

REPORT

February 15, 2022

TOWN OF
Thomaston
CONNECTICUT

2021 **Draft** Stormwater Annual Report

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



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I. INTRODUCTION / OVERVIEW

I.1 INTRODUCTION

This 2021 Stormwater Annual Report was developed by Weston & Sampson on behalf of the Town of Thomaston (Town). 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 000039. 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 2021.

The six minimum control measures include:

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

This report documents the Town's efforts to comply with the 2017 General Permit to the maximum extent practicable (MEP) for the period between January 1, 2021 to December 31, 2021 with updates on tasks to be completed in fiscal year 2021 ending in June 2022.

I.2 TOWN INFORMATION

The Town of Thomaston covers an area of approximately 12.2 square miles and is home to approximately 7,442 residents according to the 2020 Census. Approximately 9.1 square miles of the Town is classified as Urbanized Area (UA) according to the 2010 Census. Approximately 0.2 square miles of the Town is comprised of waterbodies and watercourses. An outfall map that includes urbanized area is included in Appendix A.

Sub regional drainage basins and major watercourses include the Naugatuck River, Leadmine Brook, Northfield Brook and Branch Brook. These are part of the Naugatuck River major drainage basin. In addition, there are several significant lakes and ponds within the town including Wigwag Reservoir, Nystrom Pond, and Morton Pond.

The Town of Thomaston has a Selectman-Town Meeting form of government, which is led by the First Selectman. The Highway Department is responsible for all public property including buildings, roads, parking lots, roadsides and parks. Several commissions within the Town have jurisdiction over development and include the following:

- Conservation Commission
- Inland Wetlands and Watercourses Commission
- Planning & Zoning Commission

I.3 STORMWATER MONITORING

The 2017 General Permit requires towns to conduct wet weather screening of outfalls that discharge to impaired waters, beginning July 1, 2018. One hundred percent (100%) of the outfalls shall be screened by July 1, 2022. Outfalls will require follow-up investigation if the results are greater than the parameters listed in the General Permit. The six outfalls with the highest contribution of any of the pollutants of concern was determined by July 1, 2021. These six priority outfalls will be monitored annually.

I.4 ANNUAL REPORT DEVELOPMENT TEAM

As part of the development of the SWMP, a project team was established with representatives of the Town and the Town's consultant for this assignment, Weston & Sampson. Most of the team members developed the Annual Reports for 2017 through 2021. A list of the project team is provided below.

SWMP DEVELOPMENT TEAM	
Name	Organization & Title
Edmond V. Mone	Town of Thomaston First Selectman
Glenn Clark	Town of Thomaston Superintendent of Highways
Stacey Sefcik	Town of Thomaston Land Use Administrator
Raju Vasamsetti, P.E.	Weston & Sampson Project Manager
Kori Mullen	Weston & Sampson Project Engineer

PART I: SUMMARY OF MINIMUM CONTROL MEASURE ACTIVITIES

1 PUBLIC EDUCATION AND OUTREACH

Under the General Permit Section 6(a)(1), the Town is required to “implement a public education program to distribute educational materials to the permittee’s community or conduct equivalent outreach activities about the sources and impacts of stormwater discharges on waterbodies and the steps that the public can take to reduce pollutants in stormwater runoff.” The following BMPs were selected by the Town to address the Public Education and Outreach minimum control measure of the General Permit (Section 6(a)(1)/page19):

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	Responsible Department or Person	Additional Details
1-1 Implement public education and outreach	<ul style="list-style-type: none"> Continue to display in Town Hall and at Inland Wetland and Watercourses Commission Meetings. The SWMP and links to stormwater websites are posted on the Town website. 		Physical and Virtual	Developers, homeowners (approx. 100). Information is available to anyone who views the town website including Developers and Town residents.	Town Hall and Town Website.	Superintendent of Highways, Land Use Administrator, Webmaster	Topics covered include sources of stormwater pollutants (car oil, fertilizer, pet waste) and LID- Rain Gardens.
1-2 Address education/ outreach for pollutants of concern.	Continue to maintain information in the Library of Education Materials located at the Town Hall.		Physical	Developers, homeowners (approx. 100).	Public has access to Library of Educational Materials that contains specifics about pollutants of concern.	Superintendent of Highways, Land Use Administrator	The Town placed the brochures/ fact sheets at the Town Hall.

1.2 Public Education and Outreach Activities

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 Inland Wetland and Watercourses Commission meetings.

The Town will continue to display/distribute fact sheets at Planning and Zoning meetings.

The links to stormwater information online will be updated as new material becomes available.

The information in the printed and online fact sheets will be updated when new information becomes available.

