



**Town of Bolton, Connecticut**

**2025 Annual Report**

**General Permit for the Discharge of Stormwater  
from Small Municipal Separate Storm Sewer Systems**

**Permit Number GSM000104**

MS4 General Permit  
Town of Bolton 2025 Annual Report  
Permit Number GSM 000104  
January 01, 2025 - December 31, 2025

Primary MS4 Contact: Wade M. Thomas, Nathan L. Jacobson & Associates, Inc., [wthomas@nlja.com](mailto:wthomas@nlja.com), 860.526.9591

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This report documents the Town of Bolton's efforts to comply with the conditions of the MS4 General Permit to the maximum extent practicable (MEP) from January 01, 2025 to December 31, 2025.

Sandra Pierog replaced Robert Morra as First Selectman in November 2017.

Joshua S. Kelly replaced Joyce M. Stille as Administrative Officer in November 2019.

James Rupert replaced Joshua S. Kelly as Administrative Officer in April 2021.

Pamela Sawyer replaced Sandra Pierog as First Selectwoman in November 2021.

Lance Dimock retired as Highway Foreman in June 2023.

Sean Bailey was appointed Highway Foreman, effective June 05, 2023.

Sean Bailey, Highway Foreman resigned effective August 09, 2024.

A. J. Golden was appointed Highway Foreman, effective August 12, 2024.

## Part I: Summary of Minimum Control Measure Activities

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

#### 1.1 BMP Summary

| BMP   | Activities in current reporting period   | Sources Used (if applicable)       | Method of Distribution  | Audience (and number of people reached) | Measurable Goal  | Person Responsible, Department                           | Additional details   |
|---|--|------------------------------------|---|---|------------------|--|--|
| 1-1 Implement public education and outreach | 2017 - None<br>2018 - See Below  | NEMO Fact Sheets                   | <a href="https://town.boltonct.org.com">https://town.boltonct.org.com</a> | 100s of the General Public              | Public Education | Kathleen McCavanagh, Assistant to the Town Administrator | Additional Public Education resources will be added as they are developed.   |
|   | 2017 - 2025 Ongoing  | Salmon River Watershed Partnership | <a href="https://salmonriverct.org/">https://salmonriverct.org/</a>       | 100s of the General Public              | Public Education | Pat Young SRWP Watershed Coordinator                     | The Salmon River Watershed Annual Newsletter is posted on the website.   |
|   | 2018 - 2025<br>Seven NEMO Program Clean Waters Starting in Your Home and Yard Fact Sheets were made available to the public on the town website at:<br><a href="https://bolton.govoffice.com">https://bolton.govoffice.com</a><br><br>Fact Sheet 1<br>What's the Big Deal About Water Quality<br><br>Fact Sheet 2<br>Managing Your Household Chemicals<br><br>Fact Sheet 3 | NEMO Fact Sheets                   | <a href="https://town.boltonct.org.com">https://town.boltonct.org.com</a> | 100s of the General Public              | Public Education | Kathleen McCavanagh, Assistant to the Town Administrator | Hard copies of the NEMO fact Sheets were also made available to the public at the Town Library and Town senior Center for disbursement.<br><br>The hard copies of the Fact Sheets are replenished as needed. |

|   |  |                  |   |                            |                               |  |  |
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|   | <p>Caring for Your Septic System</p> <p>Fact Sheet 4<br/>Integrated Pest Management and Biological Controls for the Homeowner</p> <p>Fact Sheet 5<br/>Conservation Landscaping for Water Quality</p> <p>Fact Sheet 6<br/>Animal Waste and Water Quality</p> <p>Fact Sheet 8<br/>Lawn Care the Environmentally Friendly Way</p>   |                  |   |                            |                               |  | Additional Public Education resources will be added as they are developed. |
| 1-2<br>Address education/<br>outreach for pollutants of concern | <p>Link to UConn CLEAR Website</p> <p>Three NEMO Program Clean Waters Starting in Your Home and Yard Fact Sheets were made available to the public on the town website at:</p> <p><a href="https://bolton.govoffice.com">https://bolton.govoffice.com</a></p> <p>Fact Sheet 1<br/>What's the Big Deal About Water Quality</p> <p>Fact Sheet 3<br/>Caring for Your Septic System</p> <p>Fact Sheet 6<br/>Animal Waste and Water Quality</p> | NEMO Fact Sheets | <a href="https://town.boltonct.org.com">https://town.boltonct.org.com</a> | 100s of the General Public | Public Education and Outreach | Kathleen McCavanagh, Assistant to the Town Administrator | Additional Public Education resources will be added as they are developed. |

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|--|--|------------------------------|--|-------------------------------|--|--|---|
| 1-3<br>Salmon<br>River<br>Watershed<br>Partnership<br>(SRWP)<br>Activities | Pat Young, SRWP<br>Coordinator, represents<br>the Partnership on<br>statewide issues relating<br>to water quality and<br>non-point source<br>pollution and related<br>information is shared<br>with the 10 watershed<br>towns.       |                              |  |                               | Public<br>Education<br>and<br>Outreach | Pat Young,<br>SRWP<br>Coordinator  |   |
|  | <b>2017</b><br>March<br><br>SRWP Annual Newsletter   |                              | <a href="https://www.salmonriverct.org">https://www.salmonriverct.org</a>  | 100s of the<br>General Public | Public<br>Education<br>and<br>Outreach | Pat Young,<br>SRWP<br>Coordinator  | Watershed<br>resource<br>protection<br>and water<br>quality<br>preservation |
|  | 2017<br>May to September<br><br>HOBO stream<br>temperature loggers<br>were used to obtain<br>hourly readings of<br>temperature at 10<br>locations  | Field sampling and analyses  | <a href="https://www.salmonriverct.org">https://www.salmonriverct.org</a><br><br>The data can be accessed at:<br><a href="http://db.ecosheds.org/">http://db.ecosheds.org/</a> | 100s of the<br>General Public | Public<br>Education<br>and<br>Outreach | Pat Young,<br>SRWP<br>Coordinator<br><br>2 College<br>Interns and<br>Town Land-<br>Use Staff |   |
|  | 2017<br>June to August<br><br>Field monitoring of 11<br>stream segment<br>continued.<br><br>Weekly samples were<br>analyzed for<br>temperature, pH,<br>dissolved oxygen,<br>conductivity, total<br>dissolved solids and<br>salinity. | Field sampling and analyses. | <a href="https://www.salmonriverct.org">https://www.salmonriverct.org</a><br><br>A report was also prepared and<br>forwarded to all 10 watershed<br>towns                      | 100s of the<br>General Public | Public<br>Education<br>and<br>Outreach | Pat Young,<br>SRWP<br>Coordinator<br><br>1 Summer<br>Intern and 8<br>community<br>volunteers |   |

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|  | 2017 - October<br><br>Pond Life and Water Quality  |                              | Field Trip   | 100s of the General Public | Public Education and Outreach | Pat Young, SRWP Coordinator   | Impacts of water quality on pond life.                       |
|  | <b>2018</b><br>March<br><br>SRWP Annual Newsletter   |                              | <a href="https://www.salmonriverct.org">https://www.salmonriverct.org</a>  | 100s of the General Public | Public Education and Outreach | Pat Young, SRWP Coordinator   | Watershed resource protection and water quality preservation |
|  | 2018<br>May to September<br><br>HOBO stream temperature loggers were used to obtain hourly readings of temperature at 10 locations   | Field sampling and analyses  | <a href="https://www.salmonriverct.org">https://www.salmonriverct.org</a><br><br>The data can be accessed at:<br><a href="http://db.ecosheds.org/">http://db.ecosheds.org/</a> | 100s of the General Public | Public Education and Outreach | Pat Young, SRWP Coordinator<br><br>2 College Interns and Town Land-Use Staff  |  |
|  | 2018<br>June to August<br><br>Field monitoring of 11 stream segment continued.<br><br>Weekly samples were analyzed for temperature, pH, dissolved oxygen, conductivity, total dissolved solids and salinity. | Field sampling and analyses. | <a href="https://www.salmonriverct.org">https://www.salmonriverct.org</a><br><br>A report was also prepared and forwarded to all 10 watershed towns                            | 100s of the General Public | Public Education and Outreach | Pat Young, SRWP Coordinator<br><br>1 Summer Intern and 8 community volunteers |  |
|  | <b>2019</b><br>March<br><br>SRWP Annual Newsletter   | SRWP Annual Newsletter       | <a href="https://www.salmonriverct.org">https://www.salmonriverct.org</a>  | 100s of the General Public | Public Education and Outreach | Pat Young, SRWP Coordinator   | Watershed resource protection and water quality preservation |

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| 2019<br>May to September   | Field sampling and analyses  | <a href="https://www.salmonriverct.org">https://www.salmonriverct.org</a>                     | 100s of the<br>General Public | Public<br>Education<br>and<br>Outreach | Pat Young,<br>SRWP<br>Coordinator | 2 College<br>Interns and<br>Town Land-<br>Use Staff                         |
| HOBO stream<br>temperature loggers<br>were used to obtain<br>hourly readings of<br>temperature at 10<br>locations                        |                              | The data can be accessed at:<br><a href="http://db.ecosheds.org/">http://db.ecosheds.org/</a> |                               |  |                                   |   |
| 2019<br>June to August   | Field sampling and analyses. | <a href="https://www.salmonriverct.org">https://www.salmonriverct.org</a>                     | 100s of the<br>General Public | Public<br>Education<br>and<br>Outreach | Pat Young,<br>SRWP<br>Coordinator | 1 Summer<br>Intern and 8<br>community<br>volunteers                         |
| Field monitoring of 11<br>stream segment<br>continued.   |                              | A report was also prepared and<br>forwarded to all 10 watershed<br>towns                      |                               |  |                                   |   |
| Weekly samples were<br>analyzed for<br>temperature, pH,<br>dissolved oxygen,<br>conductivity, total<br>dissolved solids and<br>salinity. |                              |   |                               |  |                                   |   |
| <b>2020</b><br>March   | SRWP Annual Newsletter       | <a href="https://www.salmonriverct.org">https://www.salmonriverct.org</a>                     | 100s of the<br>General Public | Public<br>Education<br>and<br>Outreach | Pat Young,<br>SRWP<br>Coordinator | Watershed<br>resource<br>protection<br>and water<br>quality<br>preservation |
| 2020<br>May to September   | Field sampling and analyses  | <a href="https://www.salmonriverct.org">https://www.salmonriverct.org</a>                     | 100s of the<br>General Public | Public<br>Education<br>and<br>Outreach | Pat Young,<br>SRWP<br>Coordinator | 2 College<br>Interns and<br>Town Land-<br>Use Staff                         |
| HOBO stream<br>temperature loggers<br>were used to obtain<br>hourly readings of<br>temperature at 10<br>locations                        |                              | The data can be accessed at:<br><a href="http://db.ecosheds.org/">http://db.ecosheds.org/</a> |                               |  |                                   |   |
| 2020<br>June to August   | Field sampling and analyses. | <a href="https://www.salmonriverct.org">https://www.salmonriverct.org</a>                     | 100s of the<br>General Public | Public<br>Education<br>and<br>Outreach | Pat Young,<br>SRWP<br>Coordinator | 1 Summer<br>Intern and 8  |
| Field monitoring of 11<br>stream segment<br>continued.   |                              | A report was also prepared and<br>forwarded to all 10 watershed<br>towns.                     |                               |  |                                   |   |

