

**Municipality/Organization: Town of Westford, MA**

---

**EPA NPDES Permit Number: MA041232**

---

**MADEP Transmittal Number: W-035577**

---

**Annual Report Number 14  
& Reporting Period: April 1, 2016 -March 31, 2017**

---

## NPDES PII Small MS4 General Permit Annual Report

### Part I. General Information

Contact Person: Paul Starratt, P.E.

Title: Town Engineer

---

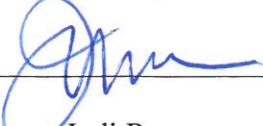
Telephone #: 978-692-5520

Email: stormwater@westfordma.gov

---

#### Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: 

---

Printed Name: Jodi Ross

---

Title: Town Manager

---

Date: April 25, 2017

---

## **Part II. Self-Assessment**

As of the end of Permit Year 14, the Town of Westford has achieved all measurable goals for the BMPs selected in the 2003 Notice of Intent as well as those BMPs added in subsequent years. Below are some highlights of the initiatives and stormwater related advancements made over the last year.

The Town of Westford continued its participation in the Northern Middlesex Stormwater Collaborative (NMSC). NMSC developed a “Watershed Protection Tips for Residents” brochure for the Town of Westford which was made available to the public at various events. On March 29, 2017, the Town of Westford hosted a NMSC training seminar at the Town’s highway facility. The seminar was led by the Town’s stormwater consultant, Tighe & Bond, and included various training sessions that focused on pollution prevention & good housekeeping, outfall inspections, field outfall testing methods, and catch basin inspection. Other NMSC activities included: regular meetings, participation in various stormwater related webinars and training events, preparation of public outreach and education materials, GIS tools for stormwater inventories and inspections, and provided general stormwater related support to each member community. The Town Engineer also began serving on the Technical and Advocacy Committees for the State Stormwater Coalition.

The Westford Engineering Department was awarded a 2016 STORMY award by New England Stormwater Collaborative for “Building Community Support for Stormwater Through Westford’s Living Lab Program”. This program teaches every fifth grader in the town the importance of protecting natural resources through proper and responsible stormwater management.

The Town continued to make significant progress on the completion of our Stormwater Management Master Plan (SWMMP). It is anticipated that the SWMMP will be finalized, published and made available to the public in the summer of 2017.

The Town awarded a three-million-dollar construction contract for the reconstruction of approximately 4,000 feet of Main Street. This project will include the complete replacement, upgrade and expansion of the existing drainage system as well as other improvements designed to improve stormwater management on this roadway. Construction is scheduled to begin in May of this year.

The Town began planning and preparing for the new MS4 General Permit that will become effective on July 1, 2017 and is under contract with our stormwater consultant to undertake Year 1 compliance activities.

The Westford Stream Team hosted an event on April 16, 2016 to provide education to the public on the Town’s surface water

monitoring program and included a review of the previous year's sampling and monitoring results.

As required by Part II.D.1 of the 2003 General Permit, as part of developing this Annual Report, the Town of Westford evaluated compliance of our Stormwater Management Program with the conditions of the 2003 General Permit. Westford has met all Best Management Practices (BMPs) and measurable goals defined in our Stormwater Management Plan, and our municipality is in compliance with the 2003 General Permit.

As part of the annual report development, the Town also evaluated the appropriateness of all BMPs in efforts towards achieving the defined measurable goals as required by Part II.D.2 of the permit. This year, BMPs and measurable goals continued to be appropriate. Westford plans to reevaluate all BMPs when preparing the Notice of Intent and Stormwater Management Plan for compliance with the final 2016 General Permit requirements and will identify suitable BMPs at that time.

The "Planned Activities – Interim Period" column of this report has been completed as in past years; however, in Fiscal Year 2018, the Town of Westford will focus on compliance with the new requirements of the 2016 MA Small MS4 General Permit, including assessment of existing stormwater practices, policies, and Town-wide stormwater-related programs, preparation of the Notice of Intent, and implementation of Best Management Practices to address the permit requirements for each Minimum Control Measure.

**Part III. Summary of Minimum Control Measures**

**1. Public Education and Outreach**

| <b>BMP ID #</b> | <b>BMP Description</b>                  | <b>Responsible Dept./Person Name</b> | <b>Measurable Goal(s)</b>   | <b>Progress on Goal(s) – Permit Year 14</b><br>(Reliance on non-municipal partners indicated, if any)   | <b>Planned Activities – Interim Period</b>   |
|-----------------|---|--------------------------------------|---|---|--|
| 1A              | Stormwater Flyer for Residents          | SuAsCo & Westford DPW                | Flyers distributed to 75% of residents, compiled & considered “survey” results. | Flyers were mailed in year 1 to all residents. The same flyers were placed on display at the Town Hall. (SuAsCo).   | Continue displaying flyers at public places. Join mailing opportunities with Town Clerk’s Office, Water Department and Town Manager’s Monthly Newsletter.  |
| Revised         |   |                                      |   | A Stormwater Management Program Frequently Asked Questions handout was prepared and made available to residents at Annual Town Meeting in March 2017. Stormwater information was included in the Westford Water Department’s Fall 2016 Resource newsletter and the 2017 Town Census newsletter.   |  |
| 1B              | Lesson Plan for 5 <sup>th</sup> Graders | SuAsCo & Westford DPW                | Develop & distribute lesson plan, teach in one or more grade 5 classes.         | The Westford Engineering Department continued to use the SuAsCo curriculum “Stormwater Matters” to teach an introductory lesson plan to all grade 5 classes during the 2016-2017 Living Lab program. The Town was recently selected to receive a STORMY Award from the New England Stormwater Collaborative for the Living Lab Program. | The Westford Engineering Department has elected to continue the lesson plan on an annual basis with assistance from local schools. Every 5 <sup>th</sup> grader in the Westford Public Schools participates. |
| Revised         |   |                                      | Continued beyond Year 5 based on success of program.                            |   |  |