2 PUBLIC INVOLVEMENT / PARTICIPATION

Under the General Permit Section 6(a)(2), the Town is required to “provide opportunities to engage their community to participate in the review and implementation of the permittee’s Plan.” Public participation benefits the program by increasing public support, including additional expertise and involving community groups/ organizations. The following BMPs were selected by the Town to address the Public Involvement / Participation minimum control measure of the General Permit (Section 6(a)(2)/page 21):

2.1 BMP Summary

BMP	Status	Activities in Current Reporting Period	Measurable Goal	Responsible Department or Person	Date completed or projected completion date	Location Posted	Additional Details
2-1 Final Stormwater Management Plan to the public.	Complete	Posted Stormwater Management Report online.	Post Stormwater Management Report online.	First Selectman, Superintendent of Highways, Webmaster	Ongoing	http://www.thomastonct.org/content/161/236/346/7618.aspx	First Selectman to address any additional questions on Stormwater Management Plan.
2-2 Comply with public notice requirements for Annual Reports (annually by 2/15)	In Progress	Post Annual Report online. This will be completed by 2/15/2022.	Post Annual Report online.	First Selectman, Superintendent of Highways, Webmaster	Posted 2/15/2022	http://www.thomastonct.org/content/161/236/346/7618.aspx	Comments received will be noted and addressed.
2-3 Brochures/ factsheets at Town Hall and Inland Wetland and Watercourses Commission Meetings	Complete	Updated brochures/ fact sheets. Continue to display in Town Hall and at Inland Wetland and Watercourses Commission Meetings.	Place Brochure/ Fact Sheets at Town Hall and display at Inland Wetland and Watercourses Commission Meetings.	Land Use Administrator, Webmaster	Ongoing	158 Main Street Thomaston, CT 06787	The Town placed the brochures/ fact sheets in the Town Hall and Inland Wetland and Watercourses Commission Meetings.
2-4 Storm drain plaques	Ongoing	Installed between 50 and 75 storm drain plaques.	Mark catch basins annually.	Superintendent of Highways	Ongoing	Town wide	

2.2 Public Involvement / Participation Activities

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

Brochures/ Factsheets will remain posted at the Town Hall.

Next year's annual report will continue to be posted online.

Storm drain marking/stenciling is ongoing.

3 ILLICIT DISCHARGE DETECTION AND ELIMINATION

Under the General Permit Section 6(a)(3), the Town is required to develop a written Illicit Discharge Detection and Elimination (IDDE) program. The IDDE program is designed to “provide the legal authority to prohibit and eliminate illicit discharges to the MS4; find the source of any illicit discharges; eliminate those illicit discharges; and ensure ongoing screening and tracking to prevent and/ or eliminate future illicit discharges.” The following BMPs were selected by the Town to address the Illicit Discharge Detection and Elimination minimum control measure of the General Permit (Section 6(a)(3) and Appendix B/page 22):

3.1 BMP Summary

BMP	Status	Activities in Current Reporting Period	Measurable Goal	Responsible Department or Person	Date completed or projected completion date	Additional Details
3-1 Develop written IDDE program (Due 7/1/2018)	Complete	The Town completed its written IDDE program based on the IDDE program template developed by UCONN's CT NEMO Program.	Develop written plan of IDDE program.	Superintendent of Highways	Completed Feb. 2019	
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas (Due 7/1/2019)	Complete	Perform field survey with GPS to survey outfalls. Update database and map (GIS).	GIS maps with updated outfalls in priority areas.	Superintendent of Highways, Webmaster Consultant	Completed Fall 2018	The Town has previously located all the outfalls, and they are available in GIS through NVCOG and included in Appendix A. The outfalls in the priority areas were reviewed in the field during the summer of 2018 during dry weather screening.
3-3 Implement citizen reporting program (Ongoing)	Ongoing	The Town website has a Contact Us Form. The Citizen Reporting Program is described in Section 3 of the IDDE Report.	Post point of contact phone number and Contact Us Form listed on the Town website.	Superintendent of Highways	Completed 7/1/2017	Contact Us Form at: http://www.thomastonct.org/content/80/621.aspx Main phone number is listed on the website 860-283-4421

BMP	Status	Activities in Current Reporting Period	Measurable Goal	Responsible Department or Person	Date completed or projected completion date	Additional Details
3-4 Establish legal authority to prohibit illicit discharges (Due 7/1/2018)	Complete	The Town wrote and implemented a Town Ordinance regarding non-stormwater discharges based on the template produced by UCONN's CT NEMO Program.	Write and implement a Town Ordinance.	Land Use Administrator, Superintendent of Highways	Completed 10/10/2018	The ordinance is based on the CT NEMO template.
3-5 Develop record keeping system for IDDE tracking (Due 7/1/2017)	Complete	The previous IDDE plan is still in effect, and the record keeping system was updated in the IDDE report.	Document IDDE findings in Annual Reports.	WPCA, Superintendent of Highways	Completed 7/1/2017	
3-6 Address IDDE in areas with pollutants of concern	Ongoing	IDDE program prioritizes areas with pollutants of concern	IDDE program will address priority areas with high levels of Bacteria.	Superintendent of Highways	Ongoing	The outfalls in the priority areas were reviewed in the field during the summer of 2018 during dry weather screening.

3.2 IDDE Activities

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

Next year's Annual Report will contain updates made to the written IDDE program as needed throughout the permit term.

MS4 system mapping will be continued by locating system components in the field.

Dry weather screening was conducted in August 2018. All the outfalls were observed to be in good condition with no observed illicit discharge except for one outfall, which has been investigated and the Town had conversations with the property owner. Subsequent inspections conducted in 2021 indicated no illicit discharges at this location.