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|---|--|------------------------------|---|----------------------------|-------------------------------|---|--|
|   | Weekly samples were analyzed for temperature, pH, dissolved oxygen, conductivity, total dissolved solids and salinity.   |                              |   |                            |                               | community volunteers  |  |
| <b>2021</b><br>March                    |  | SRWP Annual Newsletter       | <a href="https://www.salmonriverct.org">https://www.salmonriverct.org</a>   | 100s of the General Public | Public Education and Outreach | Pat Young, SRWP Coordinator   | Watershed resource protection and water quality preservation |
| 2021<br>June to August                  | Field monitoring of 11 stream segment continued.<br><br>Weekly samples were analyzed for temperature, pH, dissolved oxygen, conductivity, total dissolved solids and salinity.                   | Field sampling and analyses. | <a href="https://www.salmonriverct.org">https://www.salmonriverct.org</a><br><br>A report was also prepared and forwarded to all 10 watershed towns | 100s of the General Public | Public Education and Outreach | Pat Young, SRWP Coordinator<br><br>1 Summer Intern and 8 community volunteers |  |
| <b>2022</b><br>January through December | Ongoing Meetings with Community Leaders and Land Use Board Members Watershed Visioning Sessions.<br><br>Initiated in 2021 and ongoing, long-term visioning process with a goal of establishing a |                              |   | 25 participants            |                               | Pat Young, SRWP Coordinator   |  |

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|  | path toward long term sustainability.  |  |                            |                               |   |  |  |
| 2022<br>March                          | SRWP Annual Newsletter   | <a href="https://www.salmonriverct.org">https://www.salmonriverct.org</a>  | 100s of the General Public | Public Education and Outreach | Pat Young, SRWP Coordinator   | Watershed resource protection and water quality preservation |  |
| 2022<br>May to September               | Field sampling and analyses<br><br>HOBO stream temperature loggers were used to obtain hourly readings of temperature at 10 locations  | <a href="https://www.salmonriverct.org">https://www.salmonriverct.org</a><br><br>The data can be accessed at:<br><a href="http://db.ecosheds.org/">http://db.ecosheds.org/</a> | 100s of the General Public | Public Education and Outreach | Pat Young, SRWP Coordinator<br><br>2 College Interns and Town Land-Use Staff  |  |  |
| 2022<br>June to August                 | Field sampling and analyses.<br><br>Field monitoring of 11 stream segment continued.<br><br>Weekly samples were analyzed for temperature, pH, dissolved oxygen, conductivity, total dissolved solids and salinity. | <a href="https://www.salmonriverct.org">https://www.salmonriverct.org</a><br><br>A report was also prepared and forwarded to all 10 watershed towns                            | 100s of the General Public | Public Education and Outreach | Pat Young, SRWP Coordinator<br><br>1 Summer Intern and 8 community volunteers |  |  |
| <b>2023</b><br>March                   | SRWP Annual Newsletter   | <a href="https://www.salmonriverct.org">https://www.salmonriverct.org</a>  | 100s of the General Public | Public Education and Outreach | Pat Young, SRWP Coordinator   | Watershed resource protection and water quality preservation |  |
| 2023<br>March<br><br>Hebron Maple Fest |  | In Person<br>A booth was set up to display SRWP activities and a sign-up for volunteer water quality   | 100s of the General Public | Public Education and Outreach | Pat Young, SRWP Coordinator   |  |  |

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|                               |   |  | monitoring to focus on the impact of water quality on macroinvertebrates and water quality preservation.   |                             |                               |   |  |
| 2023<br>March                 | Water Quality Monitoring Report   |  | Release of report summarizing summer baseline stream monitoring with volunteers, board members, town official and the general public.  | 100s of the General Public  | Public Education and Outreach | Pat Young, SRWP Coordinator   |  |
| 2023<br>May to September      | HOBO stream temperature loggers were used to obtain hourly readings of temperature at 10 locations throughout the watershed   | Field sampling and analyses  | <a href="https://www.salmonriverct.org">https://www.salmonriverct.org</a><br><br>The data can be accessed at: <a href="http://db.ecosheds.org/">http://db.ecosheds.org/</a>  | 1100s of the General Public | Public Education and Outreach | Pat Young, SRWP Coordinator<br><br>2 College Interns and Town Land-Use Staff  |  |
| 2023<br>June to August        | Field monitoring of 11 stream segment continued. Weekly samples were analyzed for temperature, pH, dissolved oxygen, conductivity, total dissolved solids and salinity. | Field sampling and analyses.   | <a href="https://www.salmonriverct.org">https://www.salmonriverct.org</a><br><br>A summary report was also prepared and forwarded to all 10 watershed towns  | 100s of the General Public  | Public Education and Outreach | Pat Young, SRWP Coordinator<br><br>1 Summer Intern and 8 community volunteers |  |
| 2023<br>June to August        | Revamping of Salmon River Watershed Partnership website   |  | <a href="https://www.salmonriverct.org">https://www.salmonriverct.org</a><br><br>The website includes results of stream monitoring, SRWP Meeting Minutes, partnership activities and resources for home, animal and business owners to protect water resources | 100s of the General Public  | Public Education and Outreach | Pat Young, SRWP Coordinator   |  |
| 2023<br>September to November |   | Classroom and Field program following CT DEEP protocol for benthic macroinvertebrate assessments |  | 15 Community Volunteers     | Public Education and Outreach | Pat Young, SRWP Coordinator   |  |

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|                         | Field Stream Assessment with Community Volunteers                  |   |   |                               |                               |                                       |  |
| 2023<br>October         | RHAM High School Stream Assessment Blackledge River and Fawn Brook | Classroom and Gay City State Park. Four separate programs were conducted which included benthic macroinvertebrate identification, discussion of impact of pollution on pond ecology, importance of vegetated buffers and features of a watershed. |   | 85 RHAM Students and Teachers | Public Education and Outreach | Pat Young, SRWP Watershed Coordinator |  |
| 2023<br>Year-Around     |  |   | SRWP Outreach on Facebook<br><a href="https://www.facebook.com/10towns">https://www.facebook.com/10towns</a><br>SRWP Outreach on Instagram<br><a href="www.instagram.com/salmonriverct">www.instagram.com/salmonriverct</a><br>SRWP Outreach on Website<br><a href="http://www.salmonriverct.org">www.salmonriverct.org</a> |                               | Public Education and Outreach | Pat Young, Watershed Coordinator      |  |
| <b>2024</b><br>February |  |   | Webinar presentation to Connecticut Society of Engineers at the request of the society to present the watershed management activities in the Salmon River Watershed and the Eightmile River Watershed.  | 30+ Society Members           | Public Education and Outreach | Pat Young, Watershed Coordinator      |  |
| 2024<br>March           | Water Quality Monitoring Report                                    |   | Release of report summarizing 2023 summer baseline stream monitoring with volunteers/board members, town officials, volunteers and general public.  | 100s of the General Public    | Public Education and Outreach | Pat Young, SRWP Coordinator           |  |
| 2024<br>March           | Spring Fling with Friends of Sunrise and Machimoodus State Parks   |   | Booth set up with display on SRWP activities and live "touch" tank with Macroinvertebrate to discuss lifecycle impacts from stream pollution and a display showing all water quality  | 100s of the General Public    | Public Education and Outreach | Pat Young, SRWP Coordinator           | Watershed resource protection and water quality preservation |

|                          |  |   |   |                                  |                               |  |  |
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|                          |  |   | monitoring sites and a take home brochure including steps landowners can take to protect water quality.   |                                  |                               |  |  |
| 2024<br>March            | SRWP Annual Newsletter   |   | Covers a variety of SRWP activities and new items related to protecting watershed resources and preserving water quality.<br><br>The 2024 edition included articles on the importance of floodplains and associated management, and aquatic ecosystems and land preservation in the watershed as a means to protect surface water quality and habitats. | 100s of the General Public       | Public Education and Outreach | Pat Young, SRWP Coordinator  | Watershed resource protection and water quality preservation |
| 2024<br>May to September | Field sampling and analyses<br><br>Data was retrieved and downloaded in October and November 2024  | HOBO stream temperature loggers were used to obtain hourly readings of temperature at 10 locations throughout the watershed | <a href="https://www.salmonriverct.org">https://www.salmonriverct.org</a>   | 100s of the General Public       | Public Education and Outreach | Pat Young, SRWP Coordinator<br><br>5 Volunteers, Board Members and Town Land Use Staff |  |
| 2024<br>May              | Presentation on Aquatic Invasive Species   |   | Co-host a presentation on aquatic invasive species with the Connecticut Office of Aquatic Invasive Plants   | 20 members of the General Public | Public Education and Outreach | Pat Young, SRWP Coordinator  |  |
| 2024<br>June to August   | Field sampling and analyses.<br><br>Second year monitoring from previous routes that were monitored from 2013 to 2017 after a five year gap. The two routes included 11 stream sites throughout the watershed to establish baseline data and track future changes. | Field monitoring of 11 stream segment continued.<br><br>Weekly samples were analyzed for temperature, pH,                   | The data can be accessed at: <a href="https://www.salmonriverct.org">https://www.salmonriverct.org</a>  | 100s of the General Public       | Public Education and Outreach | Pat Young, SRWP Coordinator<br><br>10 Community Volunteers                             |  |

|                   |  |   |                                  |                               |                             |  |  |
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|                   | dissolved oxygen, conductivity, total dissolved solids and salinity. | Volunteers were trained on hand-held monitoring equipment and took weekly samples for temperature, pH, dissolved oxygen, conductivity, total dissolved solids and salinity.<br><br>A summary report will be prepared and forwarded to all ten watershed towns.  |                                  |                               |                             |  |  |
| 2024<br>June      | Hebron Day   | Booth set up with display on SRWP activities showing all water quality monitoring sites and results, information on the importance of land preservation for protecting water quality and a take home brochure including steps landowners can take to protect water quality.   | 100s of the General Public       | Public Education and Outreach | Pat Young, SRWP Coordinator |  |  |
| 2024<br>July      | SRWP Watershed Tour  | Final leg of a four-leg watershed tour for SRWP board members and guests focusing on the Salmon River Cove. The tour included a paddle on the Salmon River Cove to discuss water quality impacts, invasive species and future management activities.  | 15 SRWP Board Members and Guests | Public Education and Outreach | Pat Young, SRWP Coordinator |  |  |
| 2024<br>September | Haddam Neck Fair Booth Setup   | Booth set up for the three-day town fair event with display on SRWP activities and sign up for water quality monitoring with a special focus on impacts of water quality to macroinvertebrates, a display showing water quality monitoring sites and a take home brochure including steps landowners can take to protect water quality. | 100s the General Public          | Public Education and Outreach | Pat Young, SRWP Coordinator |  |  |