|         |                                      |                       |  |   |  |
|---------|--------------------------------------|-----------------------|--|---|--|
| 1C      | Stormwater Flyer for Businesses      | SuAsCo & Westford DPW | Flyers distributed to 50% of businesses, stormwater logo displayed by 25% of businesses. | <i>Stormwater Matters</i> local business flyer, as prepared by SuAsCo, mailed to 450 business addresses in Westford in Year 8.  | Continue to promote stormwater awareness to the local business community.  |
| Revised |                                      |                       |  |   |  |
| 1D      | Stormwater Media Campaign            | SuAsCo & Westford DPW | Media information packet, 4 press releases generated.                                    | Displayed SuAsCo stormwater materials and Stormwater Management Program display at Special & Annual Town Meetings.  | Continue to implement and utilize SuAsCo products and display products at Special & Annual Town Meetings and at other appropriate community meetings.<br><br>Promote the Town's Stormwater Management Master Plan once complete. |
| Revised |                                      |                       |  |   |  |
| 1E      | Stormwater Video                     | SuAsCo & Westford DPW | Show video at one public meeting and once on local cable.                                | Northern Middlesex Stormwater Collaborative (NMSC) Public Service Announcements were broadcasted on Westford Cable Access TV. Links to the videos are also posted on the Westford stormwater website at <a href="mailto:stormwater@westfordma.gov">stormwater@westfordma.gov</a> .                                      | Continue to post video links on Westford's stormwater website. Re-broadcast stormwater videos on local access TV.  |
| Revised |                                      |                       |  |   |  |
| 1F      | Recycling/Trash Info. on Website     | Recycling Commission  | Update website regularly, display pamphlets in Town Clerk's Office                       | The Recycling Commission updated the website as needed. <a href="http://www.westfordrecycles.org/">www.westfordrecycles.org/</a> Collection calendar at Clerk's Office.<br><br>Westford Litter League Green Team continues to remove trash across the town. Information can be found on Recycling Commission's website. | Continue website updates and display pamphlets in Town Clerk's Office.<br><br>Continue to support Westford's Litter League. Information can be found on Recycling Commission's website.  |
| Revised |                                      |                       |  |   |  |
| 1G      | Recycling/Trash Mailing to Residents | Recycling Commission  | Mail to 75% of residents and display pamphlets in Town offices.                          | Pamphlets were mailed to all residents and copies were made available at the Town Hall and on the town's website.   | Continue mailings and displaying pamphlets at public places and on town website at <a href="http://www.westfordrecycles.org">http://www.westfordrecycles.org</a> .   |

|         |  |                                      |  |   |   |
|---------|--|--------------------------------------|--|---|---|
| Revised |  |                                      |  |   |   |
| 1H      | Advertise HHW Info. in Community Phonebook             | Recycling Commission                 | Copy of advertisement in the phonebook.                      | Information about the household hazardous waste collection was advertised in the local phonebook (2017-2018 Westford Directory) and available on the Town's Recycling Commission's website. | Continue to advertise the proper method of disposal for hazardous household wastes.   |
| Revised |  |                                      |  |   |   |
| 1I      | Advertise Brush/Multi Collection on Cable and in Paper | Recycling Commission                 | Copy of advertisement on cable, website and local paper.     | The brush and multi collection events were advertised on cable, website, the local paper, roadside signs and local phone directory.   | Continue advertising the brush and multi collection events.   |
| Revised |  |                                      |  |   |   |
| 1J      | Leaf Dumping Article in Paper                          | Conservation Commission              | Copy of article in local paper once per year.                | An article discussing the proper disposal of leaves and yard waste published in 2015-2016 Westford Directory.   | Continue placing the leaf dumping article in the Westford Directory.  |
| Revised |  |                                      | Posted on Cons-Comm website                                  |   |   |
| 1K      | Leaf Dumping Pamphlet to Public                        | Conservation Commission              | Copy of pamphlet, # of residents reached.                    | Leaf disposal and compost notice published in local phone book (2016-2017 Westford Directory) and on the town's website.  | Continue publishing information on proper leaf disposal and composting.   |
| Revised |  |                                      | Publish leaf disposal notice in local phone book             |   |   |
| 1L      | Leaf Dumping Pamphlet at Events                        | Conservation/ Water/ Board of Health | Pamphlet displayed at two events.                            | Conservation Resource Planner distributes pamphlets to residents suspected of leaf dumping.   | Continue to distribute leaf dumping pamphlets at various town events and to residents suspected of leaf dumping.                                |
| Revised |  |                                      |  |   |   |
| 1M      | Fertilizer Pamphlet to Businesses                      | Water Department                     | Copy of pamphlet, distributed to all landscaping businesses. | Enforced town pesticide policy.   | Continue to eliminate where possible and otherwise minimize the use of pesticides on town-owned land and to encourage the same on private-owned |