3.3 Citizen Reports

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)
No records received during reporting period.						

3.4 Actions Taken to Address Septic Failures

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
No records received during reporting period.				

3.5 Method Used to Track Illicit Discharge Reports

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

The Superintendent of Highways is responsible for tracking and responding to illicit discharge reports. The Torrington Area Health District is responsible for tracking septic records for the Town. The Town WPCA is responsible for tracking sanitary sewer records.

3.6 IDDE Reporting Metrics

Metrics	
Estimated or actual number of MS4 outfalls	250*
Estimated or actual number of interconnections	Unknown
Outfall mapping complete	100%
Interconnection mapping complete	0%
System-wide mapping complete (detailed MS4 infrastructure)	95%
Outfall assessment and priority ranking	95%
Dry weather screening of all High and Low priority outfalls complete	0
Catchment investigations complete	0
Estimated percentage of MS4 catchment area investigated	75%

*See Map of Outfalls in Appendix A.

3.7 IDDE Training for Employees

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).

Employees including DPW staff received annual IDDE Training through a presentation given by Weston & Sampson on June 19, 2019. The training contained information on the 2017 MS4 Permit Requirements including illicit discharge identification and reporting and best management practices. Employee training was postponed due to COVID-19 restrictions. A training session is scheduled for late winter/early spring of 2022 with more detailed information about latest permit updates, tasks completed and best management practices.

4 CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

The Town shall “implement and enforce a program to control stormwater discharges (to its MS4) associated with land disturbance or development (including re-development) activities from sites with one acre or more of soil disturbance, whether considered individually or collectively as part of a larger plan.” The program will be consistent with “the 2002 Guidelines for Soil Erosion and Sedimentation Control, as amended, the Connecticut Stormwater Quality Manual, and stormwater discharge permits issued by DEEP within the municipal or institutional boundary pursuant to CGS 22a-430 and 22a-430b.” The permittee will conduct site plan reviews, site inspections, and include procedures for public involvement. The Town has local regulations (shown in Table 4.1) that require construction runoff control measures.

Table 4.1 Stormwater Regulations				
Regulations	Date	Erosion & Sediment Controls	Site Plan Review	Site Inspection and Enforcement
Zoning Regulations	2022	Article 2.47 Soil Erosion and Sediment Control Plan Article 10.3.d Sediment and Erosion Control Plan	Article 17, Site Plan Review	Article 14, Administration and Enforcement Article 19, Sedimentation and Erosion Control Bond Article 21, 21.I, Site Inspection
Subdivision Regulations	2014	Article 8 Erosion and Sedimentation Control Plan	Article 3 Application Requirements and Procedures	Article 3, 3.5, Inspection by the Town Engineer Article 14, Administrative Procedures
Inland Wetlands and Watercourse Regulations	2012	Section 7.6.b	Section 10.2, Criteria for Decision	Section 14.2 and 14.5, Enforcement

The following BMPs were selected by the Town to address the Construction Site Stormwater Runoff Control minimum control measure of the General Permit (Section 6(a)(4)/page 25):

4.1 BMP Summary

BMP	Status	Activities in Current Reporting Period	Measurable Goal	Responsible Department or Person	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 (Due 7/1/2019)	In Progress	Review and revise current town land use regulations to include reference to specific documents for design of sedimentation and erosion control BMPs	Upgrade and enforce land use regulations.	Superintendent of Highways, Planning & Zoning Commission, Inland Wetlands Commission	Projected 7/1/2022	Zoning Regulations, Subdivision Regulations, and Inland Wetland and Watercourses Regulations will be updated as required.
4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval (Ongoing)	Complete	Site plans shall be submitted to the Zoning Commission. The Town Engineer will conduct a detailed engineering review of the site plan. The Land Use Inspector circulates the Site Plan submission to all applicable boards, commissions, and departments for review and comment.	Zoning Commission and Town Engineer review site plans in accordance with the various town regulations.	Planning & Zoning Commission, Land Use Administrator	Completed 7/1/2017	See regulations listed in Table 4.1.
4-3 Review site plans for stormwater quality concerns (Ongoing)	Complete	Zoning Regulations require Sediment and Erosion Control Plans. Zoning Commission, and Town Engineer follow Site Plan Review Procedures.	Zoning Commission and Town Engineer review plans for stormwater quality concerns in accordance with regulations.	Planning & Zoning Commission, Inland Wetlands, and Watercourse Commission	Completed 7/1/2017	See regulations listed in Table 4.1. Also, require Site Stormwater Management Checklist from 2004 Connecticut Stormwater Quality Manual.

BMP	Status	Activities in Current Reporting Period	Measurable Goal	Responsible Department or Person	Date completed or projected completion date	Additional Details
4-4 Conduct site inspections (Ongoing)	Complete	The Enforcement Officer (Land Use Administrator or consultant) inspects sedimentation and erosion control measures to ensure that they are in compliance with approved plans, properly installed, functioning and maintained by the applicant.	The Enforcement Officer conducts site inspections	Land Use Administrator Enforcement Officer	Completed 7/1/2017	See regulations listed in Table 4.1.
4-5 Implement procedure to allow public comment to site development (Ongoing)	Complete	The Town utilizes their government structure for processing information submitted by the public for receipt and consideration. Information submitted by the public is forwarded to the appropriate Department within the Town's government structure for consideration.	Public comments are forwarded to the appropriate Department.	First Selectman, Land Use Administrator	Completed 7/1/2017	
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.	Land Use Administrator	Completed 7/1/2017	

4.2 Construction Site Runoff Control Activities

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.