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| 2024<br>September to November | Field Stream Assessment with Community Volunteers                                 | Classroom and outdoor field training presentation and eight Stream Macroinvertebrate Assessments conducted in 2024.<br><br>Volunteers collected and identified benthic macroinvertebrate as part of CT DEEP protocol for conducting stream assessments to establish if stream segments are meeting state water quality goals for aquatic life support. | 24 Community Volunteers   | Public Education and Outreach | Pat Young, SRWP Coordinator           |  |
| 2024<br>October               | RHAM High School Stream Assessment Blackledge River and Fawn Brook in Marlborough | Classroom and field program following CT DEEP protocol for benthic macroinvertebrate assessments. Field portions also included potential impacts to streams, road crossing design and general river terms.   | 15 RHAM Students in UConn Environmental Science Class and Teachers                          | Public Education and Outreach | Pat Young, SRWP Watershed Coordinator |  |
| 2024<br>October               | Coventry High School Stream Assessment at Raymond Brook in Hebron                 | Field assessment program which included discussions on land use impacts to stream, importance of floodplains and drought conditions.   | 35 UConn Environmental Science Students and Coventry AP Biology Class Students and Teachers | Public Education and Outreach | Pat Young, Watershed Coordinator      |  |
| 2024<br>November              | Meeting with Town Officials and National Park Service                             | Meeting to discuss next steps of SRWP and held a question and answer session with the NPS on Wild & Scenic Designation and a potential request for a reconnaissance survey of town leaders, board members and NPS representatives.   | 15 Town Leaders, Board Members and National Park Service Representatives                    | Public Education and Outreach | Pat Young, Watershed Coordinator      |  |
| 2024<br>December              | Presentation by U.S. Army Corps of Engineers                                      | SRWP was requested to host a presentation and provide input on potential treatment of Salmon Cove for Hydrilla.  | 10 Town Leaders and Stakeholders  | Public Education and Outreach | Pat Young, Watershed Coordinator      |  |

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|  | 2024 Year-Around | <p>Launching and Field Checking HOBO Stream Conductivity Loggers</p> <p>A partnership project between GZA, Inc. Green Team and SRWP. SRWP currently manages eight conductivity loggers and sites are selected for monitoring after consultation with the towns and various state departments for any areas of concern.</p>   | Stream conductivity data is shared with CT DEEP Fisheries and Water Quality staff, USGS staff, GZA staff and SRWP staff |  | Public Education and Outreach | Pat Young, Watershed Coordinator |  |
|  | 2024 Year-Around | <p>SRWP Outreach on Facebook <a href="https://www.facebook.com/10towns">https://www.facebook.com/10towns</a></p> <p>SRWP Outreach on Instagram <a href="http://www.instagram.com/salmonriverct">www.instagram.com/salmonriverct</a></p> <p>SRWP Outreach on Website <a href="http://www.salmonriverct.org">www.salmonriverct.org</a></p> <p>The SRWP is funded primarily through seven of the ten watershed towns.</p> <p>The SRWP Coordinator represents the partnership on statewide issues related to water quality and non-point source pollution. Information is shared with the ten watershed towns for their dispersal and use.</p> <p>The SRWP Coordinator also comments on town activities, regulations or planning projects specific to water quality and stormwater when requested.</p> | Social Media Outreach   |  | Public Education and Outreach | Pat Young, Watershed Coordinator |  |

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

2007 - 2025 The Salmon River Watershed Partnership (SRWP) was formed in 2007 and has been conducting public education and outreach activities since then.

2026 - It is anticipated that several more public education and outreach resources to educate the public will be added to the town website and that the Salmon River Watershed Partnership will continue outreach and monitoring activities related to stormwater and water quality.

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

**2.1 BMP Summary**

| <b>BMP</b>  | <b>Status</b><br>(Complete, Ongoing, In Progress, or Not started) | <b>Activities in current reporting period</b>   | <b>Measurable Goal</b> | <b>Person Responsible, Department</b>                    | <b>Date completed or projected completion date</b><br>(include the start date for anything that is 'in progress') | <b>Location Posted</b>  | <b>Additional details</b>        |
|---|---|---|------------------------|--|---|---|----------------------------------|
| 2-1 Final Stormwater Management Plan publicly available                           | Complete  | 2017<br><br>A hard copy of the Draft 2017 Stormwater Management Plan (SMP) was made available to the public for review and comment on the town website. | Compliance             | Kathleen McCavanagh, Assistant to the Town Administrator | April 03, 2017  | <a href="https://town.bonct.org.com">https://town.bonct.org.com</a> | No public comments were received |
| 2-2 Comply with public notice requirements for Annual Reports (Annually by 02/15) | Complete  | 2018<br><br>The Draft 2017 MS4 Annual Report was made available for public review and comment on the town website.                                      | Compliance             | Kathleen McCavanagh, Assistant to the Town Administrator | 02/15/18  | <a href="https://town.bonct.org.com">https://town.bonct.org.com</a> | No public comments were received |
|   | Complete  | 2019<br><br>The Draft 2018 MS4 Annual Report was made available for public review and comment on the town website.                                      | Substantial Compliance | Kathleen McCavanagh, Assistant to the Town Administrator | 02/21/19  | <a href="https://town.bonct.org.com">https://town.bonct.org.com</a> | No public comments were received |

|  |          |  |                        |  |          |   |  |
|--|----------|--|------------------------|--|----------|---|--|
|  | Complete | 2020<br><br>The Draft 2019 MS4 Annual Report was made available for public review and comment on the town website. | Compliance             | Kathleen McCavanagh, Assistant to the Town Administrator | 02/12/20 | <a href="https://town.bo-tonct.org.com">https://town.bo-tonct.org.com</a> | No public comments were received                           |
|  | Complete | 2021<br><br>The Draft 2020 MS4 Annual Report was made available for public review and comment on the town website. | Substantial Compliance | Kathleen McCavanagh, Assistant to the Town Administrator | 03/01/21 | <a href="https://town.bo-tonct.org.com">https://town.bo-tonct.org.com</a> | No public comments were received.                          |
|  | Complete | 2022<br><br>The Draft 2021 MS4 Annual Report was made available for public review and comment on the town website. | Substantial Compliance | Kathleen McCavanagh, Assistant to the Town Administrator | 04/04/22 | <a href="https://town.bo-tonct.org.com">https://town.bo-tonct.org.com</a> | No public comments were received.                          |
|  | Complete | 2023<br><br>The Draft 2022 MS4 Annual Report was made available for public review and comment on the town website. | Substantial Compliance | Kathleen McCavanagh, Assistant to the Town Administrator | 02/28/23 | <a href="https://town.bo-tonct.org.com">https://town.bo-tonct.org.com</a> | No public comments were received.                          |
|  | Complete | 2024<br><br>The Draft 2023 MS4 Annual Report was made available for public   | Substantial Compliance | Kathleen McCavanagh, Assistant to the Town Administrator | 05/15/24 | <a href="https://town.bo-tonct.org.com">https://town.bo-tonct.org.com</a> | Public comments were received and the draft was revised to |

|  |                  |  |   |  |                         |   |  |
|--|------------------|--|---|--|-------------------------|---|--|
|  |                  | review and comment on the town website.  |   |  |                         |   | address the comments.  |
|  | In Progress      | 2025<br>The Draft 2024 MS4 Annual Report was made available for public review and comment on the town website.   | Substantial Compliance  | Kathleen McCavanagh, Assistant to the Town Administrator | 02/28/25                | <a href="https://town.boltonct.org.com">https://town.boltonct.org.com</a> | No public comments were received.  |
|  | In Progress      | 2026<br>The Draft 2025 MS4 Annual Report was made available for public review and comment on the town website.   | Substantial Compliance  | Kathleen McCavanagh, Assistant to the Town Administrator | 03/17/26                | <a href="https://town.boltonct.org.com">https://town.boltonct.org.com</a> | Public comments are to be Emailed to Wade Thomas at wthomas@nlja.com.  |
|  |                  |  |   |  |                         |   |  |
| 2-3 SRWP Volunteer Riffle Bioassessments | 2017<br>Complete | Volunteers and Students were trained to collect and identify benthic macroinvertebrate at 11 Stream Stations as part of the CT DEEP protocol for conducting stream assessments to establish whether stream segments were meeting state water quality goals for aquatic life support. | Public Participation<br>45 Local Citizens<br>Volunteers and<br>East Hampton<br>High School<br>Environmental<br>Club | Pat Young<br>SRWP<br>Watershed<br>Coordinator            | September -<br>November | <a href="http://www.salmonriverct.org">www.salmonriverct.org</a>          | Assessments were performed at the following Stream Stations within Bolton:<br><br>11/05/17<br><br>18821<br>Baker Brook<br><br>16266<br>Bolton Pond<br>Brook<br><br>15592<br>French Brook |

