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REPORT

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TOWN OF
Prospect
CONNECTICUT

2019 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 2019 Stormwater Annual Report was developed by Weston & Sampson on behalf of the Town of Prospect (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 000110. The report includes an assessment of the identified best management practices in the SWMP and the progress towards achieving the implementation dates and measurable goals for each of the Minimum Control Measures.

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, 2019 to December 31, 2019 with updates on tasks to be completed in fiscal year 2019 ending in June 2020.

I.2 TOWN INFORMATION

The Town of Prospect covers an area of approximately 14.3 square miles and is home to approximately 9,405 residents according to the 2010 Census. Approximately 10.3 square miles of the Town is classified as Urbanized Area (UA) according to the 2010 Census. Approximately 0.4 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, Tenmile River, Willow Brook, West River, Beaver Pond Brook, Fulling Mill Brook, and Beacon Hill Brook. These are part of the Housatonic and South Central Coast major drainage basins. In addition, there are several significant lakes and ponds within the town including Long Hill Reservoir, William Moody Reservoir, and Prospect Reservoir.

The Town of Prospect has a Mayor-Council form of government. The Department of Public Works 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:

- Department of Public Works
- Planning & Zoning Commission
- Inland Wetlands Commission

- Conservation Commission
- Water Pollution Control Authority

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. At least fifty percent (50%) of these outfalls shall be screened by July 1, 2020, and 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 Town of Prospect does not have any impaired waters; therefore, stormwater monitoring is not required. In the future if any of the waters in the Town are declared impaired in the State Integrated Water Quality Report, then stormwater monitoring will be conducted.

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. The same team developed the Annual Reports for 2017 and 2018. A list of the project team is provided below.

Table I.1 SWMP DEVELOPMENT TEAM

Name	Organization & Title
Robert Chatfield	Town of Prospect Mayor and Director of Public Works
Mark Capanna	Town of Prospect Assistant Director of Public Works
Mary Barton	Town of Prospect Land Use Inspector
Raju Vasamsetti, P.E.	Weston & Sampson Project Manager
Lauren Coles, P.E.	Weston & Sampson Project Engineer

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

Table 1.1 Public Education and Outreach BMP Measurable Goals and Implementation Dates & Status							
BMP	Status	Activities in current reporting period	Measurable Goal	Responsible Department or Person	Due	Date completed or projected completion date	Additional Details
1-1 Implement public education and outreach	Complete	<ul style="list-style-type: none"> Updated brochures/ fact sheets. Continue to display in Town Hall. The SWMP and links to stormwater websites are posted on the Town website. 	Post Brochure/ Fact Sheets in the Town Hall and on the Town Website.	Land Use Inspector Webmaster	Ongoing Beginning 7/1/2017	Ongoing	<ul style="list-style-type: none"> The Town placed the brochures/ fact sheets in the Public Library. The Town distributed brochures at Planning and Zoning and Inland Wetland Meetings and attached a permanent fixture to hold the factsheets in the Meeting Room.
1-2 Address education/ outreach for pollutants of concern.	Complete	Updated information in the Library of Education Materials that is maintained at the Town Hall.	Public has access to Library of Educational Materials.	Land Use Inspector Webmaster	Ongoing Beginning 7/1/2017	Ongoing	

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 provide mutt mitts® (plastic bags for dog waste) at parks to encourage citizens to pick up pet waste.

The Town will continue to display brochures/fact sheets at the Town Hall and post links to stormwater information online. The information in the printed and online fact sheets will be updated when new information becomes available.

The Town plans to hand out fliers about stormwater pollutants at the Pumpkin Festival in the fall of 2020.

1.3 Activities Implemented to Educate the Community on Stormwater

Table 1.2 Details of Activities Implemented to Educate The Community on Stormwater

Program Element/Activity	Audience (and number of people reached)	Topic(s) covered	Pollutant of Concern addressed (if applicable)	Responsible dept. or partner org.
Brochures/ Fact sheets at Town Hall	Developers, home owners (approx. 100 to 150)	Sources of Stormwater pollutants (car oil, fertilizer, pet waste), Rain Gardens	Not Applicable	Land Use Inspector
Stormwater Information on Website http://www.townofprospect.org/mayor/stormwater.html	Information is available to anyone who views the town website including Developers and Town residents	Stormwater Information with links to Quinnipiac River Watershed Association, CT DEEP, USEPA. UCONN CLEAR NEMO MS4 Guidelines. Sources of Stormwater pollutants	Not Applicable	Land Use Inspector
Distribute fliers at Community Day at the Fire House (Fall 2019)	Families (approx.. 100-200)	Sources of Stormwater pollutants (car oil, fertilizer, pet waste)	Not Applicable	Land Use Inspector