|         |   |                                      |   |   |   |
|---------|---|--------------------------------------|---|---|---|
| Revised | Town of Westford Pesticide Policy           |                                      | Develop Pesticide Policy for Town of Westford             |   | land. Continue to enforce Pesticide Policy.   |
| 1N      | Fertilizer Info. in Newsletter              | Water Department/<br>Engineering     | Copies of semi-annual newsletters discussing fertilizers. | Healthy Lawns for Healthy Families fertilizer information provided on Water Department's website. Fertilizer information also provided on Westford Healthy Lakes & Ponds Collaborative (WHLPC) website. | Continue promoting Healthy Lawns for Healthy Families and include fertilizer information in newsletters and post on Water Department & WHLPC websites.  |
| Revised |   |                                      |   |   |   |
| 1O      | Septic System Pamphlets in Water Department | Water Department                     | Pamphlets available at Water Department at all times.     | Septic system pamphlets were made available at the Water Department throughout the year.  | Continue to make septic system pamphlets available.   |
| Revised |   |                                      |   |   |   |
| 1P      | Septic System Pamphlets at Events           | Water Department/<br>Board of Health | Display pamphlets at two events.                          | The septic system educational pamphlet was made available at the Board of Health Department and Water Department. Additional septic system information provided on the Health Department's website.     | Continue displaying pamphlet at the Board of Health and Water Department in addition to displaying at other town events. Continue to post septic system information on Health Department's website. |
| Revised |   |                                      |   |   |   |
| 1Q      | Hazardous Material Bylaw Info. on Website   | Board of Health                      | Maintain website regularly.                               | Info on the Town's Hazardous Materials Storage bylaw is posted on the Town's Health Department website.   | Continue posting information related to the Hazardous Materials Storage Bylaw and regulations on the Health Department's website.   |
| Revised |   |                                      |   |   |   |

**1a. No additions at this time.**

## 2. Public Involvement and Participation

| BMP ID # | BMP Description                          | Responsible Dept./Person Name                  | Measurable Goal(s)   | Progress on Goal(s) – Permit Year 14<br>(Reliance on non-municipal partners indicated, if any)  | Planned Activities – Interim Period   |
|----------|--|--|--|---|---|
| 2A       | Stormwater Traveling Display             | SuAsCo & Westford DPW                          |  | Completed in Year 1. SuAsCo “Go Green” display used at Annual Town Meeting and Special Town Meeting.  | Continue using the displays and pamphlets Annual Town Meeting, Special Town Meeting, Water Department Open House and other appropriate public events. |
| Revised  |  |  |  |   |   |
| 2B       | Poster Contest for Fifth Grader          | SuAsCo & Westford DPW                          | Poster contest is held and entries are received, judged and displayed in year 2. | The 4 <sup>th</sup> Grade Poster Contest is part of the Westford Water Department’s Open House program which was not held this year.  | Continue 4 <sup>th</sup> Grade Poster Contest as part of Water Department Open House program.   |
| Revised  | <i>Revised to 4<sup>th</sup> Graders</i> | Westford Water Department                      |  |   |   |
| 2C       | Poster Contest for High Schoolers        | SuAsCo & Westford DPW                          | Poster contest is held and entries are received, judged and displayed in year 3. | NOI specified to begin this BMP in Permit Year 3. Eliminated from Year 3 product by SuAsCo. Water Department holds Poster Contest for 4 <sup>th</sup> Graders under BMP 2B. BMP 2B achieves the goals of this BMP previously determined to be infeasible. | BMP determined to be infeasible and was replaced by BMP 2B in Permit Year 3.  |
| Revised  |  | Eliminated from Year 3 product by SuAsCo.      |  |   |   |
| 2D       | Local Stormwater Summit Event            | SuAsCo & Westford DPW                          | Hold local multi-community summit in year 4.                                     | Completed in Year 4.  | Continue information sharing with other stakeholders across the Nashoba Brook sub-basin.  |
| Revised  |  | SuAsCo W. C. C. Land and Habitat Working Group |  |   |   |

