The Town has disconnected 2% of DCIA and will continue to identify projects. The Town has identified multiple locations for DCIA disconnections which are either under development or seeking funding for implementation.
6-10 Develop/implement street sweeping program (Ongoing)	Ongoing	Street sweeping included over 42 miles of streets and municipal parking lots.	Street sweeps are conducted annually.	DPW	Ongoing	
6-11 Develop/implement catch basin cleaning program (Ongoing)	Ongoing	Continue Catch Basin Maintenance Program.	Catch basins are cleaned in accordance with the Program.	DPW	Ongoing	Catch basins are cleaned annually.
6-12 Develop/implement snow management practices (Due 7/1/18)	Complete	Developed and implemented standard operating practices (SOP) for snow management policy.	Implement standard snow management SOP policy	DPW	Completed 7/1/2019	Created Snow Removal and De-Icing Program on 11/14/2018.

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

The Town will continue to consider pavement reduction in their pavement and parking lot management programs.

Continue to conduct Street Sweeping Program, Catch Basin Cleaning Program and standard operating practices for snow management.

Continue to develop list of projects and funding opportunities to reduce DCIA.

Continue to use retrofit plan to identify potential DCIA disconnection projects.

Continue following operation and maintenance procedures.

**6.3 Pollution Prevention/ Good Housekeeping reporting metrics**

Metrics	
Employee training provided for key staff	Yes
Street sweeping	
Curb miles swept	88.59 miles
Volume (or mass) of material collected	552,460 lbs
Catch basin cleaning	
Total catch basins in priority areas (value will be less than or equal to total catch basins town or institution-wide)	Unknown
Total catch basins town- (or institution-) wide	3,000
Catch basins inspected	135
Catch basins cleaned	1,350
Volume (or mass) of material removed from all catch basins	77,000 lbs
Volume removed from catch basins to impaired waters (if known)	Unknown
Snow management	
Type(s) of deicing material used	Coarse Sand, Coarse Salt, Treated Salt
Total amount of each deicing material applied	890 tons
Type(s) of deicing equipment used	Dump Truck – 4 season body, salt spreaders & plows
Lane-miles treated (A lane-mile is a mile of roadway in a single driving lane)	3,445 miles
Snow disposal location	N/A
Staff training provided on application methods & equipment	Yes

Municipal turf management program actions (for permittee properties in basins with N/P impairments)	
Reduction in application of fertilizers (since start of permit)	N/A
Reduction in turf area (since start of permit)	N/A
Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems)	
Cost of mitigation actions/retrofits	N/A

#### 6.4 Catch basin cleaning program

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

This will consist of inspecting and of cleaning catch basins on a regularly scheduled basis. The Town will use the following criteria for inspecting and cleaning their catch basins:

- The Town, at minimum, will annually evaluate, and if necessary, clean catch basins and other stormwater structures that accumulate sediment. Typically, one quarter of the catch basins in Town are cleaned each year to prevent having to clean subsurface storm sewer pipe segments between structures. The Town staggers the catch basin cleaning, so that all the catch basins are cleaned every four years.
- Priority areas will be established to maximize the effectiveness of the Town’s available resources for the routing inspections. These priority areas will be developed using the Town’s knowledge of problem areas, where sediment/debris has been know to accumulate in higher quantities. Geographical location, climate, traffic patterns and vertical sag locations may also be factors in determining priority areas.

The Town will evaluate roads in the immediate vicinity of watercourse and waterbodies, and the Town will implement additional catch basins cleaning as needed.

#### 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. (Due 7/1/20)**

The Retrofit Plan has been finalized. The plan focuses on low impact development projects that can be implemented in different types of areas: low to medium density residential, high density residential, commercial and residential, and roadways. Potential projects on Town owned land will be prioritized over commercial and residential projects because the Town has the power to make changes to their own property. Transfer Station is prioritized for retrofit projects to reduce nutrient loads. Five (5) locations have been identified and are either underdevelopment, seeking funding for implementation or coordination with other Town bodies is being conducted. Identified locations included: Veterans Park, Branford High School, Intersection of Jefferson Road and Burban Road, Main Street and Court Street. These projects will assist in achieving a goal of 1% DCIA disconnection per year.



**Describe plans for continuing the Retrofit program and how to achieve a goal of 1% DCIA disconnection annually in future years. (Due 7/1/22)**

The program will continue to identify and prioritize projects to achieve a goal of 1% DCIA disconnection in future years.