The Zoning Enforcement Officer (Land Use Administrator or consultant) will continue to conduct site inspections.

The Town Departments will continue to communicate to developers about DEEP construction stormwater permit through permitting process.

5 POST-CONSTRUCTION STORMWATER MANAGEMENT

The Town shall require developers to “consider the use of low impact development (LID) and runoff reduction site planning and development practices prior to the consideration of other practices in the permittee’s land use regulations, guidance or construction project requirements to meet or exceed those LID and runoff reduction practices identified in the Stormwater Quality Manual.”

The Town currently has the following procedures for the enforcement of the stormwater regulations:

Zoning Regulations

January 13, 2022

Article 8.4, Stormwater Management Regulations

Subdivision Regulations

October 3, 2014

Article 14, Administrative Procedures

Inland Wetland and Watercourse Regulations

June 22, 2012

Section 6, Regulated Activities to be Licensed

Section 14, Enforcement

The following BMPs were selected by the town to address the Post-Construction Stormwater Management minimum control measure of the General Permit (Section 6(a)(5)/page 27):

5.1 BMP Summary

BMP	Status	Activities in Current Reporting Period	Measurable Goal	Responsible Department or Person	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 (Due 7/1/2021)	In Progress	Continue procedures for addressing post-construction BMPs including projects with 1 to 5 acres in disturbance. Formally, revise regulations by 7/1/2022.	Update regulations.	Land Use Administrator	Projected 7/1/2022	Update Subdivision Regulations, Zoning Regulations, and Inland Wetlands and Watercourse Regulations to include LID.
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects (Due 7/1/2021)	In Progress	Enforce LID/ runoff reduction regulations through site plan review.	Development and redevelopment projects will include LID/ runoff reduction measures.	Superintendent of Highways	Projected 7/1/2022	
5-3 Identify retention and detention ponds in priority areas (Due 7/1/2019)	In Progress	Identifying retention and detention ponds in priority areas has been started.	Identify retention and detention ponds in priority areas.	Superintendent of Highways	Projected 7/1/2022	The Town DPW is responsible for maintaining stormwater ponds.
5-4 Implement long-term maintenance plan for stormwater basins and treatment structures (Ongoing)	Ongoing	Implementing long-term maintenance of stormwater basins and treatment structures through scheduled maintenance based on template from UCONN's CT NEMO Program.	Inspect and maintain basins and structures in accordance with long-term plan.	Superintendent of Highways	Completed 7/1/2020	Inspect basins and structures every five years and clean when filled with sediment.
5-5 DCIA mapping (Due 7/1/2020)	Complete	A Baseline DCIA map was developed. The map will be used to develop the Retrofit Program.	Update DCIA mapping.	Asst. DPW Director Consultant	Completed 7/1/2019	
5-6 Address post-construction issues in areas with pollutants of concern	Ongoing	Inspect construction areas in areas with pollutants of concern.	Enforce construction BMPs.	Superintendent of Highways	Projected 7/1/2022	

5.2 Post-Construction Stormwater Management Activities

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

Development and redevelopment projects will include LID/ runoff reduction measures.

Town committees will continue procedures for addressing post-construction BMPs including projects with 1 to 5 acres in disturbance.

A Maintenance Plan for stormwater ponds and treatment structures was completed on July 1, 2020.

5.3 Post-Construction Stormwater Management Reporting Metrics

Post-Construction Stormwater Management Metrics	
Baseline (2012) Directly Connected Impervious Area (DCIA)	249.70 acres
DCIA disconnected (redevelopment plus retrofits)	In progress
Retrofits completed	Ongoing
DCIA disconnected	In progress
Estimated cost of retrofits	N/A
Detention or retention ponds identified	6

5.4 Method to Determine DCIA

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

The Town used Method 2 developed by CT NEMO to determine baseline DCIA. Method 2 involves using the equations on UConn NEMO's website to estimate DCIA based on the development density in each basin.