|         |                                     |                            |   |  |   |
|---------|-------------------------------------|----------------------------|---|--|---|
| 2E      | Stormwater Super Summit Event       | SuAsCo & Westford DPW      | Municipal participation in the Super Summit, stormwater “survey” to 75% residents, compiled & considered results. | Stormwater Super Summit eliminated from SuAsCo Year 5 product  | Reevaluate possibility of a future summit with SuAsCo.  |
| Revised |                                     |                            |   |  |   |
| 2F      | Curbside Recycling                  | Department of Public Works | Continued Town service.   | Curbside recycling was picked up every other week.   | Continue Curbside Recycling program.  |
| Revised |                                     |                            |   |  |   |
| 2G      | In Town HHW Drop-off                | Department of Public Works | Hold at least one event per year.   | Electronics Collection was on 5/7/16 & 9/10/16 at the Westford Highway Facility. Household hazardous waste (HHW) collection event occurred on 11/5/16 (held every other year).   | Continue to hold electronics collection twice a year and HHW event in Westford in fall of 2018. |
| Revised |                                     |                            | Every other year.   |  |   |
| 2H      | HHW Drop-off in Lexington           | Department of Public Works | Advertise service on the Town website and in flyers.  | Advertised on Recycling Commission website at www.westfordma.gov and in the 2017-2018 Westford Directory.  | Continue to advertise and promote HHW collection opportunities.                                 |
| Revised |                                     |                            | Also advertise in local phone book.   |  |   |
| 2I      | Leaf Drop-off at Laughton’s Nursery | Department of Public Works | Continue service of leaf drop-off.  | Laughton’s Nursery is no longer in business. Leaf pick up was available for drop-off at Red Wagon Landscaping (Lowell), Jones Farm (Chelmsford) and BMC Corp. (Tewksbury) for a fee. Leaf pickup in Westford was available through Acme Waste Systems for a fee on 11/5/16 & 12/3/16. All drop-off and pick up options were advertised on the town website and in the local phonebook. | Continue to advertise leaf drop-off and pick up options available on the Town’s website.        |
| Revised |                                     |                            | Advertise on the Town website.  |  |   |
| 2J      | Brush Drop-off in Westford          | Department of Public Works | Hold one collection in April and October.   | Brush chipping service provided on 4/16/16 & 10/15/16 at Westford  | Hold at least two collection events.  |

|         |  |                                       |   |   |  |
|---------|--|---------------------------------------|---|---|--|
| Revised |  |                                       |   | Highway Facility.   |  |
| 2K      | Multi-Collection Events                    | Dep't of Public Works/Board of Health | Hold one multi-collection event twice per year.                                   | Electronic devices were collected at the Highway Department on 5/7/16 & 9/10/16.  | Continue to collect electronic devices at events twice per year.   |
| Revised |  |                                       |   |   |  |
| 2L      | Mercury Drop-off at Board of Health        | Board of Health                       | Collect mercury devices in the Board of Health office daily.                      | The Board of Health office was open daily to receive mercury-containing devices.  | Continue mercury drop-off program.   |
| Revised |  |                                       |   |   |  |
| 2M      | Mercury Drop-off at Multi-Collection Event | Department of Public Works            | Hold one multi-collection event twice per year.                                   | Small mercury-containing devices were collected at the Board of Health Department counter. Mercury drop-off information available on the Westford Recycling Commission's website.   | Continue Mercury Drop-off at Board of Health office and advertise on town website.   |
| Revised |  |                                       | Mercury Drop-off available at Board of Health Office.                             |   |  |
| 2N      | Public Meetings                            | Department of Public Works            | Advertise and hold at least one public meeting every year for stormwater.         | Stormwater management was discussed at several public, advertised meetings of the Planning Board.   | Hold a public meeting to inform residents of the stormwater program.   |
| Revised |  | Engineering Department                |   |   |  |
| 2O      | Stormwater Contact                         | Highway Department                    | Establish contact and include information in pamphlets and on the Town's website. | The Town Engineer was identified as the stormwater contact regarding pollution and complaints in Year 1. Information was posted on the town's website. Established stormwater email contact: <a href="mailto:stormwater@westfordma.gov">stormwater@westfordma.gov</a> . | Update information as needed and continue to include stormwater contact information on the town's website. Include contact information in educational pamphlets. |
| Revised | Procedure to Address Public Comment        |                                       | Record of calls and issues addressed.   |   |  |

**2a. No additions at this time.**

### 3. Illicit Discharge Detection and Elimination

| BMP ID # | BMP Description                        | Responsible Dept./Person Name                              | Measurable Goal(s)  | Progress on Goal(s) – Permit Year 14<br>(Reliance on non-municipal partners indicated, if any)  | Planned Activities – Interim Period   |
|----------|--|--|---|---|---|
| 3A       | Storm Sewer Map                        | Highway Department/<br>GIS                                 | Expand and field verify all outfalls by year 5.   | Stormwater Map completed. The Stormwater Map includes the location of all drainage structures (catch basins, drainage manholes), outfalls, receiving waters and some connectivity.  | Maintain GIS database and continue to improve Stormwater Mapping as additional information is collected.  |
| Revised  |  | Engineering Department/<br>GIS                             |   |   |   |
| 3B       | Illicit Discharge Bylaw                | Engineering/<br>Conservation                               | Present draft bylaw to public in year 4, adopt in year 5.   | Illicit Discharge Bylaw completed and adopted in 2008.  | Continue to enforce Illicit Discharge Bylaw.  |
| Revised  |  | Board of Health  |   |   |   |
| 3C       | Detection & Elimination Plan           | Highway Department   | Screen 25% of outfalls each year in 4 divided sections of Town.                                     | The Engineering Dept. continued with the ongoing implementation of the Town’s written IDDE plan including field inspections and screening outfalls in critical areas of the town. Information and data collected was used to update GIS maps. | Continue to screen and inspect outfalls for illicit discharges. Continue to implement the Town’s IDDE plan.   |
| Revised  |  |  | Prioritize areas of known water quality problems for inspections and removal of illicit discharges. |   |   |
| 3D       | Illicit Discharge Education for Public | SuAsCo/Public Works/<br>Highway/<br>Water/ Board of Health | Continued public education under Control Measures 1 and 2.  | A stormwater message was included in the January 2017 census newsletter that was mailed to all Westford Residents. A stormwater article was also included in the Westford Water Department’s  | Continue public education. Support and encourage public participation and involvement in local Stream Teams and groups that promote environmental awareness and |