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

Table 2.1 Public Involvement/Participation BMP Measurable Goals and Implementation Dates & Status							
BMP	Status	Activities in current reporting period	Measurable Goal	Responsible Department or Person	Due	Date completed or projected completion date	Additional Details
2-1 Comply with public notice requirements for the Stormwater Management Plan	Complete	Posted Stormwater Management Report online.	Post Stormwater Management Report online.	Land Use Inspector Webmaster	Ongoing	Ongoing	The website link is shown in Section 2.3.
2-2 Comply with public notice requirements for Annual Reports	Ongoing/ In Progress	Post Annual Report online. This will be completed by 2/15/2019.	Continue posting Annual Reports online.	Land Use Inspector Webmaster	2/15/2020	Projected 2/15/2020	
2-3 Brochures/ factsheets at Town Hall	Complete	Updated brochures/ fact sheets. Continue to display in Town Hall	Place Brochure/ Fact Sheets at Town Hall.	Land Use Inspector Asst. DPW Director Webmaster	Ongoing Beginning 7/1/2018	Ongoing	

2.2 Public Involvement/Participation Activities

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

The Town will start distributing brochures at monthly Planning and Zoning and Inland Wetland Meetings. These meetings are open to the public.

Brochures/ Factsheets will remain posted at the Town Hall and will also be placed in the Library.

Future annual reports will be posted online.

2.3 Public Involvement/ Participation

Table 2.2 Public Involvement/ Participation Reporting Metrics

Metrics	Implemented	Date	Posted
Availability of the Stormwater Management Plan announced to public	Yes	7/1/2017	http://www.townofprospect.org/mayor/stormwater.html
Availability of Annual Report announced to public	On Schedule	Projected 2/15/2020	http://www.townofprospect.org/mayor/stormwater.html

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

Table 3.1 Illicit Discharge Detection and Elimination BMP Measurable Goals and Implementation Dates & Status							
BMP	Status	Activities in current reporting period	Measurable Goal	Responsible Department or Person	Due	Date completed or projected completion date	Additional Details
3-1 Develop written IDDE program	Ongoing/ In progress	The Town developed an IDDE program based on the IDDE program template from UCONN's CT NEMO. The IDDE program was completed in 2018. The report is complete except for the ordinance that is still under review.	Develop written plan of IDDE program	DPW WPCA	7/1/2018	Completed 7/1/2019	
3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas	Ongoing/ In progress	The outfalls in the priority areas were reviewed in the field during the summer of 2018 during dry weather screening.	Update outfalls in priority areas in GIS maps.	Consultant Webmaster	7/1/2019	Completed Fall 2018	The Town has previously located all the outfalls, and they are available in GIS through NVCOG see Appendix A.

Table 3.1 Illicit Discharge Detection and Elimination BMP (Continued)

BMP	Status	Activities in current reporting period	Measurable Goal	Responsible Department or Person	Due	Date completed or projected completion date	Additional Details
3-3 Implement citizen reporting program	Ongoing/ In progress	The point of contact person is listed on the Town's website. The Citizen Reporting Program is described in Section 3 of the IDDE Report.	Post point of contact phone number and email address online.	Asst. DPW Director	7/1/2017	Completed 7/1/2017	The Stormwater Management email page posts the Mayor's Office's phone number: 203-758-4461 Email: info@townofprospect.org
3-4 Establish legal authority to prohibit illicit discharges	In progress-	Developing a Town Ordinance regarding non-stormwater discharges based on the template from UCONN's CT NEMO's website.	Write and implement a Town Ordinance	Town Council DPW	7/1/2018	Projected 7/1/2020	
3-5 Develop record keeping system for IDDE tracking	Ongoing/ In progress	The record keeping system will be updated in the IDDE report.	Document IDDE findings in Annual Reports	Asst. DPW Director	7/1/2017	Completed 7/1/2017	
3-6 Address IDDE in areas with pollutants of concern	Ongoing/ In progress	Not Applicable because there are no pollutants of concern.	Not Applicable because there are no pollutants of concern.	Asst. DPW Director	Not specified	N/A	There are no listed impaired waters in Prospect, so this BMP is not applicable.