6 POLLUTION PREVENTION / GOOD HOUSEKEEPING

Under the General Permit Section 6(a)(6), the Town shall “implement an operations and maintenance program for permittee-owned or – operated MS4s that has a goal of preventing or reducing pollutant runoff and protecting water quality from all permittee-owned or – operated MS4s.” The following BMPs were selected by the town to address the Pollution Prevention/ Good Housekeeping minimum control measure of the General Permit (Section 6(a)(6)/ page 31):

6.1 BMP Summary

BMP	Status	Activities in Current Reporting Period	Measurable Goal	Responsible Department or Person	Date completed or projected completion date	Additional Details
6-1 Develop/Implement formal employee training program (Ongoing)	In Progress	Employee training was postponed due to COVID-19 restrictions. A training session is scheduled for late winter/early spring of 2022.	Implement annual training meetings.	Superintendent of Highways	Ongoing	Employee training was postponed due to COVID-19 restrictions. A training session is scheduled for late winter/early spring of 2022.
6-2 Implement MS4 property and operations maintenance (Ongoing)	Ongoing	Review current operation and maintenance procedures. Town parks have pet waste programs and scheduled trash collection. DPW has procedures for vehicle maintenance.	Update and implement MS4 operation and maintenance procedures.	Superintendent of Highways	Ongoing	
6-3 Implement coordination with interconnected MS4s	In Progress	Meet with operators of interconnected MS4s. Coordinate operations and maintenance procedures.	Coordinate with interconnected MS4s.	Superintendent of Highways	Ongoing	In the future, the Town and DOT will coordinate operations and maintenance procedures.

BMP	Status	Activities in Current Reporting Period	Measurable Goal	Responsible Department or Person	Date completed or projected completion date	Additional Details
6-4 Develop/Implement program to control other sources of pollutants to the MS4	Ongoing	Develop program to control other sources of pollutants.	Develop and implement program to control other sources of pollutants.	Superintendent of Highways	Ongoing	The Town has been implementing this program through DEEP permits for individual industrial and municipal facilities.
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.	Superintendent of Highways	Ongoing	
6-6 Track projects that disconnect DCIA (Ongoing)	Ongoing	Track projects that disconnect DCIA.	Report projects that disconnect DCIA in annual reports.	Land Use Administrator, Superintendent of Highways	Projected 7/1/2022	
6-7 Implement infrastructure repair/rehab program (Due 7/1/2021)	Ongoing	Repair and rehabilitate the MS4 infrastructure in a timely manner is ongoing.	Implement infrastructure repair/rehab program.	Superintendent of Highways	Ongoing	The Town has been performing repairs/rehab on MS4 infrastructure as required and on a periodic basis.
6-8 Develop/Implement plan to identify/prioritize retrofit projects (Due 7/1/2020)	Ongoing	Plan developed to identify/prioritize retrofit projects.	Database of identified/prioritized retrofit projects.	Superintendent of Highways	Ongoing	
6-9 Implement retrofit projects to disconnect 2% of DCIA (Due 7/1/2022)	Ongoing	Track projects that disconnect DCIA and include in annual report is ongoing.	Implement retrofit projects.	Superintendent of Highways	Projected 7/1/2022	
6-10 Develop/implement street sweeping program (Ongoing)	Complete	All streets were swept after the first snowmelt.	Street sweeps are conducted annually.	Superintendent of Highways	Ongoing	

BMP	Status	Activities in Current Reporting Period	Measurable Goal	Responsible Department or Person	Date completed or projected completion date	Additional Details
6-11 Develop/implement catch basin cleaning program (Ongoing)	Complete	Continue Catch Basin Maintenance Program.	Catch basins are cleaned in accordance with Program.	Superintendent of Highways	Ongoing	Typically, all catch basins are cleaned between the spring and fall. In 2017, the Town started keeping records of the catch basins that were cleaned.
6-12 Develop/implement snow management practices (Ongoing)	Ongoing	Develop and implement standard operating practices for snow management.	Implement standard snow management practices.	Superintendent of Highways	Ongoing	The magic salt is stored at the Transfer Station. The handling of the salt is described under the Industrial Permit.

6.2 Pollution Prevention/ Good Housekeeping Activities

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

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

Develop list of projects to reduce DCIA.

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	42 miles
Volume (or mass) of material collected	170 Yards
Catch basin cleaning	
Total catch basins in priority areas	Unknown
Total catch basins in MS4	850
Catch basins inspected	180
Catch basins cleaned	180
Volume (or mass) of material removed from all catch basins	Unknown
Volume removed from catch basins to impaired waters (if known)	Unknown
Snow management	
Type(s) of deicing material used	Magic salt
Total amount of each deicing material applied	1000 tons
Type(s) of deicing equipment used	Dump Truck – 4 season body
Lane-miles treated	84 miles
Snow disposal location	Transfer Station
Staff training provided on application methods & equipment	No
Municipal turf management program actions (for permittee properties in basins with N/P impairments)	
Reduction in application of fertilizers (since start of permit)	Unknown
Reduction in turf area (since start of permit)	Unknown
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.

The Town's catch basin maintenance program consists of inspecting and cleaning catch basins on a regularly scheduled basis. The Town uses the following criteria for inspecting and cleaning their catch basins:

- The Town, at a minimum, will annually evaluate and, if necessary, clean catch basins and other stormwater structures that accumulate sediment. Typically, all catch basins in Town are cleaned in the spring and fall each year to prevent having to clean subsurface storm sewer pipe segments between structures.
- Priority areas will be established to maximize the effectiveness of the Town's available resources for the routine inspections. These priority areas will be developed using the town's knowledge of problem areas, where sediment/debris has been known 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 in the immediate vicinity of watercourses and waterbodies, and the Town will implement additional catch basin cleanings 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 7/1/2020)

A Retrofit Plan was completed on July 1, 2020. The plan focuses on low impact development projects that can be implemented in different types of areas: low to medium density residential, high density industrial, commercial and residential, and roadways. Potential projects on Town owned land will be prioritized over commercial and residential projects because the Town has the authority to make changes to their own property. The total DCIA to be disconnected upon completion of each project will be included in the report.