|               |   |  |   |                      |  |   |                      |
|---------------|---|--|---|----------------------|--|---|----------------------|
|               |   | The program was also used as an education component by providing hands on opportunities for students.  |   |                      |  |   | 17971 Railroad Brook |
| 2018 Complete | Volunteers and Students were trained to collect and identify benthic macroinvertebrate at 11 Stream Stations as part of the CT DEEP protocol for conducting stream assessments to establish whether stream segments were meeting state water quality goals for aquatic life support.<br><br>The program was also used as an education component by providing hands on opportunities for students. | Public Participation<br><br>60 Local Citizens Volunteers, RHAM High School Environmental Studies Class Students and East Hampton High School Environmental Club Students | Pat Young<br>SRWP Watershed Coordinator | September - November | <a href="http://www.salmonriverct.org">www.salmonriverct.org</a> | Assessments were performed at the following Stream Stations within Bolton<br><br>11/04/18<br><br>18821 Baker Brook<br><br>16266 Bolton Pond Brook<br><br>15592 French Brook<br><br>17971 Railroad Brook |                      |
| 2019 Complete | Volunteers and Students were trained to collect and identify benthic macroinvertebrate at 14 Stream Stations as part of the CT DEEP protocol for conducting stream  | Public Participation<br><br>65 Local Citizens Volunteers, RHAM High School Environmental Studies Class Students and East Haddam High School Forestry Class Students      | Pat Young<br>SRWP Watershed Coordinator | September - November | <a href="http://www.salmonriverct.org">www.salmonriverct.org</a> | Assessments were performed at the following Stream Stations within Bolton<br><br>11/03/19<br><br>18821  |                      |

|  |                  |   |   |   |                                 |   |   |
|--|------------------|---|---|---|---------------------------------|---|---|
|  |                  | <p>assessments to establish whether stream segments were meeting state water quality goals for aquatic life support.</p> <p>The program was also used as an education component by providing hands on opportunities for students.</p>   |   |   |                                 |   | <p>Baker Brook</p> <p>16266<br/>Bolton Pond Brook</p> <p>15592<br/>French Brook</p>   |
|  | 2020<br>Complete | <p>Volunteers and Students were trained to collect and identify benthic macroinvertebrate at 8 Stream Stations as part of the CT DEEP protocol for conducting stream assessments to establish whether stream segments were meeting state water quality goals for aquatic life support.</p> <p>The program was also used as an education component by providing hands on opportunities for students.</p> | <p>Public Participation</p> <p>10 Local Citizens Volunteers</p> | <p>Pat Young<br/>SRWP<br/>Watershed<br/>Coordinator</p> | <p>September -<br/>November</p> | <p><a href="http://www.salmonriverct.org">www.salmonriverct.org</a></p> | <p>Assessments were performed at the following Stream Stations within Bolton</p> <p>10/18/20</p> <p>18821<br/>Baker Brook<br/>Tributary</p> <p>15592<br/>French Brook</p> |
|  | 2021<br>Complete | <p>Volunteers and Students were trained to collect and identify</p>   | <p>Public Participation</p> <p>15 Local Citizens Volunteers</p> | <p>Pat Young<br/>SRWP<br/>Watershed<br/>Coordinator</p> | <p>September -<br/>November</p> | <p><a href="http://www.salmonriverct.org">www.salmonriverct.org</a></p> | <p>Assessments were performed at the following</p>  |

|  |                      |  |   |   |                                 |   |  |
|--|----------------------|--|---|---|---------------------------------|---|--|
|  |                      | <p>benthic macroinvertebrate at 9 Stream Stations as part of the CT DEEP protocol for conducting stream assessments to establish whether stream segments were meeting state water quality goals for aquatic life support.</p> <p>The program was also used as an education component by providing hands on opportunities for students.</p>               |   |   |                                 |   | <p>Stream Stations within Bolton</p> <p>10/31/21</p> <p>18821 Baker Brook Tributary</p> <p>15592 French Brook</p>                                      |
|  | <p>2022 Complete</p> | <p>Volunteers and Students were trained to collect and identify benthic macroinvertebrate at 8 Stream Stations as part of the CT DEEP protocol for conducting stream assessments to establish whether stream segments were meeting state water quality goals for aquatic life support.</p> <p>The program was also used as an education component by</p> | <p>Public Participation</p> <p>12 Local Citizens Volunteers</p> | <p>Pat Young<br/>SRWP<br/>Watershed<br/>Coordinator</p> | <p>September -<br/>November</p> | <p><a href="http://www.salmonriverct.org">www.salmonriverct.org</a></p> | <p>Assessments were performed at the following Stream Stations within Bolton</p> <p>10/23/22</p> <p>15592 French Brook</p> <p>17971 Railroad Brook</p> |

|  |  |   |  |   |                         |  |  |
|--|--|---|--|---|-------------------------|--|--|
|  |  | providing hands on opportunities for students.  |  |   |                         |  |  |
|  | 2023<br>Complete                         | Volunteers and Students were trained to collect and identify benthic macroinvertebrate at 9 Stream Stations as part of the CT DEEP protocol for conducting stream assessments to establish whether stream segments were meeting state water quality goals for aquatic life support. | Public Participation<br>15 Local Citizens Volunteers | Pat Young<br>SRWP<br>Watershed<br>Coordinator | September -<br>November | <a href="http://www.salmonriverct.org">www.salmonriverct.org</a> |  |
|  | 2024<br>September - November<br>Complete | Volunteers and Students were trained to collect and identify benthic macroinvertebrate at 8 Stream Stations as part of the CT DEEP protocol for conducting stream assessments to establish whether stream segments were meeting state water quality goals for aquatic life support. | Public Participation<br>24 Local Citizens Volunteers | Pat Young<br>SRWP<br>Watershed<br>Coordinator | September -<br>November | <a href="http://www.salmonriverct.org">www.salmonriverct.org</a> |  |
|  | 2025<br>September - November             | Volunteers and Students were trained to collect and identify  | Public Participation<br>25 Local Citizens Volunteers | Pat Young<br>SRWP<br>Watershed<br>Coordinator | September -<br>November | <a href="http://www.salmonriverct.org">www.salmonriverct.org</a> |  |

|  |          |  |                      |   |               |  |  |
|--|----------|--|----------------------|---|---------------|--|--|
|  | Complete | benthic macroinvertebrate at 8 Stream Stations as part of the CT DEEP protocol for conducting stream assessments to establish whether stream segments were meeting state water quality goals for aquatic life support. |                      |   |               |  |  |
| 2-4 SRWP Planners Workshop                           | Complete | 2017 - May<br><br>Salmon River Watershed Partnership Town Planners Workshop on land use and water quality preservation.  | Public Participation | Pat Young<br>SRWP<br>Watershed<br>Coordinator | May 2017      |  |  |
| 2-5 SRWP Community Leaders and Board Member Meetings | Complete | 2022<br>January to December<br><br>SRWP initiated a long-term visioning process with a goal of establishing a path towards long-term sustainability.   | Public Participation | Pat Young<br>SRWP<br>Watershed<br>Coordinator | December 2022 |  |  |

|  |             |   |   |   |               |  |  |
|--|-------------|---|---|---|---------------|--|--|
| 2-6 SRWP Bolton Conservation Commission Presentation | Complete    | 2022 - March<br><br>SRWP presentation on water quality monitoring initiatives related to Bolton and the watershed as a whole as well as opportunities to collaborate with the commission. | Public Involvement  | Pat Young<br>SRWP<br>Watershed<br>Coordinator | March 2022    |  |  |
| 2-7 SRWP Meeting with Town Leaders                   | Complete    | 2023 - December<br><br>Review highlights of the 5-year visioning plan and discuss SRWP contributions to the watershed.  | Public Involvement<br><br>15 Town Leaders and Staff   | Pat Young<br>SRWP<br>Watershed<br>Coordinator | December 2023 |  |  |
| 2-8 Consider Establishing a Stormwater Committee     | In progress | In process of identifying committee members   | Provide forum to coordinate Stormwater Management Plan implementation across Departments and Commissions. | James Rupert,<br>Town<br>Administrator        | Summer 2025   |  | Committee will represent Town Departments and Commissions with stake in stormwater management. |

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

Consideration will be given to holding quarterly or semi-annual Stormwater Committee meetings to review the Stormwater Management Plan implementation progress.

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

#### 3.1 BMP Summary

| <b>BMP</b>  | <b>Status</b><br>(Complete, Ongoing, In Progress, or Not started) | <b>Activities in current reporting period</b>  | <b>Measurable Goal</b>   | <b>Person Responsible, Department</b>                                       | <b>Date completed or projected completion date</b><br>(include the start date for anything that is 'in progress') | <b>Additional details</b>  |
|---|---|--|--|---|---|--|
| 3-1 Develop written IDDE program (Due 07/01/19)   | In progress   | Town is in process of completing a written IDDE program.   | Began development of the written IDDE program.   | Wade Thomas, Nathan L. Jacobson & Associates, Inc.                          | Anticipate completing by November 01, 2026.   | The IDDE Program will be developed in 2026.  |
| 3-2 Develop list and maps of all MS4 stormwater outfalls in priority areas (Due 07/01/20) | Complete  | MS4 stormwater outfall mapping was conducted in August 2007. The stormwater outfall mapping was compiled on a ESRI GIS layer. The MS4 stormwater outfall mapping will be updated to include impaired waters as contained in the State of Connecticut, Department of Energy and Environmental Protection 2016 Integrated Water Quality Report. The stormwater outfalls in the impaired waters will be identified. | Development of an ESRI GIS map layer with Impaired Waters, Urbanized Areas and watersheds with impervious area greater than 11%. | Board of Selectmen and Nathan L. Jacobson & Associates, Inc., Town Engineer | Completed in 2017.  |  |
| 3-3 Implement citizen reporting program (Ongoing)   | Complete  | A program to allow the general public to report suspected illicit discharges has been established.   | Compliance   | Board of Selectmen/ Joyce M. Stille, Administrative Officer                 | January 01, 2019  | The town website lists the telephone number at Town Hall to report suspected illicit discharges. The Administrative Officer will than notify the appropriate department for follow up. |

|   |             |   |   |   |                      |   |
|---|-------------|---|---|---|----------------------|---|
| 3-4 Establish legal authority to prohibit illicit discharges (Due 07/01/19) | Complete    | A Stormwater Ordinance was accepted by the Board of Selectmen on June 05, 2018 with an Effective Date of July 19, 2018.   | IDDE Ordinance enacted.<br><br>Substantial Compliance | Board of Selectmen/<br>Joyce M. Stille,<br>Administrative Officer | June 05, 2018        |   |
| 3-5 Develop record keeping system for IDDE tracking (Due 07/01/17)          | Complete    | 2017 through 2018 - None<br><br>2019 - Completed  | Substantial Compliance                                | Joyce M. Stille,<br>Administrative Officer                        | January 01, 2019     | The Highway Department is the listed contact. |
| 3-6 Address IDDE in areas with pollutants of concern                        | Complete    | Three NEMO Program Clean Waters Starting in Your Home and Yard Fact Sheets were made available to the public on the town website at:<br><br><a href="https://bolton.govoffice.com">https://bolton.govoffice.com</a><br><br>Fact Sheet 1<br>What's the Big Deal About Water Quality<br><br>Fact Sheet 3<br>Caring for Your Septic System<br><br>Fact Sheet 6<br>Animal Waste and Water Quality | Compliance  | Nathan L. Jacobson & Associates, Inc., Town Engineer              | Before July 01, 2018 |   |
| 3-7 Consolidate IDDE tracking spreadsheets                                  | Not started | Compile all the IDDE tracking requirements into one spreadsheet   | Substantial Compliance                                | Sean Bailey,<br>Supervisor,<br>Highway Department                 | July 01, 2024        | Simplify IDDE tracking activities.            |

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

The written program will be posted to the Dept of Public Works webpage and a link listed in the 2022 MS4 Annual Report; will update the written IDDE program as needed throughout the permit term.

