

**Municipality/Organization:** Littleton, MA

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**EPA NPDES Permit Number:** MA041204

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**MaDEP Transmittal Number:** W-035458

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**Annual Report Number**

**& Reporting Period:** Year 14: April 1, 2016 – March 31, 2017

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## **NPDES PII Small MS4 General Permit Annual Report**

### **Part I. General Information**

**Contact Person:** Keith A. Bergman

**Title:** Town Administrator

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**Telephone #:** (978) 540-2460

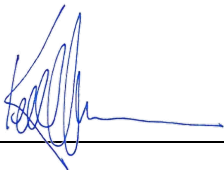
**Email:** kbergman@littletonma.org

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#### 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:** Keith A. Bergman

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**Title:** Town Administrator

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**Date:** April 27, 2017

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

In Permit Year 14 (April 1, 2016 through March 31, 2017), the Town of Littleton continued to implement its Stormwater Management Program. As part of developing the Annual Report, the Town has completed the required self-assessment of compliance with the conditions of the NPDES General Permit for Stormwater Discharges from Small MS4s, effective May 1, 2003, as required by Part II.D.1 of the permit. As of the end of Permit Year 14, the Town is generally in compliance with the conditions of the permit. See Part III for status of BMPs.

As part of the Annual Report development, the Town also evaluated the appropriateness of all BMPs in efforts towards achieving the defined measurable goals. This year, the majority of BMPs and measurable goals continue to be appropriate with a few exceptions. Several Public Education and Public Participation BMPs from the 2003 Stormwater Management Plan are no longer appropriate with current staff resources, school curriculum constraints, budget limitations, and changes to SuAsCo Watershed Community Council's stormwater outreach materials. However, we believe that the intent of all of these BMPs is being met through other program elements. Please refer to BMPs 1H, 2B, 2C, and 2E for a more detailed explanation. The Town 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 make substitutions with more suitable BMPs at that time.

### Part III. Summary of Minimum Control Measures

#### 1. Public Education and Outreach

Note that the “Planned Activities” column has been deleted from this Annual Report. In Fiscal Year 2018, the Town of Littleton 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.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)
1A	Stormwater Flyer for Residents	Water Dept	Flyer distributed to a minimum of 75% of residents	<p><b>BMP Completed Year 1.</b> The Town of Littleton has been using materials provided by the SuAsCo Watershed Community Council to assist in compliance with public education and outreach. During Permit Year 14, the Town did not receive or distribute any new materials from SuAsCo.</p> <p>During Permit Year 14, the <i>Watts &amp; Drops</i> newsletter, produced by the Littleton Electric Light and Water Dept. (LELWD), informed residents of a new rebate on smart sprinklers as the drought was at the forefront of water issues. Residents can earn a \$50 rebate on their water bill if they utilize the smart irrigation controller which uses local weather and landscape conditions to determine when to turn on the sprinklers, putting an end to watering the lawn on rainy days.</p> <p>The Town developed a brochure, entitled “Two New Stormwater Bylaws”, to support the stormwater bylaws proposed for adoption at the May 2, 2016 Annual Town Meeting. The Littleton Electric Light and Water Department (LELWD) mailed the brochure to all Littleton residents as a bill stuffer in April 2016 and posted the brochure to their website. The Town adopted the bylaws and they were approved by the Attorney General. Refer to BMPs 1F, 3A, 4A, and 5A for more information.</p>
Revised				
1B	Stormwater Lesson Plan for Fifth Graders	Water Dept	Develop/distribute lesson plan for grade 5 level. Lesson plan taught in one or more classrooms.	<p>In Year 14, the LELWD continued to sponsor a field trip to their facility; 138 students from the Russell Street Elementary School visited the facility on June 6, 2016. Presentations made to students continued to include a discussion on stormwater management and included a demonstration of stormwater runoff.</p>
Revised				
1C	Stormwater Flyer for Community Businesses	Water Dept	Develop flyer and distribute to 50% of businesses	<p>In Year 14, the <i>Watts &amp; Drops</i> newsletter, produced by LELWD, was distributed to local business owners and residents on a regular basis, and includes topics such as water conservation and stormwater management as applicable.</p>
Revised				
1D	Stormwater Media Campaign	Water Dept	Media Info Package delivered to Media	<p><b>BMP Completed Year 4.</b> In previous permit years, the Town obtained a PowerPoint and Media Toolkit from SuAsCo for media distribution. During Year 14, the Town continued to meet the intent of this completed BMP by making stormwater management</p>