Describe plans for continuing the Retrofit program and how to achieve a goal of 1% DCIA disconnection in future years. (Due 7/1/2022)

The program will describe how to achieve a goal of 1% DCIA disconnection in future years.

PART II: IMPAIRED WATERS INVESTIGATION AND MONITORING PROGRAM

MS4s that discharge to impaired streams shall be monitored. Screening of outfalls that discharge to impaired waters shall begin within one year of the effective date of the General Permit.

According to the 2018 Integrated Water Quality Report, there are three EPA Category 5 impaired waterbody segments in the Town shown below. Category 5 designates a water that is impaired or threatened by a pollutant or pollutants for one or more designated uses and requires a total maximum daily load (TMDL).

- Naugatuck River (6900-00_05)
- Naugatuck River (6900-00_06)
- Branch Brook (6910-00_01)
- Branch Brook (6910-00_02)

The Naugatuck River is an impaired water with a TMDL for bacteria. The “Total Maximum Daily Load Analysis for Recreational uses of the Naugatuck River Regional Basin” report was approved by the EPA on June 6, 2008. These segments of Branch Brook do not have an established TMDL, but these segments of the river are not supporting aquatic life due to some pollutant or pollutants.

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 Stormwater Pollutants

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

The plan to screen all the outfalls that discharge to impaired waters is shown below. See Figure 2 in Appendix A for a map of the outfall locations. The Integrated Water Quality Report is published every two years. The monitoring schedule will be updated if impaired waters change.

Target Date	Measurable Goal/Activity
December 21, 2018	Screened Outfalls: 84, 85, 138, 139 & 140
March 24, 2020	Screened Outfalls 8, 21, 22, 23, 24, & 250.
July 1, 2021	Screened Outfalls 4,5, 20 & 48. Follow up investigation on outfalls with high pollutant concentrations.
July 1, 2021 July 1, 2022	Annually monitor the six priority outfalls. Screened Outfalls 8, 22, 84, 98, 138, & 139 on August 23, 2021.

1.2 Describe Program Status

Discuss 1) the status of monitoring work completed, 2) a summary of the results and any notable findings, and 3) any changes to the Stormwater Management Plan based on monitoring results.

- 1) Completed all wet weather sampling. Sampling of six priority outfalls conducted in 2021 and will continue to be monitored annually. 2) The bacteria levels continue to be exceeding the limits. No illicit connections found. Excessive bacteria levels are likely to be based on land use. 3) No changes to the Stormwater Management Plan based on monitoring results.

2 SCREENING DATA FOR OUTFALLS TO IMPAIRED WATERBODIES

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	Results	Name of Laboratory (if used)	Follow-up required? *
8		8/23/2021	Bacteria	<ul style="list-style-type: none"> E.Coli:14500 MPN/100mls Total Coliform: > 48400 MPN/100mls 	Phoenix	Yes
22		8/23/2021	Bacteria	<ul style="list-style-type: none"> E. Coli:126 MPN/100mls Total Coliform: > 48400 MPN/100mls 	Phoenix	Yes
84		8/23/2021	Bacteria	<ul style="list-style-type: none"> E.Coli:4560 MPN/100mls Total Coliform: > 48400 MPN/100mls 	Phoenix	Yes
98		8/23/2021	Bacteria	<ul style="list-style-type: none"> E. Coli:15400 MPN/100mls Total Coliform: > 48400 MPN/100mls 	Phoenix	Yes
138		8/23/2021	Bacteria	<ul style="list-style-type: none"> E.Coli:462 MPN/100mls Total Coliform: > 48400 MPN/100mls 	Phoenix	Yes
139		8/23/2021	Bacteria	<ul style="list-style-type: none"> E. Coli:2520 MPN/100mls Total Coliform: > 48400 MPN/100mls 	Phoenix	Yes

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

The six outfalls sampled in 2021 had concentrations of Total Coliform greater than the allowable limits stated in the 2017 General Permit and shown in the table above. Outfalls 8, 84, 98, 138, and 139 had concentrations of E.coli greater than the allowable. Follow-up investigations will be ongoing to these outfalls. Excessive bacteria levels are likely to be based on land use.

3 FOLLOW-UP INVESTIGATIONS

Provide the following information for outfalls exceeding the pollutant threshold.