Maintain master IDDE tracking spreadsheet and ensure all employees involved in IDDE program understand the logging process

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

| <b>Location</b><br>(Lat long/ street crossing /address and receiving water) | <b>Date and duration of occurrence</b> | <b>Discharge to MS4 or surface water</b> | <b>Estimated volume discharged</b> | <b>Known or suspected cause / Responsible party</b> | <b>Corrective measures planned and completed</b><br>(include dates) | <b>Sampling data</b> (if applicable) |
|---|--|--|------------------------------------|---|---|--------------------------------------|
|   |  |  |                                    |   |   |                                      |
|   |  |  |                                    |   |   |                                      |

2017 through 2025 - Based on review of records maintained by the Eastern Highlands Health District no SSOs have occurred.

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

| <b>Method used to track illicit discharge reports</b>                               | <b>Location and nature of structure with failing septic systems</b>   | <b>Actions taken to respond to and address the failures</b>  | <b>Impacted waterbody or watershed, if known</b>  | <b>Person Responsible, Department</b>  |
|---|---|--|---|--|
| <p><b>2017</b></p> <p>Not Applicable</p> <p>No illicit discharges were reported</p> | <p>8 subsurface sewage disposal system (SSDS) repairs were made:</p> <p>15 Dean Drive<br/>18 Hebron Road<br/>272 French Road<br/>841 Hop River Road<br/>34 Valerie Drive<br/>127 Vernon Road<br/>44 Lookout Landing<br/>33 Laurwood Drive</p> | <p>Septic System Repair<br/>Septic System Repair</p> | <p>4500-11-1<br/>3108-01-1-L1<br/>4707-00-2-L:2<br/>3108-00-2-R2<br/>3107-02-1<br/>3108-02-1-L3<br/>4707-02-1-L1<br/>4504-01-1-L1</p> | <p>Holly Hood, MPH,<br/>RS, Sanitarian II,<br/>Eastern Highlands Health District</p> |









|  |   |   |   |  |
|--|---|---|---|--|
|  | 34 Stonehedge Lane<br>55 Stonehedge Lane<br>41 Tinker Pond Road<br>50 Tinker Pond Road<br>24 Toomey Road<br>64 Volpi Road<br>191 West Street<br>27 Williams Road  | Septic Tank and Leaching Field Repair<br>Septic Tank Repair<br>Leaching Field Repair<br>Septic Tank Repair<br>Leaching Field Repair<br>Septic Tank Repair<br>Septic Tank and Leaching Field Repair<br>Septic Tank and Leaching Field Repair   | 3108-00-1<br>3108-00-1<br>4707-02-1<br>4707-02-1<br>3108-00-1<br>4504-03-1-L1<br>4707-00-2-R1<br>4500-11-1  |  |
| <b>2025</b><br><br>Not Applicable<br><br>No illicit discharges were reported | 24 subsurface sewage disposal system (SSDS) repairs were made:<br><br>14 Tunxis Trail<br>1 Anthony Road<br>628 Hop River Road<br>19 Fiano Road<br>29 Lyman Road<br>135 Notch Road<br>2 Converse Road<br>131 Camp Meeting Road<br>52 Stonehedge Lane<br>21 Fernwood Drive<br>116 Hebron Road<br>255 Hop River Road<br>154 Birch Mountain Road<br>7 Notch Road<br>50 Steeles Crossing Road<br>45 Quarry Road<br>26 Converse Road<br>25 Enrico Road<br>50 Tinker Pond Road<br>101 French Road<br>24 Brian Drive<br>20 Goodwin Road | Septic Tank Repair<br>Septic Tank Repair<br>Septic Tank Repair<br>Septic Tank Repair<br>Septic Tank Repair<br>Septic Tank and Leaching System<br>Sewer Repair<br>Septic Tank Repair<br>Septic Tank Repair<br>Septic Tank and Leaching Field<br>Septic Tank<br>Septic Tank and Leaching Field<br>Septic Tank and Leaching Field<br>Sewer<br>Septic Tank and Leaching Field<br>Septic Tank<br>Septic Tank and Leaching Field<br>Septic Tank<br>Septic Tank<br>Septic Tank<br>Septic Tank and Leaching Field<br>Septic Tank and Leaching Field | 4503-04-1-L1<br>4503-03-1-L1<br>3108-00-2-R1<br>4504-03-1-L1<br>4707-00-2-R1<br>4707-01-1<br>4707-00-1-L1<br>4707-00-1/4707-01-1<br>3108-00-1<br>3108-02-1<br>3107-02-1<br>3108-00-1<br>4504-03-1-L1<br>3108-00-1<br>3108-00-2-R2<br>3108-02-1-L3<br>4707-01-1<br>4707-02-1<br>4707-02-1<br>4707-02-1<br>3107-01-1<br>4500-11-1 | Thad D. King,<br>MPH, REHS,<br>Eastern<br>Highlands Health<br>District |
|  |   |   |   |  |

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

To be developed and tracked.

### 3.6 IDDE reporting metrics.

| Metrics  |      |
|--|------|
| Estimated or actual number of MS4 outfalls                           | 130  |
| Estimated or actual number of interconnections                       | 2    |
| Outfall mapping complete   | 100% |
| Interconnection mapping complete                                     | 90%  |
| System-wide mapping complete (detailed MS4 infrastructure)           | 40%  |
| Outfall assessment and priority ranking                              | 10%  |
| Dry weather screening of all High and Low priority outfalls complete | 0%   |
| Catchment investigations complete                                    | 10%  |
| Estimated percentage of MS4 catchment area investigated              | 10%  |

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

The Highway Department will be provided with a copy of the publication entitled *Illicit Discharge Detection and Elimination Manual, A Handbook for Municipalities*, Published January 2003 by the New England Interstate Water Pollution Control Commission.

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

##### 4.1 BMP Summary

| <b>BMP</b>  | <b>Status</b><br>(Complete, Ongoing, In Progress, or Not started) | <b>Activities in current reporting period</b>   | <b>Measurable Goal</b>         | <b>Person Responsible, Department</b>  | <b>Date completed or projected completion date</b><br>(include the start date for anything that is 'in progress') | <b>Additional details</b> |
|---|---|---|--------------------------------|--|---|---------------------------|
| 4-1 Implement, upgrade, and enforce land use regulations or other legal authority to meet requirements of MS4 general permit (Due 07/01/20) | Ongoing   | The existing in-place system works effectively.   | Compliance                     | Patrice Carson, AICP, Director of Community Development, Land Use Department | July 01, 2019   | Ongoing                   |
| 4-2 Develop/Implement plan for interdepartmental coordination in site plan review and approval (Ongoing)                                    | Ongoing   | Nathan L. Jacobson & Associates, Inc., Town Engineer, prepares land use review letters for most applications for the Inland Wetlands Commission, Planning Commission and Zoning Commission. | Interdepartmental Coordination | Patrice Carson, AICP, Director of Community Development, Land Use Department | July 01, 2017   | Ongoing                   |
| 4-3 Review site plans for stormwater quality concerns (Ongoing)   | Ongoing   | Nathan L. Jacobson & Associates, Inc., Town Engineer, encourages the use of LID BMPs as contained in the Connecticut Stormwater Quality Manual, Effective Date March 30, 2024, as amended.  | Compliance                     | Joseph M. Dillon, P.E., Town Engineer, Nathan L. Jacobson & Associates, Inc. | July 01, 2017   | Ongoing                   |
| 4-4 Conduct site inspections (Ongoing)  | Ongoing   | The town conducts construction site inspections for proper implementation and maintenance of soil erosion and sediment control measures.  | Compliance with Approved Plans | Joseph M. Dillon, P.E., Town Engineer, Nathan L. Jacobson & Associates, Inc. | July 01, 2017   | Ongoing                   |

|  |         |  |  |  |               |         |
|--|---------|--|--|--|---------------|---------|
| 4-5 Implement procedure to allow public comment on site development (Ongoing)                    | Ongoing | The land use application process allows for public comment on land use applications which are submitted to the Inland Wetlands Agency and the Planning & Zoning Commission during the Public Hearing Process when applicable.  |  | Patrice Carson, AICP, Director of Community Development, Land Use Department | July 01, 2017 | Ongoing |
| 4-6 Implement procedure to notify developers about DEEP construction stormwater permit (Ongoing) | Ongoing | Since the inception of the MS4 program Nathan L. Jacobson & Associates, Inc., Town Engineer, has made developer's engineers aware of the need to register for the General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities in engineering review letters which are typically prepared as part of the land use application process. | Awareness of the need to register for the General permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activities | Joseph M. Dillon, P.E., Town Engineer, Nathan L. Jacobson & Associates, Inc. | July 01, 2017 | Ongoing |
|  |         |  |  |  |               |         |

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

There are no large-scale projects currently in the land use review process, so it is anticipated that development will be limited to single residential lots or small-scale commercial development.