<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> (Reliance on non-municipal partners indicated, if any)
Revised				information available on the Town’s website and in the <i>Watts &amp; Drops</i> newsletter.  Additionally, the Town and its numerous committees regularly post water quality and conservation information on their respective social media pages. The Sustainability Committee has promoted a number of programs and events focusing on water quality and conservation; from promoting the rain barrel program to holding “Third Thursdays” in the summer where they focused on conserving water and keeping waterways clean. Town departments use this platform to reach the public in an effective and efficient way.
<b>1E</b>	Stormwater Video	Water Dept	Show stormwater video at a minimum of one public meeting; Air stormwater video at least once on local cable station	During Year 12, Littleton became part of the Northern Middlesex Stormwater Collaborative. The Collaborative provided Littleton with a public service announcement on stormwater pollution and how residents can help prevent it, which is included on LELWD’s website: <a href="http://www.lelwd.com/water-department/source-water-protection/">http://www.lelwd.com/water-department/source-water-protection/</a> .
Revised				
<b>1F</b>	Littleton-Specific Stormwater Flyers	Water Dept	Distribute Littleton-specific along with SuAsCo brochures	In Year 14, the Town, through its Clean Lakes Committee, continued to provide educational materials to watershed groups through handouts distributed at meetings. The <i>Watts &amp; Drops</i> newsletter produced by the LELWD was also distributed to local business owners and residents every two months. The Town developed a brochure to support the two stormwater bylaws proposed for adoption at the May 2, 2016 Annual Town Meeting.
Revised				
<b>1G</b>	Community Education: Hazardous Waste Day and Recycling advertised	Highway / Water Dept.	Continue to write At Least One Article Per Year in the Local Paper and post announcements elsewhere	Littleton continued with its recycling program during Year 14. Recycling information is posted on the Town’s website. Recyclable materials are accepted in the bins at the local transfer station. Flyers and postcards are distributed outlining the recycling program. Along with 8 other communities, Littleton is a member of the North Central Regional Solid Waste Cooperative.
Revised				The Town also is a member town included in the Devens Regional Household Hazardous Waste Recycling Facility, which is open to residents and pre-qualified businesses within member communities. It allows hazardous waste to be collected up to 20 times per year at one central location. Information on the Recycling Facility is available on the Town website.
<b>1H</b>	Business Education	Water Dept	Expand Commending Businesses for Environmental Practices	As stated in the Town’s 2003 NOI, this recognition program for local businesses was expected to be conducted in conjunction with an existing Nashoba Valley Chamber of Commerce program. However, this program was not implemented regionally. The intent of this BMP is being met through BMP 1C.
Revised				

<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> (Reliance on non-municipal partners indicated, if any)
<b>1I</b>	Stormwater Flyer for Agriculture	Water Dept	Develop flyer and distribute to agricultural land owners	<b>BMP Completed Year 3.</b> In previous permit years, pamphlets produced by the Clean Lakes Committee were distributed to agricultural land owners within Town and provided information on protection of water quality through stormwater management. Agricultural land owners continue to receive stormwater and watershed stewardship information through the <i>Watts &amp; Drops</i> newsletter.
Revised				
<b>1J</b>	Newsletter / Newspaper Articles	Water Dept	Write at least one article in <i>Watts &amp; Drops</i> newsletter and newspaper per year	In Year 14, the <i>Watts &amp; Drops</i> newsletter was distributed to local business owners and residents on a bi-monthly basis (April, June, August, October, and December 2016, February 2017). See BMP 1C.  In April 2016, the Town Meeting Report was distributed to all residents, including articles, motions, recommendations, explanations, Consent Calendar, and Finance Committee Report. This included 2 articles regarding stormwater bylaws (see BMPs 3A, 4A, and 5A) and an article requesting a stormwater budget appropriation. The Town Meeting Report is also available here: <a href="http://www.littletonma.org/content/19733/19783/36257/36259.aspx">http://www.littletonma.org/content/19733/19783/36257/36259.aspx</a> .
Revised				
<b>1K</b>	Stormwater Info on Town Website	Water Dept	Provide storm water links by year 2; provide Littleton specific information by year 4	In Year 14, copies of the <i>Watts &amp; Drops</i> newsletters were posted on LELWD's website, which can be accessed through the Town's website. These newsletters traditionally provide information on stormwater management, hazardous materials management, and outdoor water conservation.  The LELWD website also provides information regarding the Town's water conservation program, including the Town's rain barrel program, technical reports and studies regarding stormwater management and watershed stewardship, and other educational materials.
Revised				