DRAFT

## 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.**

MS4s that discharge to impaired streams shall be monitored. Screening of outfalls that discharge to impaired waters shall be an annual task. The Town plans to sample 6 outfalls in 2023. The outfalls were monitored during this period.

According to the 2022 Intergrated Water Quality Report, there is one impaired pond, one impaired river and one impaired estuary. The LIS CB Inner Branford Harbor's total maximum daily load (TMDL) is caused by Fecal and Coliform contaminants. Linsley Pond's TMDL is caused by Cholorophyll – a, Excess Algal Growth, Nutrient / Eutrophicat ion. The Branford Supply Pond does not have TMDL. Stormwater outfalls do not discharge to the ponds; therefore, stormwater monitoring is not required for impaired ponds.

The impaired waterbodies are listed in Table 7.1 below. The outfalls directly discharging to these estuaries will be monitored.

The Town of Branford began screening the outfalls that discharge to impaired waters in 2023. The outfalls that discharge directly to the impaired estuaries will be screened starting with the Inner Branford Harbor. See Figure 2 in Appendix A for a map of the outfall locations screened as per the schedule below. The Integrated Water Quality Report is published every two years. The monitoring schedule will be updated if impaired waters change.

Wet and dry weather sampling is complete and attached to this report.

Table 7.1 Impaired Waters			
Waterbody	Waterbody ID	Impaired Designated Use	Cause
Branford River – 02	CT5111-00_02	Habitat for Fish, Other Aquatic Life and Wildlife	Cause Unknown
Branford Supply Pond (Northwest)	CT5111-09-2-L3_01	Habitat for Fish, Other Aquatic Life and Wildlife	Turbidity, Sedimentation/Siltation, Total Suspended Solids (TSS)
LIS CB Shore – Pages Cove	CT-C2_015-SB	Habitat for Marine Fish, Other Aquatic Life and Wildlife	Nutrient/Eutrophication Biological Indicators, Dissolved Oxygen
Table 7.2 Waterbodies with Adopted TMDLs			
Waterbody	Waterbody ID	Impaired Designated Use	Cause
Linsley Pond	CT5111-09-1-L2_01	Habitat for Fish, Other Aquatic Life and Wildlife	Chlorophyll- a, Excess Algal Growth, Nutrient / Eutrophication
LIS CB Inner – Inner Branford Harbor	CT-C1_009-SB	Shellfish Harvest	Fecal Coliform

## 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](http://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? *
				Data will be provided with Final Report		

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"> <li>E. coli &gt; 235 col/100ml for swimming areas or 410 col/100ml for all others</li> <li>Total Coliform &gt; 500 col/100ml</li> </ul>

Bacteria (salt waterbody)	<ul style="list-style-type: none"> <li>Fecal Coliform &gt; 31 col/100ml for Class SA and &gt; 260 col/100ml for Class SB</li> <li>Enterococci &gt; 104 col/100ml for swimming areas or 500 col/100 for all others</li> </ul>
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
	Sampling results will be attached to Final Report	

### 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)
				Result will be provided with Final Report	

**Part III: Additional IDDE Program Data**

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

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

1. Catchment ID (DEEP Basin ID)	2. Category	3. Rank
N/A	N/A	N/A

**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**

This screening is the baseline IDDE dry weather screening. 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, during dry weather, of outfalls and interconnections categorized as high or low priority in priority areas. Do not include problem or excluded catchments. 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
No dry weather screening has been conducted											

## 2.2 Wet weather sample and inspection data

This sampling data is the baseline wet weather priority catchment investigation sampling. 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 baseline sample data for outfalls and key junction manholes of any catchment area (all high priority, low priority, and problem outfalls within the priority 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
In Progress										

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

For details on this requirement, visit [www.nemo.uconn.edu/ms4/tasks/monitoring.htm](http://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
N/A	N/A	N/A

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

This screening is the dry weather priority catchment investigation screening. Provide sample data, both baseline and follow-up, for key junction manholes of any catchment area being investigated for an illicit discharge and do not have any SVFs present. Follow-up investigations must take place within one year and again within five years. **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
N/A	N/A	N/A	N/A	N/A	N/A	N/A