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/September 2018. There were no illicit discharges found.

3.3 Citizen Reports

Citizen reports of suspected illicit discharges received during this reporting period.

Table 3.2 Suspected Illicit Discharge Reports

Date of Report	Location / suspected source	Response taken
No reports received during reporting period		

3.4 Illicit Discharges

Record of illicit discharges occurring during the reporting period and SSOs occurring July 2012 through end of reporting period.

Table 3.3 SSO Reports

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						

3.5 Method Used to Track Illicit Discharge Reports

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

The Assistant DPW Director is responsible for tracking and responding to illicit discharge reports. The CHESPROCOTT Health District is responsible for tracking septic records for the Town.

3.6 Actions Taken to Address Septic Failures

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

Table 3.4 Septic Failures

Location and nature of structure with failing septic systems	Actions taken to respond to and address the failures	Impacted waterbody or watershed, if known
40 Talmadge Hill Rd.	Repair or replacement	Unknown
19 Farmwood Dr.	Repair or replacement	Unknown
11 Corine Dr.	Repair or replacement	Unknown
43 Sherwood Dr.	Repair or replacement	Unknown
64 Clark Hill Rd.	Repair or replacement	Unknown
3 Farmwood Dr.	Repair or replacement	Unknown
47 Woodcrest Dr.	Repair or replacement	Unknown
52 Putting Green	Repair or replacement	Unknown
12 Evergreen Lane	Repair or replacement	Unknown
12 Arbor Meadow	Repair or replacement	Unknown
2 Hemlock	Repair or replacement	Unknown
38 Colonial	Repair or replacement	Unknown
17 Plank Rd.	Repair or replacement	Unknown
24 Knapp Dr.	Repair or replacement	Unknown
27 Melissa Ln.	Repair or replacement	Unknown
56 Talmadge Hill Rd.	Repair or replacement	Unknown
2 Pinecrest	Repair or replacement	Unknown
54 Woodcrest	Repair or replacement	Unknown
89 (R) Talmadge Hill Rd.	Repair or replacement	Unknown
7 Overlook Ct	Repair or replacement	Unknown
10 Rosum Circle	Repair or replacement	Unknown
45 Summit Rd.	Repair or replacement	Unknown
40 Maria Hotchkiss	Repair or replacement	Unknown

Table 3.4 Septic Failures Continued

Location and nature of structure with failing septic systems	Actions taken to respond to and address the failures	Impacted waterbody or watershed, if known
119 Summit Rd.	Repair or replacement	Unknown
34 Clark Hill Rd.	Repair or replacement	Unknown
1 Highland Dr.	Repair or replacement	Unknown
53 Scott Rd.	Repair or replacement	Unknown
21 Woodcrest	Repair or replacement	Unknown
130 Matthew St.	Repair or replacement	Unknown
1 Hydeler	Repair or replacement	Unknown
11 Salem Rd.	Repair or replacement	Unknown
11 Farmwood	Repair or replacement	Unknown
42 Waterbury Rd.	Repair or replacement	Unknown
48 Beach Dr.	Repair or replacement	Unknown
2 Sherwood Dr.	Repair or replacement	Unknown
12 Finno Ct	Repair or replacement	Unknown
33 Morris Rd.	Repair or replacement	Unknown
72 Klein	Repair or replacement	Unknown

3.7 IDDE reporting metrics

Table 3.5 IDDE Reporting Metrics	
Metrics	
Estimated or actual number of MS4 outfalls	287*
Estimated or actual number of interconnections	Unknown
Outfall mapping complete	100%
Interconnection mapping complete	0%
System-wide mapping complete (detailed MS4 infrastructure)	75%
Outfall assessment and priority ranking	90%
Dry weather screening of all High and Low priority outfalls complete	N/A
Catchment investigations complete	0
Estimated percentage of MS4 catchment area investigated	50%

*See Outfall Map in Appendix A.