## 2. Public Involvement and Participation

Note that the “Planned Activities” column has been deleted from this Annual Report. In Fiscal Year 2018, the Town of Littleton 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.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)
2A	Stormwater Traveling Display	Water Dept.	Display circulates for a min of 3 months per year; Display is posted at a min of 3 locations per year	The Town of Littleton has been utilizing kiosks with stormwater information provided by the SuAsCo Watershed Community Council to assist with public involvement. During Year 14, the Town obtained updated posters containing information regarding stormwater management practices for kiosks around Town, which will be on display later this year.
Revised				
2B	Poster Contest for Fifth Graders	Water Dept.	Poster contest is held and entries are received, judged and displayed	The Town did not hold a stormwater poster contest for fifth graders during Year 14, although poster contests were held in previous years with help from the SuAsCo Watershed Community Council. The intent of this BMP has been met through BMP 1B’s annual interactive school curriculum.
Revised				
2C	Photo Contest for High Schoolers	Water Dept.	Photo contest is held and entries are received, judged and displayed	The Town did not hold a stormwater photo contest with the high school students during Permit Year 14, as this initiative was difficult to implement in the high school curriculum. The intent of this BMP has been met through BMP 1B.
Revised				
2D	Stormwater Summit Event	Water Dept	Hold Local or multi community stormwater summit year 4	<b>BMP Completed Year 4 with SuAsCo.</b> The Town is a member of the Northern Middlesex Stormwater Collaborative, which has hosted a number of regional stormwater workshops and training opportunities throughout past Permit Years. In Permit Year 14, staff from the Littleton Highway Department participated in a Technical Stormwater Training on March 29, 2017 in Westford, MA.
Revised				Other Town staff, including the Town Administrator, Assistant Town Administrator, and Planning Administrator/Permit Coordinator, attended the MAGIC Stormwater Collaborative Meeting on Wednesday, March 29, 2017, which included topics such as Good Housekeeping Requirements, Mapping and Data Tools, MAGIC Stormwater Partnership, Stormwater Coalitions in MA, and an Overview of the MA MS4 permit.
2E	Stormwater Super Summit Event	Water Dept.	Municipal participation in the Stormwater Super Summit	The “Stormwater Super Summit” was eliminated from SuAsCo Year 5 product. The intent of this BMP (regional sharing of stormwater program information) is being met through participation in the Northern Middlesex Stormwater Collaborative.
Revised				

<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> (Reliance on non-municipal partners indicated, if any)
<b>2F</b>	Annual Public Meeting/Hearing Regarding Plan Status and Reports to EPA	Selectmen	Hold meeting in April prior to May 1 submission of report	During Year 14, public meetings were held by the Planning Board and through Town Meeting. Stormwater management initiatives and watershed restoration efforts were discussed at these meetings.  In April 2016, the Town distributed a Town Meeting Report to all residents providing information regarding the May 2, 2016 Annual Town Meeting. This report included three stormwater-related articles. See BMP 1J.
Revised				
<b>2G</b>	Involve Watershed Groups: Clean Lakes Committee, Spectacle, Mill, Long, & Forge Ponds	Water Dept. & Local Groups	Continue meetings at least 4 times/yr; Continue annual cleanup days; Educational Information Shared by Town;	During Year 14, the Clean Lakes Committee continued to meet monthly on strategies being utilized for stormwater management and in lake restoration efforts. In addition, the Town, along with the Clean Lakes Committee, made available to residents, low-impact drought tolerant grass seed and rain barrels as part of their water conservation efforts as they have in years past. The Long Lake Neighborhood Association also continued to hold their annual spring clean-up in April, picking up trash and debris in the neighborhood and lake.
Revised				
<b>2H</b>	Involve Children's groups (such as 4H, scouts)	Water Dept	Children's groups at least once per year help distribute or display educational information	In previous years, the Town had boy scouts use storm drain markers to label catch basins to educate the public and prevent illegal dumping into the storm drain system. No storm drain stenciling was performed in Year 14.
Revised				