|         |   |                    |   |  |  |
|---------|---|--------------------|---|--|--|
| Revised |   |                    | Partner with Westford Environmental News and Action Committee (WENAC) and the Organization for the Assabet River (OAR). | Resource newsletter in the Fall of 2016. “Watershed Protection Tips for Residents” brochure was prepared by the Northern Middlesex Council of Governments and made available to the public.  | activism.                                      |
| 3E      | Illicit Discharge Education for Municipal Employees | Highway Department | Education for employees under BMP 6H.   | A Northern Middlesex Stormwater Collaborative technical training seminar was hosted at the Westford Highway Facility on March 29, 2017. The seminar was attended by Westford Highway Department & Engineering Department personnel. IDDE, including outfall testing with field kits and catch basin inspections, was one of the main topics of the training seminar. | Continue municipal employee training programs. |
| Revised |   |                    |   |  |  |

**3a. No additions at this time.**

#### 4. Construction Site Stormwater Runoff Control

| <b>BMP ID #</b> | <b>BMP Description</b>             | <b>Responsible Dept./Person Name</b>      | <b>Measurable Goal(s)</b>  | <b>Progress on Goal(s) – Permit Year 14</b><br>(Reliance on non-municipal partners indicated, if any)  | <b>Planned Activities – Interim Period</b>   |
|-----------------|------------------------------------|---|--|--|--|
| 4A              | Wetlands Bylaw                     | Conservation Commission                   | Continue to implement existing Wetlands Bylaw.                         | The Town of Westford Conservation Commission enforced the Westford Wetlands Bylaw and Regulations.   | Continue enforcement of Wetlands Bylaw and Regulations.                                    |
| Revised         |                                    |   |  |  |  |
| 4B              | Construction Site Runoff Bylaw     | Engineering/<br>Planning/<br>Conservation | Present draft bylaw to public in year 4, adopt in year 5.              | Stormwater Management Bylaw adopted at Special Town Meeting on May 10, 2008 and approved by Attorney General on August 5, 2008. Stormwater Management Regulations adopted by the Planning Board in November 2012. During Permit Year 14, Town continued to implement permitting process defined in bylaw and require projects to manage stormwater runoff during construction. | Continue enforcement of Stormwater Management Bylaw and Stormwater Management Regulations. |
| Revised         |                                    |   |  |  |  |
| 4C              | Erosion, Sediment & Waste Controls | Engineering/<br>Planning/<br>Conservation | Copies of meeting minutes and memos. Improved site controls in year 4. | Stormwater Management Bylaw adopted at Special Town Meeting on May 10, 2008 and approved by Attorney General on August 5, 2008. Stormwater Management Regulations adopted by the Planning Board in November 2012. The Bylaw and Regulations include requirements to control constructions wastes (e.g. building materials, litter, sanitary waste).                            | Continue enforcement of Stormwater Management Bylaw and Stormwater Management Regulations. |
| Revised         |                                    |   |  |  |  |

|         |                                     |   |  |  |   |
|---------|-------------------------------------|---|--|--|---|
| 4D      | Site Plan Review Procedures         | Engineering/<br>Planning/<br>Conservation | Improved site plan review procedures in year 4.  | Site plans are currently reviewed by the Engineering Department and Conservation Commission for erosion and construction site runoff BMPs as well as for compliance with the Stormwater Management Standards. Site Plans are also reviewed and discussed with a Technical Review group comprised of town staff from various Departments along with developers. | Continue to review Site Plans in accordance with Site Plan Review Bylaw, Wetlands Bylaw & Stormwater Management Bylaw procedures. Also, continue to hold Technical Review meetings with developers and designers to evaluate site plan criteria and incorporate Stormwater Regulations during early stages of design. |
| Revised |                                     |   |  |  |   |
| 4E      | Site Inspection & Enforcement       | Engineering/<br>Planning/<br>Conservation | Records of current enforcement actions, site inspection procedures for all land disturbance >1 acre. | Site inspection procedures for land disturbances > 1 acre enforced as outlined in the Stormwater Management Regulations and in accordance with the mandatory SWPPP. Active sites are inspected on a daily to weekly basis depending on site activity and weather conditions.   | Continue enforcement of Stormwater Management Bylaw & Stormwater Management Rules & Regulations.  |
| Revised |                                     |   |  |  |   |
| 4F      | Construction Site Contact           | Highway Department                        | Establish contact and include information in pamphlets and on the Town's website.                    | The Town Engineer was identified as the stormwater contact regarding pollution prevention, complaints and construction runoff in Year 1. Established stormwater email contact at <a href="mailto:stormwater@westfordma.gov">stormwater@westfordma.gov</a> .  | Update information as needed and continue to include stormwater contact information on the town's website. Include contact information in educational pamphlets and stormwater related mailings.  |
| Revised | Procedure to Address Public Comment |   | Record of calls and issues addressed.  |  |   |