3.8 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 18, 2019. The training contained information on the 2017 MS4 Permit Requirements including illicit discharge identification and reporting and best management practices. Another training session will be provided in the spring of 2021 with more detailed information about IDDE and best management practices.

4 CONSTRUCTION SITE STORMWATER RUNOFF CONTROL

Under the General Permit Section 6(a)(4), 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	Site Plan Review	Site Inspection and Enforcement
Zoning Regulations	2015	Section 11.4.5, Certification of Erosion and Sediment Control Plan	Section 4.14.6.1, Inspection Section 13.2, Enforcement
Subdivision Regulations	2013	Article III, Section B, Final Subdivision Application	Article VI, Items 1-2, Sediment and Erosion Control Bonding
Inland Wetlands and Watercourse Regulations	2013	Section 8, Application Procedures	Section 14, Enforcement
Ordinance Establishing Fines and Citation Procedure for Zoning Violations	2003		Zoning Enforcement Officer fines \$150 for each and every day such erosion and sedimentation violations exist.

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

**Table 4.2 Construction Site Stormwater Runoff Control BMP
Measurable Goals and Implementation Dates & Status**

BMP	Status	Activities in current reporting period	Measurable Goal	Responsible Department or Person	Due	Date completed or projected completion date	Additional Details
4-1 Implement, upgrade, and enforce land use regulations or other legal authority to meet requirements of MS4 general permit	Complete	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.	Land Use Inspector, Asst. DPW Director, Planning & Zoning Commission, Inland Wetlands Commission	7/1/2019	Completed 12/19/2018	
4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval	Complete	Fire, Water and Health Departments, Planning & Zoning, Asst. DPW Director, Inland Wetlands Commission (when necessary) review site plans. County Soil and Water Conservation District makes recommendations on submitted site plans	Conduct Site Plan Review Procedures.	Land Use Inspector, Asst. DPW Director, Planning & Zoning Commission, Inland Wetlands Commission	Ongoing Beginning 7/1/2017	Ongoing	See regulations listed in Table 4.1.
4-3 Review site plans for stormwater quality concerns	Complete	Planning & Zoning and Assistant DPW Director review site plans for stormwater quality concerns. Consultant engineers conduct detailed engineering reviews of site plans.	Town Committees review plans in accordance with regulations.	Land Use Inspector, Asst. DPW Director, Planning & Zoning Commission, Inland Wetlands Commission	Ongoing Beginning 7/1/2017	Ongoing	The 2018 Zoning Amendments Section 4.14 C states Site Stormwater Management Plan and Report requirements.

Table 4.2 Construction Site Stormwater Runoff Control BMP (Continued)

BMP	Status	Activities in current reporting period	Measurable Goal	Responsible Department or Person	Due	Date completed or projected completion date	Additional Details
4-4 Conduct site inspections	Complete	Inspectors from the Town are authorized to inspect construction sites. The Town enforces regulations	Continue to conduct site inspections and enforce site regulations.	Land Use Administrator, Asst. DPW Director	Ongoing Beginning 7/1/2017	Ongoing	See regulations listed in Table 4.1.
4-5 Implement procedure to allow public comment to site development	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 Town Department for consideration.	Public comments are forwarded to the appropriate Department.	Land Use Administrator, Asst. DPW Director	Ongoing Beginning 7/1/2017	Ongoing	
4-6 Implement procedure to notify developers about DEEP construction stormwater permit	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, Asst. DPW Director	Ongoing Beginning 7/1/2017	Ongoing	

4.2 Construction Site Runoff Control Activities

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

The Planning & Zoning and Assistant DPW Director will continue to review site plans in accordance with the various town regulations. Site plans are reviewed within seven days of the application date. The Land Use Inspector reviews comments from the Water Department. The applicants must also file a sediment & erosion control check list with their application.

The 2018 Zoning Regulations Amendments include additions to Section 4.14 Erosion & Sedimentation Control and 4.22 Stormwater Management Standards. These sections describe stormwater management standards, stormwater treatment facilities, and site stormwater management plan requirements. The Zoning Regulations Amendments became effective in January 2019.