Outfall ID	Status of drainage area investigation	Control measure to address impairment
8	Ongoing	Ongoing
22	Ongoing	Ongoing
84	Ongoing	Ongoing
98	Ongoing	Ongoing
138	Ongoing	Ongoing
139	Ongoing	Ongoing

4 PRIORITIZED OUTFALL MONITORING

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 ID	Latitude / Longitude	Sample date	Parameter(s)	Results	Name of Laboratory (if used)
8		8/23/2021	Bacteria	<ul style="list-style-type: none"> E.Coli:14500 MPN/100mls Total Coliform: >48400 MPN/100mls 	Phoenix
22		8/23/2021	Bacteria	<ul style="list-style-type: none"> E. Coli:126 MPN/100mls Total Coliform: >48400 MPN/100mls 	Phoenix
84		8/23/2021	Bacteria	<ul style="list-style-type: none"> E.Coli:4560 MPN/100mls Total Coliform: >48400 MPN/100mls 	Phoenix
98		8/23/2021	Bacteria	<ul style="list-style-type: none"> E. Coli:15400 MPN/100mls Total Coliform: >48400 MPN/100mls 	Phoenix
138		8/23/2021	Bacteria	<ul style="list-style-type: none"> E.Coli:462 MPN/100mls Total Coliform: >48400 MPN/100mls 	Phoenix
139		8/23/2021	Bacteria	<ul style="list-style-type: none"> E. Coli:2520 MPN/100mls Total Coliform: >48400 MPN/100mls 	Phoenix

PART III: ADDITIONAL IDDE PROGRAM DATA

1 ASSESSMENT AND PRIORITY RANKING OF CATCHMENTS DATA

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

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
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

3 CATCHMENT INVESTIGATION DATA

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
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

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 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
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

1 CERTIFICATION REQUIREMENTS

This plan and any document, including but not limited to any notice, information or report, which is submitted to the Commissioner of the CTDEEP under the General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems shall be signed by the chief elected official or principal executive officer, and by the individual or individuals responsible for preparing such document as defined in Section 22a-430-3(b) (2) of the Regulations of Connecticut State Agencies.

2 PLAN CERTIFICATION AND SIGNATURE

“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: Edmond V. Mone First Selectman Town of Thomaston	Print name: Raju Vasamsetti, P.E. Senior Project Manager Weston & Sampson Engineers, Inc.
Signature / Date:	Signature / Date:
Email: emone@thomastonct.org	Email: vasamsettir@wseinc.com