**4a. No additions at this time.**

## 5. Post-Construction Stormwater Management in New Development and Redevelopment

| BMP ID # | BMP Description                          | Responsible Dept./Person Name             | Measurable Goal(s)   | Progress on Goal(s) – Permit Year 14<br>(Reliance on non-municipal partners indicated, if any)   | Planned Activities – Interim Period  |
|----------|--|---|--|--|--|
| 5A       | Post-Construction Site Runoff Bylaw      | Engineering/<br>Planning/<br>Conservation | Present draft bylaw to public in year 4, adopt in year 5.                    | Planning Board continued to issue Stormwater Management Permits under the Stormwater Management Bylaw & Stormwater Management Regulations, including SWPPP with O&M requirements.  | Continue enforcement of Stormwater Management Bylaw and Regulations.                                       |
| Revised  |  |   |  |  |  |
| 5B       | Structural & Non-Structural BMPs         | Engineering/<br>Planning/<br>Conservation | BMP design standards specific to the Town of Westford.                       | BMP design standards were incorporated in the Stormwater Management Rules & Regulations as adopted on November 5, 2012.  | Hold meetings with local developers and project designers to evaluate BMPs and design standards.           |
| Revised  | BMP Design Standards                     |   |  |  |  |
| 5C       | Long-Term Operation & Maintenance        | Engineering/<br>Planning/<br>Conservation | O&M Plan/template and procedures required for new and redevelopment          | O&M standards were incorporated in the Stormwater Management Regulations, including a requirement to record applicable Operation & Maintenance agreements. The Regulations also include provisions to require continuing inspection and maintenance and submitting reports on inspections to the Planning Board. | Oversee compliance of O&M plans for all projects subject to the Stormwater Management Rules & Regulations. |
| Revised  |  |   |  |  |  |
| 5D       | Structural BMP Implementation Procedures | Engineering/<br>Planning/<br>Conservation | Inspection and enforcement procedures to ensure BMPs are installed properly. | Structural BMP's installed and inspected for compliance with the Stormwater Management Rules & Regulations.  | Continue inspections for compliance.   |
| Revised  |  |   |  |  |  |

### 5a. No additions at this time.

## 6. Pollution Prevention and Good Housekeeping in Municipal Operations

| <b>BMP ID #</b> | <b>BMP Description</b>  | <b>Responsible Dept./Person Name</b> | <b>Measurable Goal(s)</b>                                     | <b>Progress on Goal(s) – Permit Year 14</b><br>(Reliance on non-municipal partners indicated, if any)   | <b>Planned Activities – Interim Period</b>   |
|-----------------|-------------------------|--------------------------------------|---|---|--|
| 6A              | Catch Basin Schedule    | Highway Department                   | Clean all catch basins and prioritize locations for cleaning. | All catch basins were cleaned in Town at least once and twice on hills. Catch basins are visually inspected during cleaning to ensure proper function of the drainage system and to identify any potential illicit discharge connections. The need for any repairs or maintenance were also identified and recorded during cleaning operations. | Continue catch basin cleaning and inspection program annually. Continue documenting structure conditions and sediment data for future cleaning and maintenance priorities. Continue to identify illicit discharge connections. |
| Revised         |                         |                                      |   |   |  |
| 6B              | Regular Street Sweeping | Department of Public Works           | Sweep streets a minimum of twice per year.                    | All streets were swept twice during 2016. Streets are annually swept twice a year.  | Continue street sweeping program annually.   |
| Revised         |                         | Highway Department                   |   |   |  |
| 6C              | Sand/Salt Covered       | Highway Department                   | Sand and salt storage is covered.                             | Sand and salt storage continued to be covered.  | Continue to cover sand and salt.   |
| Revised         |                         |                                      |   |   |  |
| 6D              | Used Oil is Recycled    | Highway Department                   | Waste oil recycling at the Highway Facility is permitted.     | The Highway Department maintained permit compliance for the waste oil recycling. The Highway Facility was also inspected by the Health Department under the town's Hazardous Materials Storage Bylaw.   | Continue existing practices for waste oil recycling to maintain permit compliance.   |
| Revised         |                         |                                      |   |   |  |