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

**5.1 BMP Summary**

| <b>BMP</b>  | <b>Status</b><br>(Complete, Ongoing, In Progress, or Not started) | <b>Activities in current reporting period</b>  | <b>Measurable Goal</b>   | <b>Person Responsible, Department</b>  | <b>Date completed or projected completion date</b><br>(include the start date for anything that is 'in progress') | <b>Additional details</b> |
|---|---|--|--|--|---|---------------------------|
| 5-1 Establish and/or update legal authority and guidelines regarding LID and runoff reduction in site development planning (Due 07/01/22) | In Progress   | The land use regulations will be revised to incorporate the requirements contained in Minimum Control Measure No. 5 - Post-Construction Runoff Control.  | The requirements contained in Minimum Control Measure No. 5 - Post-Construction Runoff Control will be forwarded to the First Selectman. | Patrice Carson, AICP, Director of Community Development, Land Use Department | Anticipating this will be completed by December 01, 2026.   |                           |
| 5-2 Enforce LID/runoff reduction requirements for development and redevelopment projects (Due 07/01/22)                                   | Ongoing   | Integrate LID/runoff reduction into all site development when appropriate.   | Compliance   | Joseph M. Dillon, P.E., Town Engineer, Nathan L. Jacobson & Associates, Inc. | July 01, 2019   | July 01, 2017             |
| 5-3 Identify retention and detention ponds in priority areas (Due 07/01/20)   | Complete  | Retention Ponds, Detention Ponds and Hydrodynamic Separators will be inventoried.<br><br>A GIS Map Layer will be created after the inventory. Part of the inventory process will be facility maintenance requirements. | Develop Detention Pond Inventory   | Lance Dimock, Supervisor, Highway Department<br><br>and                      | July 01, 2019   |                           |

|   |             |   |   |  |               |   |
|---|-------------|---|---|--|---------------|---|
|   |             |   |   | Joseph M. Dillon, P.E.,<br>Town Engineer,<br>Nathan L. Jacobson & Associates, Inc. |               |   |
| 5-4 Implement long-term maintenance plan for stormwater basins and treatment structures (Ongoing) | In Progress | Inventory Retention Ponds, Detention Ponds and Hydrodynamic Separators<br><br>Implement the Post-Construction Stormwater Management Facility Operation and Maintenance Plan Manual. |   | Lance Dimock,<br>Supervisor,<br>Highway Department                                 | July 01, 2019 | A Post-Construction Stormwater Management Facility Operation and Maintenance Plan Manual with an Effective Date of July 01, 2019 was developed. |
| 5-5 DCIA mapping (Due 07/01/20)   | Complete    | Completed the process of DCIA Mapping from base mapping prepared by UConn CLEAR.  | The DCIA to MS4 stormwater outfalls discharging to waters identified as impaired in the 2020 Integrated Water Quality Report and in watersheds with a DCIA of greater than 11 percent will start in 2018. | Nathan L. Jacobson & Associates, Inc., Town Engineer                               | July 01, 2020 | Completed in December 2018.   |
| 5-6 Address post-construction issues in areas with pollutants of concern                          | Ongoing     | 2017 through 2025 - No significant construction projects have occurred within the impaired segment of the Hop River.  | Stormwater outfalls discharging to waters identified as impaired in   | Nathan L. Jacobson & Associates, Inc., Town Engineer                               | Not specified | The town MS4 stormwater outfalls to impaired waters are limited and the impairment may be due   |

|  |  |  |  |  |  |   |
|--|--|--|--|--|--|---|
|  |  |  | the 2020 Integrated Water Quality Report and in watersheds with a DCIA of greater than 11 percent will be subject to enhanced water quality treatment. |  |  | largely to the state MS4 stormwater outfalls. |
|  |  |  |  |  |  |   |

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

2025 - Procedures outlined in the Post-Construction Stormwater Management Facility Operation & Maintenance Plan Manual will be implemented.

**5.3 Post-Construction Stormwater Management reporting metrics**

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

| Metrics   |  |
|---|--|
| Baseline (2012) Directly Connected Impervious Area (DCIA) | 5.05 acres   |
| DCIA disconnected (redevelopment plus retrofits)          | 2012 - 2017 To Be Determined<br>2017 through 2024 0 Acres  |
| Retrofit projects completed                               | 0  |
| DCIA disconnected   | 2012 - 2017 To Be Determined<br>2017 through 2024 - 0<br>No significant storm drainage improvements have been constructed that allowed for DCIA disconnection. |
| Estimated cost of retrofits                               | \$0  |
| Detention or retention ponds identified                   | Six to eight detention ponds were noted during 2017 outfall mapping field checking. All of the detention ponds will be compiled in a three-ring binder and an  |

operations and maintenance plan will be developed for each detention basin.

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

Based on information contained in the Factsheet: *Town of Bolton Water Quality and Stormwater Summary*, prepared by the CT DEEP, 675.70 acres of the town has an impervious area exceeding 12% which is approximately 7.16% of the town. 232.83 acres have an impervious cover of ranging from 12% to 25%, 344.14 acres have an impervious cover ranging from 26% to 50%, 77.24 acres have an impervious cover ranging from 51% to 75% and 21.49 acres have an impervious cover ranging from 76% to 100%.

Based on information contained in the MS4 mapping tab of Connecticut Environmental Conditions Online The impervious surface area consists of 129.50 acres of buildings, 209.78 acres of roads and 229.33 acres of other impervious surfaces for a total impervious surface area of 568.61 acres.

The DCIA Mapping was conducted in substantial accordance with the methodologies presented in the October 25, 2017 UConn CLEAR Webinar entitled *CT MS4 Mapping Details, Clarifications and Tools*, the October 19, 2018 UConn CLEAR Workshop entitled *CT MS4 Mapping Workshop* as well as information contained in the EPA reference entitled *Estimating Change in Impervious Area (IA) and Directly Connected Impervious Area (DCIA) for Massachusetts Small MS4 Permit utilizing Sutherland equations*.

The DCIA computations were prepared utilizing Connecticut Environmental Conditions Online MS4 base mapping prepared by UConn CLEAR.

Impaired waters were determined from the report entitled *2016 Integrated Water Quality Report*, dated April 2017, prepared by the State of Connecticut Department of Energy and Environmental protection.

The method to determine the 2012 baseline DCIA was to first compile the CT DEEP drainage basin characteristics in a Microsoft Excel spreadsheet. Information on the Connecticut Environmental Conditions Online MS4 Mapping was used to determine the impervious area breakdown as Buildings, Roads and Other. For CT DEEP drainage basins that fell in two or more municipalities the advanced mapping tab of Connecticut Environmental Conditions Online was used to delineate and determine the applicable town CT DEEP basin area. It was assumed that the entire drainage basin characteristics were directly proportional to the applicable town CT DEEP drainage basin area.

In that Conn DOT has a MS4 Stormwater Program which applies to state owned roads and facilities which the town has no control over, it was decided that the impervious state road area would be determined and deducted from the total impervious road area for each CT DEEP drainage basin as the impervious road areas associated with state highways and facilities constitutes a considerable portion of the total town impervious road area.

The Conn DOT state highway, parking lot and facility impervious road areas were then determined for each CT DEEP drainage basin.

The Conn DOT state highway, parking lot and facility impervious road areas were then deducted from the total town impervious road area to determine a town owned impervious road area for each CT DEEP drainage basin.

Subsequent to the above deduction, the total impervious area in acres and percentage was then recomputed for each CT DEEP drainage basin.

The DCIA formula for each of four development types was then utilized to compute the DCIA. The impervious area in acres was assigned to each of the four Sutherland equations which were modified for the northeastern United State. The Sutherland equation to be utilized was determined using the following methodology:

For impervious percentage less than 6%:

100% of the impervious area was assigned to the slight connectivity Sutherland Equation where  $DCIA\% = 0.01*(IA\%)^{2.0}$

For an impervious area between 6% and 12 %:

50% of the area was assigned to the partial connectivity Sutherland Equation where  $DCIA\% = 0.04*(IA\%)^{1.7}$

And

50% was assigned to the average connectivity Sutherland Equation where  $DCIA\% = 0.10*(IA\%)^{1.5}$

For an impervious area between 12% and 18 %:

50% of the area was assigned to the average connectivity Sutherland Equation where  $DCIA\% = 0.10*(IA\%)^{1.5}$

and

50% was assigned to the high connectivity Sutherland Equation where  $DCIA\% = 0.40*(IA\%)^{1.2}$

For an impervious area of greater than 18 %:

100% of the area was assigned to the high connectivity Sutherland Equation where  $DCIA\% = 0.40*(IA\%)^{1.2}$

The DCIA for each CT DEEP drainage basin was then summed to determine the entire town DCIA.

Subsequent to completion of 2012 Baseline DCIA computations, UConn CLEAR Mapping available on Connecticut Environmental Conditions Online (CT ECO) was revised to separate road impervious area into State Road Impervious Area (Acres) and Town Road Impervious Area (Acres).

The original 2012 Baseline DCIA computations were revised utilizing the UConn CLEAR State Road Impervious Area (Acres) and Town Road Impervious Area (Acres). No major 2012 Baseline DCIA computation discrepancies were noted.

Land use files will be reviewed to determine disconnection of DCIA since July 01, 2012 for utilization in reaching the CT DEEP goal of 2% disconnection of DCIA by June 30, 2022.