Inspectors from the Town 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

Under the General Permit Section 6(a)(5), 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

April 1, 2015

Section 13.2, Enforcement

Subdivision Regulations

March 1, 2013

Planning & Zoning

Inland Wetlands and Watercourse Regulations

Effective Date: July 1, 1974

As amended to: June 3, 2013

Section 14, Enforcement

Ordinance Establishing Fines and Citation Procedure for Zoning Violations

Adopted September 2, 2003

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

**Table 5.1 Post-Construction Stormwater Management BMP
Measurable Goals and Implementation Dates & Status**

BMP	Status	Activities in current reporting period	Measurable Goal	Responsible Department or Person	Due	Date completed or projected completion date	Additional Details
5-1 Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning	Ongoing/ In Progress	Continue procedures for addressing post-construction BMPs including projects with 1 to 5 acres in disturbance. Formally, revise regulations by 7/1/2021.	Update regulations.	Land Use Inspector, Asst. DPW Director	7/1/2021	Projected 7/1/2021	The revised Zoning Regulations include LID measures. Update Subdivision Regulations, and Inland Wetlands and Watercourse Regulations to include LID.
5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects	Ongoing/ In Progress	Enforce LID/ runoff reduction regulations through site plan review.	Development and redevelopment projects will include LID/ runoff reduction measures.	Land Use Inspector, Asst. DPW Director	Ongoing beginning 7/1/2019	Projected 7/1/2020	
5-3 Identify retention and detention ponds in priority areas	Completed	The Town provided a list of retention and detention ponds throughout the Town including priority areas	List and map of retention and detention ponds in priority areas	Asst. DPW Director	7/1/2019	Completed 11/20/2019	
5-4 Implement long-term maintenance plan for stormwater basins and treatment structures	Ongoing/ In Progress	Implementing long-term maintenance of stormwater basins and treatment structures through scheduled maintenance based.	Inspect and maintain basins and structures in accordance to long-term plan.	Asst. DPW Director	Ongoing beginning 7/1/2019	Projected 4/1/2020	Public basins and structures are maintained by the DPW while privately owned are maintained by owner.

Table 5.1 Post-Construction Stormwater Management BMP (Continued)

BMP	Status	Activities in current reporting period	Measurable Goal	Responsible Department or Person	Due	Date completed or projected completion date	Additional Details
5-5 DCIA mapping	Ongoing/ In Progress	A Baseline DCIA map was developed. The map will be used to develop the Retrofit Program.	Update DCIA mapping.	Asst. DPW Director Consultant	7/1/2020	Completed 7/1/2019	
5-6 Address post-construction issues in areas with pollutants of concern	Not started	There are no pollutants of concern. Inspect construction areas in accordance with regulations.	Enforce construction BMPs.	Asst. DPW Director	Not Specified	Projected 7/1/2020	

5.2 Post-Construction Stormwater Management Activities

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

Continue to include LID/ runoff reduction measures in development and redevelopment projects. LID is defined in the 2018 Zoning Regulation Amendments. Inland Wetlands and Watercourse Regulations are in the process of being updated to include stormwater and LID practices.

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 drafted, and it will be finalized by July 1, 2020.

5.3 Post-Construction Stormwater Management Reporting Metrics

Table 5.2 Post-Construction Stormwater Management Reporting Metrics

Baseline (2012) Directly Connected Impervious Area (DCIA)	238.98 acres
DCIA disconnected (redevelopment plus retrofits)	In progress
Retrofits completed	None
DCIA disconnected	In progress
Estimated cost of retrofits	N/A
Detention or retention ponds identified	22 ponds identified this year

5.4 Method to Determine Baseline DCIA.

Briefly describe the method to be used to determine baseline DCIA

The Town will choose from the following methods developed by CT NEMO:

- Method 1 involves assuming impervious Cover (IC) from the CT NEMO map is 100% connected; therefore, IC will equal DCIA.
- Method 2 involves using the equations on UConn NEMO's website to estimate DCIA based on the development density in each basin.
- Method 3 involves calculating DCIA through map analysis and field checking.

A combination of the above mentioned three methods was utilized.