APPENDIX A
OUTFALL MAPS

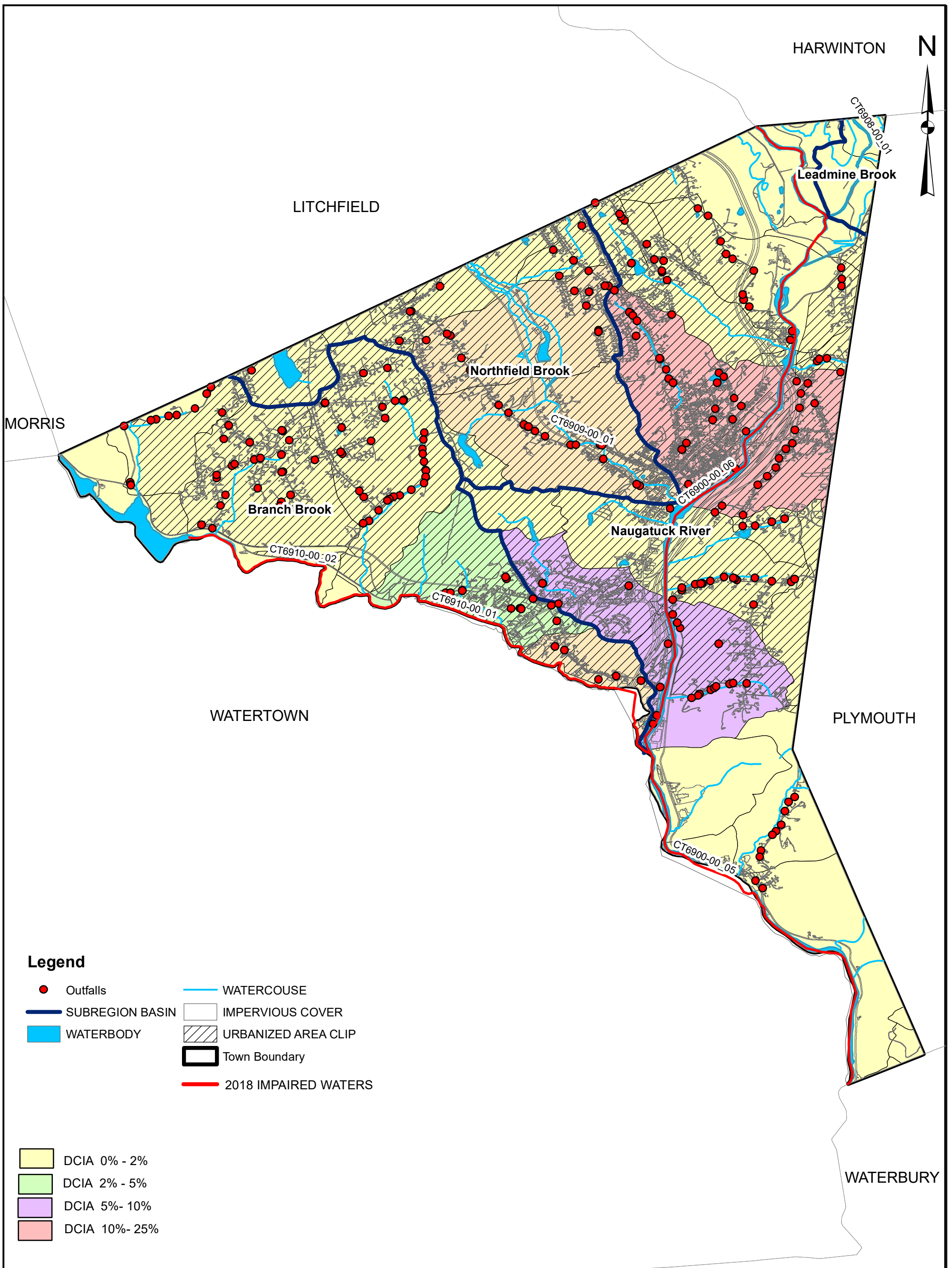


FIGURE 1
OUTFALLS AND IMPAIRED WATERS

ANNUAL REPORT 2019
TOWN OF THOMASTON



0 0.25 0.5 1 1.5 2 Miles

SOURCE: CTDEEP GIS DATA 2014

Weston & Sampson

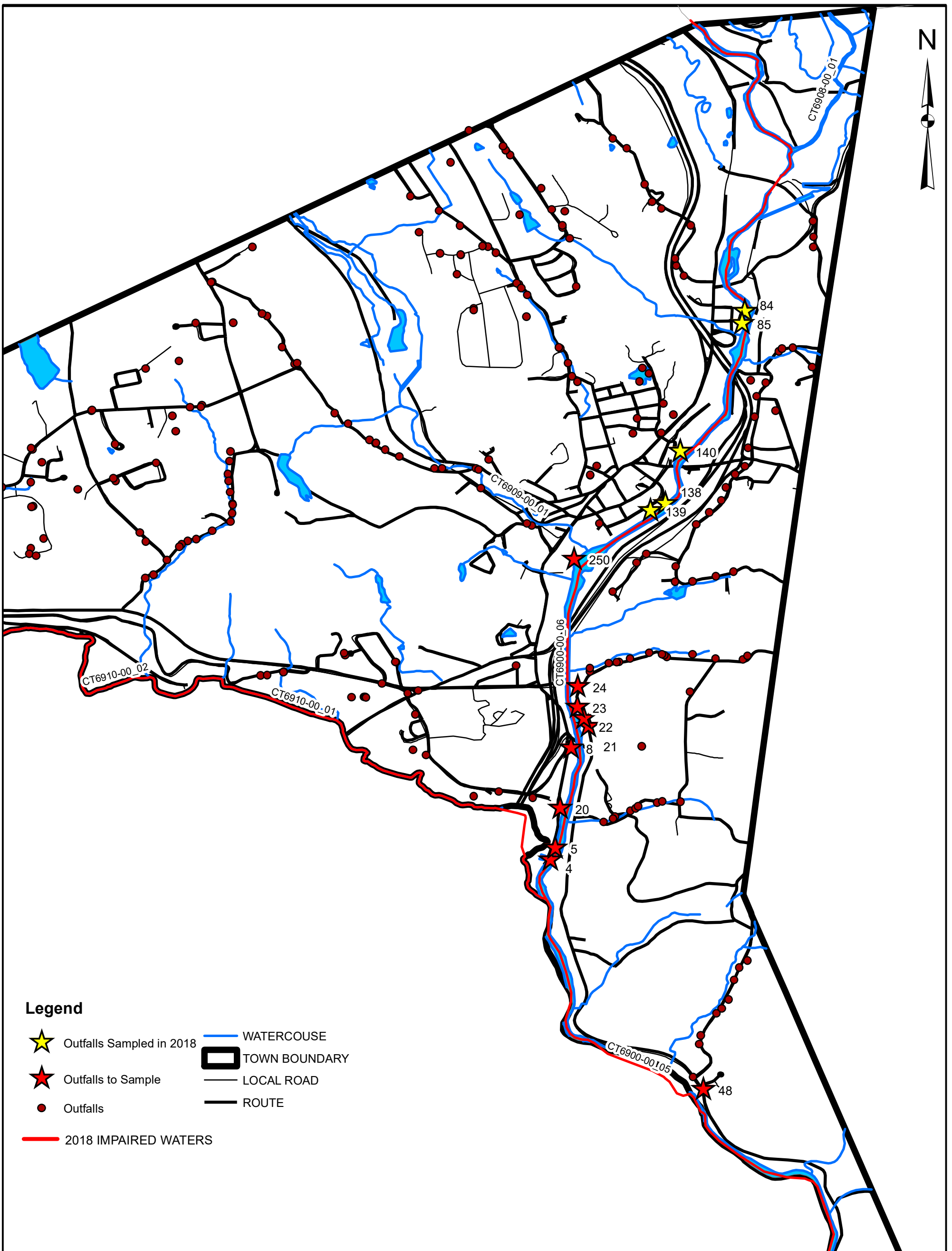


FIGURE 2
OUTFALLS TO SAMPLE

STORMWATER
ANNUAL REPORT
2019

TOWN OF THOMASTON



0 0.125 0.25 0.5 0.75 1
Miles

SOURCE: CTDEEP GIS DATA 2014