### 3.3 Wet weather follow-up investigation outfall sampling data

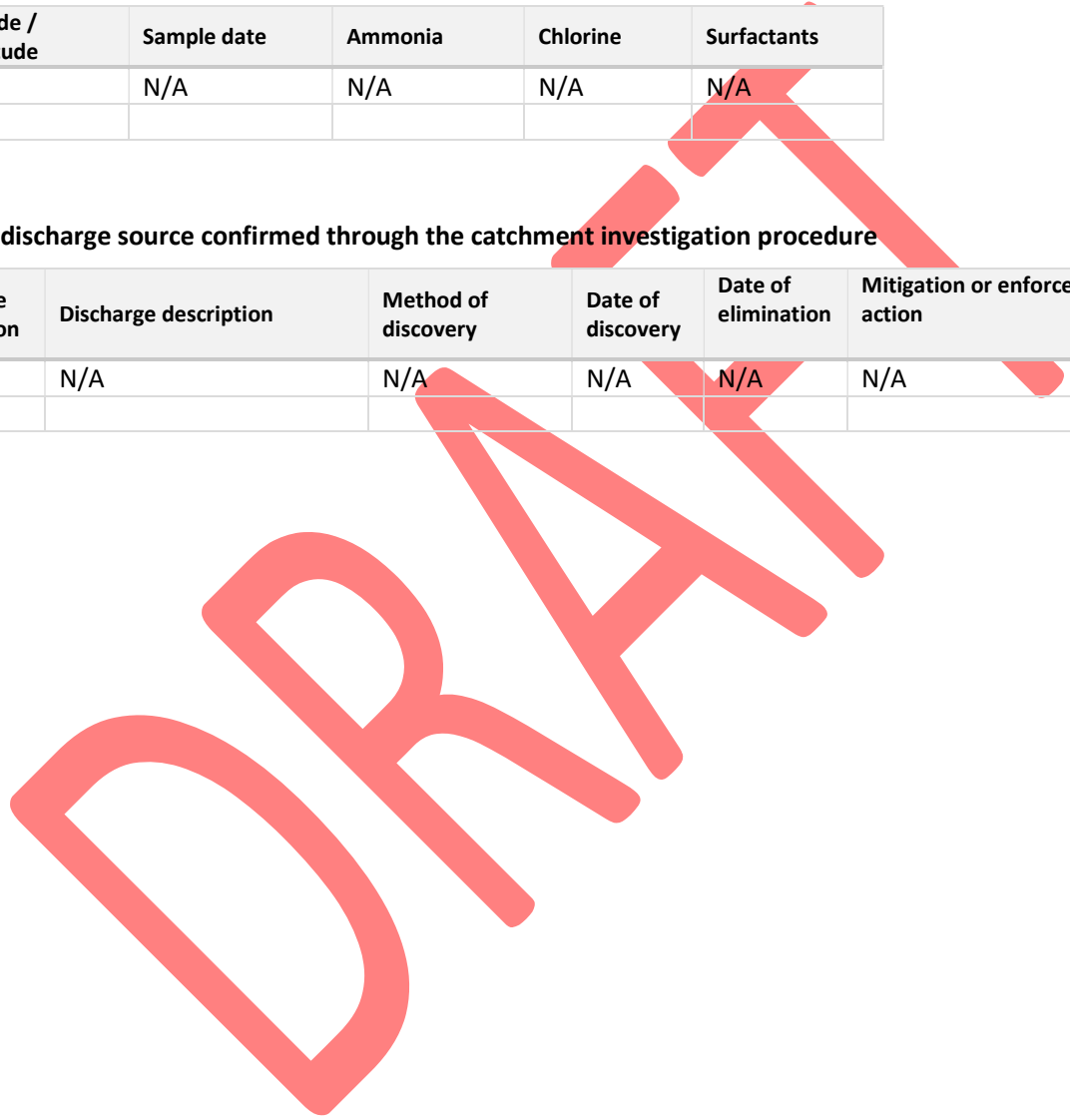
This sampling is the follow-up investigations for the wet weather priority catchment investigation. Provide follow-up sample data for outfalls and key junction manholes of any catchment area with at least one System Vulnerability Factor. Follow-up investigations must take place within one year and

again within five years. **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
N/A	N/A	N/A	N/A	N/A	N/A

**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
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A





#### Part IV: Certification

"I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that, based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that a false statement made in this document or its attachments may be punishable as a criminal offense, in accordance with Section 22a-6 of the Connecticut General Statutes, pursuant to Section 53a-157b of the Connecticut General Statutes, and in accordance with any other applicable statute."

Chief Elected Official or Principal Executive Officer	Document Prepared by
Print name:	Print name:
Signature / Date:	Signature / Date:
Email:	Email:

DRAFT