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

Table 6.1 Pollution Prevention/ Good Housekeeping BMP Measurable Goals and Implementation Dates & Status							
BMP	Status	Activities in current reporting period	Measurable Goal	Responsible Department or Person	Due	Date completed or projected completion date	Additional Details
6-1 Develop/Implement formal employee training program	Complete	Training was conducted	Implement annual training meetings.	Asst. DPW Director	Ongoing Beginning 7/1/2017	Ongoing	The annual training was completed in 2019 by Weston & Sampson.
6-2 Implement MS4 property and operations maintenance	Ongoing/ In progress	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.	Asst. DPW Director	Ongoing Beginning 7/1/2018	Ongoing	The Town provides mutt mitts® (plastic bags for dog waste) at parks to encourage citizens to pick up pet waste.
6-3 Implement coordination with interconnected MS4s	Not started	Meet with operators of interconnected MS4s. Coordinate operations and maintenance procedures. This has not been started yet.	Coordinate with interconnected MS4s.	Asst. DPW Director	Not specified	Not specified	In the future, the Town and DOT will coordinate operations and maintenance procedures.

Table 6.1 Pollution Prevention/ Good Housekeeping BMP (Continued)

BMP	Status	Activities in current reporting period	Measurable Goal	Responsible Department or Person	Due	Date completed or projected completion date	Additional Details
6-4 Develop/Implement program to control other sources of pollutants to the MS4	Not started	Develop program to control other sources of pollutants. This has not been started yet.	Develop and implement program to control other sources of pollutants.	Asst. DPW Director	Not specified	Projected 7/1/2020	
6-5 Evaluate additional measures for discharges to impaired waters	Not started	Not applicable because there are no impaired waters.	Not applicable because there are no impaired waters.	Asst. DPW Director	Not specified	N/A	
6-6 Track projects that disconnect DCIA	Ongoing	Track projects that disconnect DCIA.	Report projects that disconnect DCIA in annual reports.	Asst. DPW Director	Ongoing	Projected 7/1/2020	
6-7 Implement infrastructure repair/ rehab program	Not Started	Repairing and rehabilitating the MS4 infrastructure in a timely manner was not started yet.	Implement infrastructure repair/ rehab program	Asst. DPW Director	7/1/2021	Projected 7/1/2021	
6-8 Develop/Implement plan to identify/prioritize retrofit projects	In-progress	Develop plan to identify/prioritize retrofit projects was started.	Database of identified/prioritized retrofit projects Analyzed Town properties with high DCIA.	Asst. DPW Director	7/1/2020	Projected 7/1/2020	
6-9 Implement retrofit projects to disconnect 2% of DCIA	Not Started	Track projects that disconnect DCIA, and include in annual report was not started.	Implement retrofit projects.	Asst. DPW Director	7/1/2022	Projected 7/1/2022	
6-10 Develop/implement street sweeping program	Complete	All streets were swept after the snow melted.	Street sweeps are conducted annually.	Asst. DPW Director	Ongoing beginning 7/1/2017	Ongoing	All roadways, parking lots and facilities are swept at least once per year. Areas of concern are swept more than once.

Table 6.1 Pollution Prevention/ Good Housekeeping BMP Continued

BMP	Status	Activities in current reporting period	Measurable Goal	Responsible Department or Person	Due	Date completed or projected completion date	Additional Details
6-11 Develop/implement catch basin cleaning program	Complete	Continue Catch Basin Maintenance Program.	Catch basins are cleaned in accordance with the Program.	Asst. DPW Director	Ongoing beginning 7/1/2020	Ongoing	
6-12 Develop/implement snow management practices	Ongoing/ In Progress	Develop and implement standard operating practices for snow management.	Implement standard snow management practices.	Asst. DPW Director	Ongoing beginning 7/1/2018	Ongoing	

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.

Continue following operation and maintenance procedures.

6.3 Pollution Prevention/ Good Housekeeping Reporting Metrics

Table 6.2 Pollution Prevention/ Good Housekeeping Reporting Metrics	
Employee training provided for key staff	Yes
Street sweeping	
Curb miles swept	143 miles
Volume (or mass) of material collected	Unknown
Catch basin cleaning	
Total catch basins in priority areas	Unknown
Total catch basins in MS4	2100
Catch basins inspected	750
Catch basins cleaned	750
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 and sand
Total amount of each deicing material applied	1,950 tons
Type(s) of deicing equipment used	None
Lane-miles treated	N/A
Snow disposal location	
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)	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)	Undetermined
Cost of mitigation actions/retrofits	N/A

6.4 Catch Basin Cleaning Program

Briefly describe the method used to optimize your catch basin inspection and cleaning schedule. (No modifications were made.)