|         |  |                    |   |   |   |
|---------|--|--------------------|---|---|---|
| 6E      | Municipal Hazardous Material Stored Inside | Highway Department | All hazardous materials are stored indoors.   | The Highway Department stored all hazardous materials indoors.  | Continue to store all hazardous materials indoors.  |
| Revised |  |                    |   |   |   |
| 6F      | Implement SWPPP at Garage                  | Highway Department | SWPPP implemented and maintained.   | The Highway Department implemented BMPs outlined in the Garage SWPPP.   | Continue existing practices for pollution prevention and good housekeeping.   |
| Revised | Implement SWPPP BMPs at Garage             |                    | SWPPP BMPs implemented.   |   |   |
| 6G      | Increase Vehicle Fueling Cover             | Highway Department | Increase cover until new facility is constructed.   | Occupied new facility in September 2006. Facility includes a covered fueling station.   | Utilize covered fueling station at the new DPW Facility.  |
| Revised |  |                    |   |   |   |
| 6H      | Municipal Employee Training                | Highway Department | All Highway Department employees trained annually, record of attendance sheet. Copy of training program | A Northern Middlesex Stormwater Collaborative technical training seminar was hosted at the Westford Highway Facility on March 29, 2017. The seminar was attended by Westford Highway Department & Engineering Department personnel. Good housekeeping and pollution prevention, including oil and spill controls, was one of the main topics of the training seminar. | Continue providing training programs, incorporate new topics, and expand programs as appropriate.   |
| Revised |  |                    |   |   |   |
| 6I      | Municipal Operation/Maintenance Plan       | Highway Department | Improved operations at municipal facilities and throughout Town.  | Municipal facilities were evaluated for good housekeeping practices as part of the town's Stormwater Management Master Plan. The Town's Hazardous Materials Storage Bylaw also requires reporting & record keeping, regular inspections, yearly permitting and more stringent storage practices at both private and municipal facilities.                             | Continue to follow the requirements of the updated Hazardous Materials Storage Bylaw and good housekeeping recommendations from the Stormwater Management Master Plan. Continue to look for opportunities at town facilities to improve operations. |
| Revised |  |                    |   |   |   |

|         |  |                          |  |   |                                    |
|---------|--|--------------------------|--|---|------------------------------------|
| 6J      | Mosquito Control Project & Drainage System Maintenance | Engineering/Conservation | Record of improved drainage system inspection and maintenance. | Through the efforts of the Central Massachusetts Mosquito Control Project, brush and other accumulated debris was removed from culverts and streams to ensure proper flow conditions and reduce the amount of stagnant water available for mosquito breeding. | Continue mosquito control program. |
| Revised |  |                          |  |   |                                    |

## **7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA)**

Not Applicable - There are no final TMDLs at this time, however Westford continues to evaluate the impairment status of receiving waters. See below.

### **7a. No additions at this time.**

### **7b. WLA Assessment**

Forge Pond and Nabnasset Pond are classified as Category 4A Waters “TMDL is complete” and Beaver Brook, Deep Brook, Heart Pond, Nashoba Brook, Stony Brook, and Tadmuck Brook are classified as Category 5 Waters “Waters requiring a TMDL” based on the Final Massachusetts Year 2014 Integrated List of Waters.

Water quality concerns associated with the Town’s impaired waters are and will continue to be addressed through the implementation of recommended BMPs as well as the implementation of BMPs specified under the six minimum control measures for Phase II, as outlined in the Westford Stormwater Management Plan (SWMP). The Stormwater Management Master Plan (SWMMP), which will be completed by Tighe & Bond in 2017, reviews the status of surface waters within the town and provides further recommendations on addressing existing impairments to comply with the new General Permit. Tighe & Bond will also provide the town with TMDL recommendations including the potential need and costs for future retrofit projects.

## **Part IV. Summary of Information Collected and Analyzed**

All town catch basins were inspected by the Westford Highway Department during catch basin cleaning activities and the Engineering Department was notified of any suspicious pipes or connections observed. Smoke testing was performed at various locations to investigate potential illicit discharge connections, determine connectivity, and for data collection to be used for Capital Improvement Projects. GIS mapping was updated as necessary based on field investigations. The town is also in the process of transitioning from paper records to electronic data collection and record keeping for catch basin inspections.

**Part V. Program Outputs & Accomplishments (OPTIONAL)**

A summary of the significant program outputs and accomplishments can be found under the Part II. Self-Assessment section of this report.

**Programmatic**

|  |       |          |
|--|-------|----------|
| Stormwater management position created/staffed   | (y/n) | No       |
| Annual program budget/expenditures (Fiscal Year) | (\$)  | \$82,000 |
|  |       |          |
|  |       |          |

**Education, Involvement, and Training**

|  |               |                            |
|--|---------------|----------------------------|
| Estimated number of residents reached by education program(s)  | (# or %)      | Households*                |
| Stormwater management committee established  | (y/n)         | Yes**                      |
| Stream teams established or supported  | (# or y/n)    | Yes                        |
| Shoreline clean-up participation or quantity of shoreline miles cleaned  | (y/n or mi.)  | 2.5 Miles***               |
| Household Hazardous Waste Collection Days  |               |                            |
| ▪ days sponsored   | (#)           | See Section 2G             |
| ▪ community participation  | (%)           | U.K.                       |
| ▪ material collected   | (tons or gal) | U.K.                       |
| School curricula implemented   | (y/n)         | Yes: 5 <sup>th</sup> Grade |
| * 2017 Census Newsletter mailing sent to every Westford Household.   |               |                            |
| ** Northern Middlesex Stormwater Collaborative, Healthy Lakes & Ponds Collaborative & Stormwater Management Master Plan Advisory Group (SwAG). |               |                            |
| *** Nabnasset Improvement Association & Friends of Forge Pond Annual Clean Up  |               |                            |