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

**6.1 BMP Summary**

| <b>BMP</b>   | <b>Status</b><br>(Complete, Ongoing, In Progress, or Not started) | <b>Activities in current reporting period</b> | <b>Measurable Goal</b>    | <b>Person Responsible, Department</b>  | <b>Date completed or projected completion date</b><br>(include the start date for anything that is 'in progress') | <b>Additional details</b> |
|--|---|---|---------------------------|--|---|---------------------------|
| 6-1 Develop and implement formal employee training program (Ongoing) | To Be Developed   | 2017 through 2025 - None                      | Ongoing Employee Training | 2017 to June 2023<br><br>Lance Dimock, Supervisor, Highway Department<br><br>June 2023 to August 2024<br><br>Sean Bailey, Supervisor, Highway Department<br><br>August 2024 to Present<br><br>A.J. Golden, Supervisor, Highway Department<br><br>and<br><br>Nathan L. Jacobson & Associates, Inc., Town Engineer | July 01, 2017   |                           |

|  |                |   |                   |  |                      |  |
|--|----------------|---|-------------------|--|----------------------|--|
| <p>6-2 Implement MS4 property and operations maintenance (Ongoing)</p> | <p>Ongoing</p> | <p>Ongoing</p>  | <p>Compliance</p> | <p>2017 to June 2023<br/><br/>Lance Dimock, Supervisor, Highway Department<br/><br/>June 2023 to August 2024<br/><br/>Sean Bailey, Supervisor, Highway Department<br/><br/>August 2024 to Present<br/><br/>A.J. Golden, Supervisor, Highway Department</p> | <p>July 01, 2018</p> |  |
| <p>6-3 Implement coordination with interconnected MS4s</p>             | <p>Ongoing</p> | <p>The Town of Bolton continued to coordinate MS4 responsibilities with the Towns of Vernon, Manchester, Glastonbury, Hebron, Andover and Coventry as well as Conn DOT.</p> | <p>Compliance</p> | <p>2017 to June 2023<br/><br/>Lance Dimock, Supervisor, Highway Department<br/><br/>June 2023 to August 2024<br/><br/>Sean Bailey, Supervisor, Highway Department<br/><br/>August 2024 to Present<br/><br/>A.J. Golden,</p>                                | <p>July 01, 2017</p> |  |

|   |                 |   |                        |  |   |  |
|---|-----------------|---|------------------------|--|---|--|
|   |                 |   |                        | Supervisor,<br>Highway<br>Department   |   |  |
| 6-4 Develop and implement program to control other sources of pollutants to the MS4 | To Be Developed | 2017 through 2025 - None  | Substantial Compliance | Joseph M. Dillon, P.E.,<br>Town Engineer,<br>Nathan L. Jacobson & Associates, Inc.   | Anticipate completing by October 01, 2026 |  |
| 6-5 Evaluate additional measures for discharges to impaired waters*                 | Not Started     | 2017 through 2025 - None  |                        | Joseph M. Dillon, P.E.,<br>Town Engineer,<br>Nathan L. Jacobson & Associates, Inc.   | Anticipate completing by October 01, 2026 |  |
| 6-6 Track projects that disconnect DCIA (Ongoing)                                   | Ongoing         | No significant projects have allowed for DCIA disconnection.  | Compliance             | Nathan L. Jacobson & Associates, Inc., Town Engineer   | July 01, 2017                             |  |
| 6-7 Implement infrastructure repair/rehab program (Due 07/01/21)                    | Ongoing         | 2017 through 2025 - MS4 storm drainage improvements have been made in areas where the storm drainage infrastructure was showing signs of age. | Substantial Compliance | 2017 to June 2023<br><br>Lance Dimock,<br>Supervisor,<br>Highway Department<br><br>June 2023 to August 2024<br><br>Sean Bailey,<br>Supervisor,<br>Highway Department | July 01, 2021                             |  |

|  |             |                          |   |   |   |  |
|--|-------------|--------------------------|---|---|---|--|
|  |             |                          |   | <p>August 2024 to Present</p> <p>A.J. Golden,<br/>Supervisor,<br/>Highway<br/>Department</p> <p>and</p> <p>Nathan L.<br/>Jacobson &amp;<br/>Associates,<br/>Inc., Town<br/>Engineer</p>   |   |  |
| 6-8 Develop and implement plan to identify/prioritize retrofit projects (Due 07/01/20) | Not Started | 2017 through 2025 - None | <p>It is anticipated that the program will begin in 2024.</p> <p>Substantial Compliance</p> | <p>2017 to June 2023</p> <p>Lance Dimock,<br/>Supervisor,<br/>Highway<br/>Department</p> <p>June 2023 to August 2024</p> <p>Sean Bailey,<br/>Supervisor,<br/>Highway<br/>Department</p> <p>August 2024 to Present</p> <p>A.J. Golden,<br/>Supervisor,<br/>Highway<br/>Department</p> <p>and</p> <p>Nathan L.<br/>Jacobson &amp;<br/>Associates,</p> | Anticipate completing by October 01, 2026 |  |

|   |             |   |  |  |   |  |
|---|-------------|---|--|--|---|--|
|   |             |   |  | Inc., Town Engineer  |   |  |
| 6-9 Implement retrofit projects to disconnect 2% of DCIA (Due 7/1/22) | Not Started | 2017 through 2025 - None  | It is anticipated that the program will begin in 2025.<br><br>Substantial Compliance | 2017 to June 2023<br><br>Lance Dimock, Supervisor, Highway Department<br><br>June 2023 to August 2024<br><br>Sean Bailey, Supervisor, Highway Department<br><br>August 2024 to Present<br><br>A.J. Golden, Supervisor, Highway Department<br><br>and<br><br>Nathan L. Jacobson & Associates, Inc., Town Engineer | Anticipate completing by October 01, 2026 |  |
| 6-10 Develop and implement street sweeping program (Ongoing)          | Ongoing     | The Town of Bolton currently implements a road sweeping program whereby all town roads are swept one time per year. | Compliance   | 2017 to June 2023<br><br>Lance Dimock, Supervisor, Highway Department  | July 01, 2017                             |  |

|   |         |   |            |  |               |  |
|---|---------|---|------------|--|---------------|--|
|   |         |   |            | <p>June 2023 to August 2024</p> <p>Sean Bailey, Supervisor, Highway Department</p> <p>August 2024 to Present</p> <p>A.J. Golden, Supervisor, Highway Department</p>  |               |  |
| 6-11 Develop and implement catch basin cleaning program (Ongoing)   | Ongoing | The Town of Bolton currently implements a catch basin cleaning program whereby all catch basins are cleaned in alternate years and catch basins with high sediment loads or catch basins which discharge to sensitive waters are cleaned every year | Compliance | <p>2017 to June 2023</p> <p>Lance Dimock, Supervisor, Highway Department</p> <p>June 2023 to August 2024</p> <p>Sean Bailey, Supervisor, Highway Department</p> <p>August 2024 to Present</p> <p>A.J. Golden, Supervisor, Highway Department</p> | July 01, 2020 |  |
| 6-12 Develop and implement snow management practices (Due 07/01/18) | Ongoing | Continuing  | Compliance | <p>2017 to June 2023</p> <p>Lance Dimock, Supervisor,</p>  | July 01, 2018 |  |

|   |             |   |  |   |   |  |
|---|-------------|---|--|---|---|--|
|   |             |   |  | <p>Highway Department</p> <p>June 2023 to August 2024</p> <p>Sean Bailey, Supervisor, Highway Department</p> <p>August 2024 to Present</p> <p>A.J. Golden, Supervisor, Highway Department</p>   |   |  |
| 6-13 develop a map and inventory highly erosive areas in town right-of-way. | Not started | Collect information on eroding areas in the town right-of-way from highway maintenance personnel over course of normal operations | identify areas contributing large volume of sediment to town waterbodies | <p>2017 to June 2023</p> <p>Lance Dimock, Supervisor, Highway Department</p> <p>June 2023 to August 2024</p> <p>Sean Bailey, Supervisor, Highway Department</p> <p>August 2024 to Present</p> <p>A.J. Golden, Supervisor, Highway Department</p> <p>and</p> | Anticipate completing by October 01, 2025 | Reduce erosion and sedimentation to waterways. |

|  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|
|  |  |  |  | Nathan L. Jacobson & Associates, Inc., Town Engineer |  |  |
|--|--|--|--|--|--|--|

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

2026 - It is anticipated that all town roads will be swept and all catch basins will be vactored.

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

| Metrics  |   |
|--|---|
| Employee training provided for key staff   | 2017 through 2019 - None<br>2020 through 2022 - None due to the COVID-19 pandemic<br>2023 through 2024 - None<br>2025 - It is anticipated that Employee Training will be initiated. |
| Street sweeping  |   |
| Curb miles swept   | 2017 through 2022 - 86.70   |
| Volume (or mass) of material collected   | 2017 and 2018 - Not Determined<br>2019 - 300± C.Y.<br>2020 - 200± C.Y.<br>2021 - 200± C.Y.<br>2022 - 150± C.Y.<br>2023 - 150± C.Y.<br>2024 - 150± C.Y.<br>2025 - 150± C.Y.          |
| Catch basin cleaning   |   |
| Total catch basins in priority areas (value will be less than or equal to total catch basins town or institution-wide) | 2017 through 2025 - Not Determined<br>2026 - To Be Determined   |
| Total catch basins town-wide   | 800-850   |
| Catch basins inspected   | 2017 through 2024 - 800-850   |
| Catch basins cleaned   | 2017 - 400-450<br>2018 - 400-450<br>2019 - More than 500<br>2020 - 450±<br>2021 - 450±<br>2022 - 470±<br>2023 - 470±<br>2024 - 470±   |

|   |   |
|---|---|
|   | 2025 - 470±   |
| Volume (or mass) of material removed from all catch basins  | 2017 - 2018 Not Determined<br>2019 - 200± C.Y.<br>2020 - 150± C.Y.<br>2021 - 125± C.Y. to 150± C.Y.<br>2022 - 175± C.Y.<br>2023 - 175± C.Y.<br>2024 - 175± C.Y.<br>2025 - 175± C.Y.   |
| Volume removed from catch basins to impaired waters (if known)                                      | 2017 through 2025 - Not Determined  |
| Snow management   |   |
| Type(s) of deicing material used  | Deicing Mix<br>1 Part Sand to 1 Part NaCl Salt<br>By Volume   |
| Total amount of each deicing material applied   | Winter 2017-2018 - 1,100± Tons Sand/800± Tons NaCl<br>Winter 2018-2019 - 1,500± Tons Sand/1,100± Tons NaCl<br>Winter 2019-2020 - 1,000± Tons Sand/750± Tons NaCl<br>Winter 2020-2021 - 930± Tons Sand/700± Tons NaCl<br>Winter 2021-2022 - 500± Tons Sand/500± Tons NaCl<br>Winter 2022-2023 - 300± Tons Sand/300± Tons NaCl<br>Winter 2023-2024 - 300± Tons Sand/300± Tons NaCl<br>Winter 2024-2025 - 300± Tons Sand/300± Tons NaCl<br>Winter 2025-2026 - 300± Tons Sand/300± Tons NaCl (Est.) |
| Type(s) of deicing equipment used   | Four Large Snow Plow/Spreaders.<br>The spreaders are manually controlled at an estimated application rate of 150 - 200 pounds per lane (curb) mile.   |
| Lane-miles treated (A lane-mile is a mile of roadway in a single driving lane)                      | 2017 through 2025 - 86.70   |
| Snow disposal location  | Herrick Park parking lot when needed during exceptionally heavy snowfall events.  |
| Staff training provided on application methods & equipment  | 2017 through 2019 - None<br><br>2020 through 2021 - None due to the COVID-19 pandemic<br><br>2022 through 2025 - None<br><br>2026 It is anticipated that Employee Training will be initiated again.   |
| Municipal turf management program actions (for permittee properties in basins with N/P impairments) |   |
| Reduction in application of fertilizers (since start of permit)                                     | 0%  |
| Reduction in turf area (since start of permit)  | 0 acres   |

|  |     |
|--|-----|
| Lands with high potential to contribute bacteria (dog parks, parks with open water, & sites with failing septic systems) |     |
| Cost of mitigation actions/retrofits   | \$0 |
|  |     |

#### 6.4 Catch basin cleaning program

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

It is estimated that there are approximately 800-850 catch basins in the Town of Bolton.