This will consist of inspecting and 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 a minimum, will annually evaluate and, if necessary, clean catch basins and other stormwater structures that accumulate sediment. Typically, one third 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 three years.
- 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 the immediate vicinity of watercourse 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.

The retrofit program will be completed by 7/1/2020. The draft 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.

The Retrofit Plan is in a draft state. The program will describe how to achieve a goal of 1% DCIA disconnection in future years.

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

The Retrofit Plan is in a draft state. The program will describe how to achieve a goal of 1% DCIA disconnection annually over the next 5 years.

7 MONITORING RESULTS

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 2016 Integrated Water Quality Report, the Town of Prospect does not contain any impaired waters; therefore, the Town is not required to conduct impaired waters outfall monitoring. The Integrated Water Quality Report is published every two years, and the Town will conduct impaired waters monitoring if any streams are classified as impaired in the future.

8 ADDITIONAL IDDE PROGRAM DATA

8.1 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).

Table 8.1 Catchment Rankings		
1. Catchment ID (DEEP Basin ID)	2. Category	3. Rank

8.2 Outfall and Interconnection Screening and Sampling Data

Provide sample data for outfalls where flow is observed. Only include Pollutant of concern data for outfalls that discharge into stormwater impaired waterbodies.

Table 8.2 Dry Weather Screening and Sampling Data from Outfalls and Interconnections

Outfall / Interconnection ID	Screening / sample date	Ammonia	Chlorine	Conductivity	Salinity	E. coli or enterococcus	Surfactants	Water Temp	Pollutant of concern	If required, follow-up actions taken

Provide sample data for outfalls and key junction manholes of any catchment area with at least one System Vulnerability Factor.

Table 8.3 Wet Weather Sample and Inspection Data

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

8.3 Catchment Investigation Data

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.

Table 8.4 System Vulnerability Factor Summary

Outfall ID	Receiving Water	System Vulnerability Factors

Where SVFs are:

1. History of SSOs, including, but not limited to, those resulting from wet weather, high water table, or fat/oil/grease blockages.
2. Sewer pump/lift stations, siphons, or known sanitary sewer restrictions where power/equipment failures or blockages could readily result in SSOs.
3. Inadequate sanitary sewer level of service (LOS) resulting in regular surcharging, customer back-ups, or frequent customer complaints.
4. Common or twin-invert manholes serving storm and sanitary sewer alignments.
5. Common trench construction serving both storm and sanitary sewer alignments.
6. Crossings of storm and sanitary sewer alignments.
7. Sanitary sewer alignments known or suspected to have been constructed with an underdrain system;
8. Sanitary sewer infrastructure defects such as leaking service laterals, cracked, broken, or offset sanitary infrastructure, directly piped connections between storm drain and sanitary sewer infrastructure, or other vulnerability factors identified through Inflow/Infiltration Analyses, Sanitary Sewer Evaluation Surveys, or other infrastructure investigations.

9. Areas formerly served by combined sewer systems.
10. Any sanitary sewer and storm drain infrastructure greater than 40 years old in medium and densely developed areas.
11. Widespread code-required septic system upgrades required at property transfers (indicative of inadequate soils, water table separation, or other physical constraints of the area rather than poor owner maintenance).
12. History of multiple local health department or sanitarian actions addressing widespread septic system failures (indicative of inadequate soils, water table separation, or other physical constraints of the area rather than poor owner maintenance).

Table 8.5 Key Junction Manhole Dry Weather Screening and Sampling Data

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

Table 8.6 Wet Weather Investigation Outfall Sampling Data

Outfall ID	Sample date	Ammonia	Chlorine	Surfactants

Table 8.7 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

9 CERTIFICATION AND SIGNATURE

9.1 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.