**Legal/Regulatory**

|  | In Place<br>Prior to<br>Phase II | Under<br>Review | Drafted | Adopted |
|--|----------------------------------|-----------------|---------|---------|
| Regulatory Mechanism Status (indicate with "X")    |                                  |                 |         |         |
| ▪ Illicit Discharge Detection & Elimination        |                                  |                 |         | X       |
| ▪ Erosion & Sediment Control                       |                                  |                 |         | X       |
| ▪ Post-Development Stormwater Management           |                                  |                 |         | X       |
| Accompanying Regulation Status (indicate with "X") |                                  |                 |         |         |
| ▪ Illicit Discharge Detection & Elimination        |                                  |                 |         | X       |
| ▪ Erosion & Sediment Control                       |                                  |                 |         | X       |
| ▪ Post-Development Stormwater Management           |                                  |                 |         | X       |

**Mapping and Illicit Discharges**

|  |          |       |
|--|----------|-------|
| Outfall mapping complete               | (%)      | 100%  |
| Estimated or actual number of outfalls | (#)      | 616   |
| System-Wide mapping complete           | (%)      | 100%  |
| Mapping method(s)                      |          |       |
| ▪ Paper/Mylar                          | (%)      |       |
| ▪ CADD                                 | (%)      |       |
| ▪ GIS                                  | (%)      | 100%  |
| Outfalls inspected/screened            | (# or %) | 100%* |
| Illicit discharges identified          | (#)      | 0     |

|  |                    |      |
|--|--------------------|------|
| Illicit connections removed  | (# )<br>(est. gpd) | 0    |
| % of population on sewer   | (%)                | 0%   |
| % of population on septic systems  | (%)                | 100% |
| *The Westford Highway Department inspects stormwater outfalls on an annual basis for drainage and erosion problems. The Engineering Department continues to systematically inspect outfalls for illicit discharge detection and elimination. |                    |      |

### Construction

|   |            |      |
|---|------------|------|
| Number of construction starts (>1-acre)   | (#)        | 2    |
| Estimated percentage of construction starts adequately regulated for erosion and sediment control | (%)        | 100% |
| Site inspections completed  | (# or %)   | 100% |
| Tickets/Stop work orders issued   | (# or %)   | 0    |
| Fines collected   | (# and \$) | 0    |
| Complaints/concerns received from public  | (#)        | 3    |
|   |            |      |

### Post-Development Stormwater Management

|  |          |              |
|--|----------|--------------|
| Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control | (%)      | 100%         |
| Site inspections completed   | (# or %) | U.K.         |
| Estimated volume of stormwater recharged   | (gpy)    | Not Assessed |
|  |          |              |

### Operations and Maintenance

|   |                |                     |
|---|----------------|---------------------|
| Average frequency of catch basin cleaning (non-commercial/non-arterial streets)                               | (times/yr)     | 1                   |
| Average frequency of catch basin cleaning (commercial/arterial or other critical streets)                     | (times/yr)     | 1-2/yr <sup>1</sup> |
| Total number of structures cleaned  | (#)            | 3,201               |
| Storm drain cleaned   | (LF or mi.)    | 500' +/-            |
| Qty. of screenings/debris removed from storm sewer infrastructure   | (lbs. or tons) | 257.43 Tons         |
| Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)                |                | Disposal            |
| Cost of screenings disposal   | (\$)           | \$7,640             |
| 1. Drainage structures in hilly areas are cleaned more frequently based on the rate of sediment accumulation. |                |                     |

|  |                |             |
|--|----------------|-------------|
| Average frequency of street sweeping (non-commercial/non-arterial streets)           | (times/yr)     | 2           |
| Average frequency of street sweeping (commercial/arterial or other critical streets) | (times/yr)     | 2           |
| Qty. of sand/debris collected by sweeping  | (lbs. or tons) | 255.08 Tons |
| Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)                | (location)     | Disposal    |
| Cost of sweepings disposal   | (\$)           | \$7,571     |
| Vacuum street sweepers purchased/leased  | (#)            | 1 owned*    |
| Vacuum street sweepers specified in contracts  | (y/n)          | Y*          |
| *The town owns 1 mechanical sweeper and contracts another sweeper when needed.       |                |             |

|   |             |      |
|---|-------------|------|
| Reduction in application on public land of: (“N/A” = never used; “100%” = elimination)                                    |             |      |
| ▪ Fertilizers   | (lbs. or %) | 0%   |
| ▪ Herbicides  | (lbs. or %) | 95%* |
| ▪ Pesticides  | (lbs. or %) | 95%* |
| * Town of Westford Pesticide Policy requires 100% elimination except in emergencies. Estimated 5% emergency applications. |             |      |

|  |   |              |
|--|---|--------------|
| Anti-/De-Icing products and ratios<br><br><i>Ice-Ban (MgCl<sub>2</sub>) is applied to salt (NaCl) with a sprayer for use in de-icing activities. The town follows MassDOT guidelines for anti/de-icing material application.</i> | % NaCl<br>% CaCl <sub>2</sub><br>% MgCl <sub>2</sub><br>% CMA<br>% Kac<br>% KCl<br>% Sand | U.K.         |
| Pre-wetting techniques utilized  | (y/n)   | Yes          |
| Manual control spreaders used  | (y/n)   | Yes          |
| Automatic or Zero-velocity spreaders used  | (y/n)   | Auto         |
| Estimated net reduction in typical year salt application   | (lbs. or %)   | Not Assessed |
| Salt pile(s) covered in storage shed(s)  | (y/n)   | Yes          |
| Storage shed(s) in design or under construction  | (y/n)   | No           |