2017 - 400-450 catch basins were cleaned.

2018 - 400-450 catch basins were cleaned.

2019 - More than 500 catch basins were cleaned.

2020 - 450± catch basins were cleaned.

2021 - 450± catch basins were cleaned.

2022 - 470± catch basins were cleaned.

2023 - 470± catch basins were cleaned.

2024 - 470± catch basins were cleaned.

2025 - 470± catch basins were cleaned.

Currently no optimization methods are being implemented as the catch basin cleaning inspection and cleaning schedule appears to be working well based upon field investigation of accumulated sediment depths.

#### 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 07/01/20)

Storm Drainage Retrofit prioritization will be given to stormwater outfalls that are known to result in soil erosion and sedimentation. Prioritization will be given to the outfalls within the impaired water drainage basins with particular emphasis placed on stormwater outfalls which are located on fine grained glacial till soils.

2017 through 2025 - No significant MS4 stormwater retrofits were constructed. The retrofit program will be prioritized based on setback distance from watercourse and/or waterbodies.

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

(Due 07/01/22)

Land use files will be reviewed to determine disconnection of DCIA since July 01, 2012 for utilization in reaching the CT DEEP goal of 2% disconnection of DCIA by June 30, 2026.

## Part II: Impaired waters investigation and monitoring

### 1. Impaired waters investigation and monitoring program

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

#### 1.1 Indicate which stormwater pollutant(s) of concern occur(s) in your municipality or institution.

This data is available on the MS4 map viewer: <http://s.uconn.edu/ctms4map>.

Nitrogen/ Phosphorus

Bacteria

Mercury

Other Pollutant of Concern

#### 1.2 Describe program status

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

2018 through 2019 - It was anticipated that dry weather screening of MS4 stormwater outfalls that discharge directly to impaired waters would be conducted in the Fall. However, due to the unseasonably high rainfall and resulting high groundwater conditions no dry weather screening or sampling of observed flows was conducted.

2020 through 2023 - No Dry Weather Screening was conducted.

2024 - Dry Weather Screening was completed in December.

2025 - No Dry Weather Screening was conducted.

2026 - Dry Weather Sampling, where appropriate based on Dry Weather Screening, will be conducted.

The impaired water consists of a 3.22 mile segment of the Hop River in Bolton and Andover, of which approximately a 1.80 mile segment is located in Bolton. In Bolton the Hop River flows under Connecticut Route 6 several times in the Town of Bolton. However, there the Hop River does not flow under or proximal to town roads. Consequently, there are not many potential town MS4 stormwater outfalls discharging directly to the Hop River. Therefore, it would appear that the bacteria impairment of the Hop River may be due to natural causes or associated with Conn DOT MS4 outfalls on Connecticut Route 6.

Outfalls located on town roads proximal to the Hop River will be sampled to determine bacteria counts.

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

### 2.1 Screening data

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

Each Annual Report will add on to the previous year's data showing a cumulative list of sampling data.

**You may also attach an excel spreadsheet with the same data rather than copying it into this table.**

If you do attach a spreadsheet, please write "See Attachment" below.

| Outfall ID | Latitude & Longitude | Sample date | Parameter<br>(Nitrogen, Phosphorus, Bacteria, or Other pollutant of concern) | Results | Name of Laboratory (if used) | Follow-up required? * |
|------------|----------------------|-------------|--|---------|------------------------------|-----------------------|
|            |                      |             |  |         |                              |                       |
|            |                      |             |  |         |                              |                       |
|            |                      |             |  |         |                              |                       |

2026 - It is anticipated that wet weather sampling of direct MS4 stormwater outfalls to impaired waterbodies if needed. It should be noted that the Bolton section of the impaired segment of the Hope River has few possible MS4 stormwater direct discharges to the Hop River.

Follow-up investigation required (last column) if the following pollutant thresholds are exceeded:

| Pollutant of concern        | Pollutant threshold  |
|-----------------------------|--|
| Nitrogen                    | Total N > 2.5 mg/l   |
| Phosphorus                  | Total P > 0.3 mg/l   |
| Bacteria (fresh waterbody)  | <ul style="list-style-type: none"> <li>E. coli &gt; 235 col/100ml for swimming areas or 410 col/100ml for all others</li> <li>Total Coliform &gt; 500 col/100ml</li> </ul>   |
| Bacteria (salt waterbody)   | <ul style="list-style-type: none"> <li>Fecal Coliform &gt; 31 col/100ml for Class SA and &gt; 260 col/100ml for Class SB</li> <li>Enterococci &gt; 104 col/100ml for swimming areas or 500 col/100 for all others</li> </ul> |
| Other pollutants of concern | Sample turbidity is 5 NTU > in-stream sample   |

**3. Follow-up investigations** (Section 6(i)(1)(D) / page 43)

Provide the following information for outfalls exceeding the pollutant threshold.

| <b>Outfall ID</b> | <b>Status of drainage area investigation</b> | <b>Control measure to address impairment</b> |
|-------------------|--|--|
|                   |  |  |
|                   |  |  |
|                   |  |  |

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

Once outfall sampling has been completed for at least 50% of outfalls to impaired waters, identify 6 of the highest contributors of any pollutants of concern. Begin monitoring these outfalls on an annual basis by July 01, 2021.

**You may also attach an excel spreadsheet with the same data rather than copying it to this table.**

If you do attach a spreadsheet, please write "See Attachment" below.

| Outfall | Latitude & Longitude | Sample Date | Parameter(s) | Results | Name of Laboratory (if used) |
|---------|----------------------|-------------|--------------|---------|------------------------------|
|         |                      |             |              |         |                              |
|         |                      |             |              |         |                              |
|         |                      |             |              |         |                              |
|         |                      |             |              |         |                              |
|         |                      |             |              |         |                              |
|         |                      |             |              |         |                              |

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### Part III: Additional IDDE Program Data

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

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

| 1. Catchment ID (DEEP Basin ID) | 2. Category           | 3. Rank |
|---------------------------------|-----------------------|---------|
| 3108-00-1                       | High Priority         | 1       |
| 3108-00-2-R1                    | Intermediate Priority | 2       |
| 3108-02-1                       | Intermediate Priority | 3       |

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**2. Outfall and Interconnection Screening and Sampling data** (Appendix B (A)(7)(d) / page 7)

**2.1 Dry weather screening and sampling data from outfalls and interconnections**

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

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

**You may also attach an excel spreadsheet with the same data rather than copying it to this table.**

If you do attach a spreadsheet, please write "See Attachment" below.

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

2017 through 2023 - No Dry Weather Screening or Dry Weather Sampling was conducted.

2024 - Dry Weather Screening was conducted for all outfalls in December.

2025 - No Dry Weather Screening or Dry Weather Sampling was conducted.

2026 - It is anticipated that Dry Weather Sampling, if appropriate, will be conducted.

## 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 |
|------------------------------|----------------------|-------------|---------|----------|--------------|----------|-------------------------|-------------|------------|----------------------|
|                              |                      |             |         |          |              |          |                         |             |            |                      |
|                              |                      |             |         |          |              |          |                         |             |            |                      |
|                              |                      |             |         |          |              |          |                         |             |            |                      |

2017 through 2025 - No Wet Weather Screening or Wet Weather Sampling was conducted.

2026 - It is anticipated that Wet Weather Screening and Wet Weather Sampling, if appropriate, will be conducted.

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

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

#### 3.1 System Vulnerability Factor Summary

For those catchments being investigated for illicit discharges (i.e. categorized as high priority, low priority, or problem) document the presence or absence of System Vulnerability Factors (SVF). If present, report which SVF's were identified. An example is provided below.

| Outfall ID | Receiving Water | System Vulnerability Factors |
|------------|-----------------|------------------------------|
|            |                 |                              |
|            |                 |                              |

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).

To be completed by December 31, 2026.

#### 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 |
|-------------------------|----------------------|------------------------|--|---------|----------|-------------|
|                         |                      |                        |  |         |          |             |
|                         |                      |                        |  |         |          |             |

2017 through 2024 - No junction manhole Dry Weather Screening or Dry Weather Sampling was conducted.

2024 - Junction manhole Dry Weather Screening was conducted. On the basis of the Dry Weather Screening, no junction manhole Dry Weather Sampling will be conducted.

It should be noted that there are very few junction manholes in town with most being where town storm drainage systems connect to Conn DOT storm drainage systems

### 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 |
|------------|----------------------|-------------|---------|----------|-------------|
|            |                      |             |         |          |             |
|            |                      |             |         |          |             |

2017 through 2025 - No Wet Weather Investigation or Wet Weather Sampling was conducted.

2026 - It is anticipated that Wet Weather Investigation and Wet Weather Sampling will be conducted.

### 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 |
|--------------------|-----------------|-----------------------|---------------------|-------------------|---------------------|----------------------------------|----------------------------------|
|                    |                 |                       |                     |                   |                     |                                  |                                  |
|                    |                 |                       |                     |                   |                     |                                  |                                  |

2026 - To be completed if encountered.

DRAFT

## Part IV: Certification

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

|   |   |
|---|---|
| Chief Elected Official or Principal Executive Officer | Document Prepared by                            |
| Print Name: James Rupert, Town Administrator          | Print Name: Wade M. Thomas, CPESC, CPSWQ, CPMSM |
| Signature:  | Signature:                                      |
| Date: May , 2026                                      | Date: May , 2026                                |
| Email: jrupert@boltonct.org                           | Email: wthomas@nlja.com                         |