9.2 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

Robert Chatfield
Mayor
Director of Department of Public Works
Town of Prospect, Connecticut

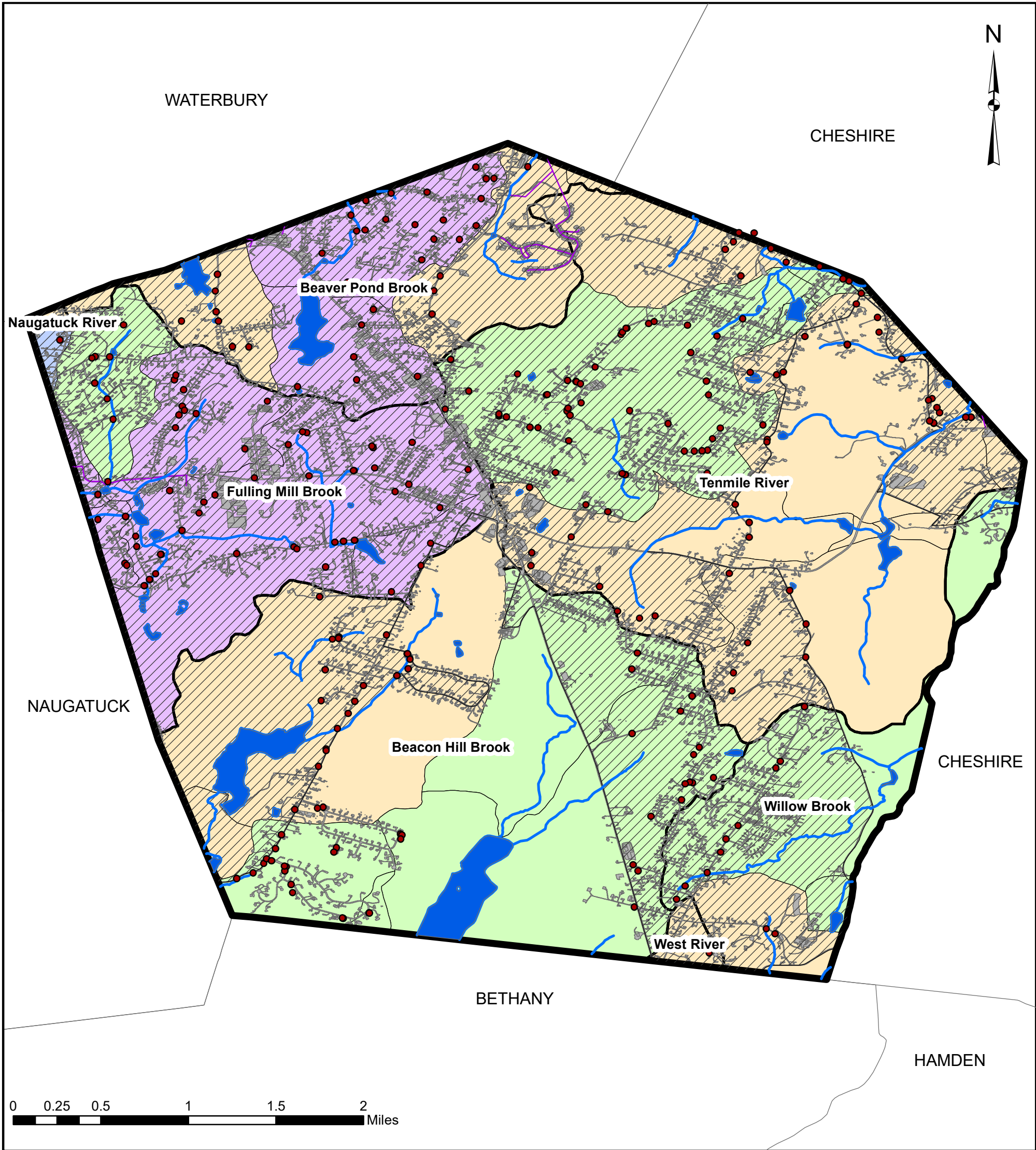
Signature and Date

Document Prepared by

Raju Vasamsetti, P.E.
Project Manager
Weston & Sampson Engineers, Inc.

Signature and Date

APPENDIX A
OUTFALL MAP



Legend

- OUTFALLS
- WATERBODY
- WATERCOURSE
- ▨ URBANIZED AREA
- SEWER
- ▬ TOWN BOUNDARY
- IMPERVIOUS COVER
- DCIA 0% - 1 %
- DCIA 1% - 3%
- DCIA 3% - 6%
- DCIA 6%- 10%

FIGURE 1
OUTFALLS AND DCIA

ANNUAL REPORT 2019

TOWN OF PROSPECT



SOURCE: CTDEEP GIS DATA 2014