### 3. Illicit Discharge Detection and Elimination

Note that the “Planned Activities” column has been deleted from this Annual Report. In Fiscal Year 2018, the Town of Littleton 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.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)
3A	REQUIRED: Illicit Discharge Bylaw / Regulatory Mechanism	Water Dept / Highway	Develop draft bylaw; involve and educate public, municipal officials, etc.	An <i>Illicit Connections and Discharges to Storm Drain System Bylaw</i> was adopted at the May 2, 2016 Annual Town Meeting and was submitted to and approved by the attorney general. This bylaw gives the Town a tool to eliminate and prevent pollution from entering the Town’s storm drain system.
Revised		Water Dept has assumed lead role.		Bylaw changes made in previous permit years include the development of a Board of Health regulation regarding floor drain discharges in commercial and industrial facilities to preserve and protect the Town’s surface and groundwater resources.
3B	REQUIRED: Storm Drain Map	Highway	Compile existing record plans and surveyed data. Find and locate drainage outfalls in the field.	During Year 14, the Town hired a consultant to complete additional mapping of the storm drain system. The consultant georeferenced as-built plans to update connectivity and attribute information in the Town’s GIS mapping. In past permit years, available plans were compiled onto a town-wide drainage system map and all known outfalls have been identified. Approximately 50% of structures have been located by GPS.
Revised				
3C	REQUIRED: Illicit Discharge Detection and Elimination Plan	Highway	Determine Priority Areas and Discuss Plan Visually Screen Outfalls During Dry Weather (at least 20% each year)	The Town has hired a consultant to develop a written IDDE Plan. This Plan will include procedures for dry weather screening, responsible parties, and will be completed by the end of Fiscal Year 2017.  During Year 14, the Highway Department continued to visually screen drainage structures, including outfalls, for illicit discharges on a limited basis during annual cleaning. Illicit discharges are reported to the Board of Health, and the Water & Highway Departments follow-up to investigate the source of these discharges. In the past illegal connections from wash water and contaminated sump pump discharges have been found and disconnected. No illicit discharges or connections were found during Year 14.
Revised				
3D	REQUIRED: Illicit Discharge Education for General Public & Businesses	Water Dept.	Include illicit discharge education in the community, business, and Littleton specific flyers.	The Littleton Electric Light and Water Department mailed the brochure entitled, “Two New Stormwater Bylaws” to all Littleton residents as a bill stuffer in April 2016 which included an explanation of the <i>Illicit Connections and Discharges to Storm Drain System Bylaw</i> and FAQs about what is allowed in the drainage system.



<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> (Reliance on non-municipal partners indicated, if any)
Revised				In previous permit years, the Town completed storm drain stenciling and placed information in the <i>Watts &amp; Drops</i> newsletter discussing the community notification system in place for use in emergency situations such as hazardous waste spills, etc.
<b>3E</b>	REQUIRED: Illicit Discharge Education for Municipal Employees	Water Dept.	Include illicit discharge education in training under measure 6	During Year 14, staff from the Littleton Highway Department participated in a Technical Stormwater Training that was held by the Northern Middlesex Stormwater Collaborative on March 29 <sup>th</sup> , 2017 in Westford, MA.
Revised				Other Town staff, including the Town Administrator, Assistant Town Administrator, and Planning Administrator/Permit Coordinator, attended the MAGIC Stormwater Collaborative Meeting on Wednesday, March 29, 2017, which included topics such as Good Housekeeping Requirements, Mapping and Data Tools, MAGIC Stormwater Partnership, Stormwater Coalitions in MA, and an Overview of the MA MS4 permit.

#### 4. Construction Site Stormwater Runoff Control

Note that the “Planned Activities” column has been deleted from this Annual Report. In Fiscal Year 2018, the Town of Littleton 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.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)
4A	REQUIRED: Construction Site Runoff Bylaw / Regulatory Mechanism	Water Dept / Planning	Initial discussions; Review current local/state regulations; Review proposed samples. Develop draft bylaw, involve and educate public etc. Implement bylaw by year 3.	The Town’s Subdivision Regulations require submittal of an erosion and sedimentation control plan to mitigate and prevent erosion/sedimentation of disturbed areas during and after construction activities. Article IV of the Town’s Existing Zoning Bylaws outline site plan requirements for other types of development within Town and reference the Subdivision Regulations. Additionally, the Conservation Commission requires erosion and sediment control through the Town’s Wetlands Bylaw and Regulations and related State code.
Revised				A <i>Stormwater Management and Erosion Control Bylaw</i> was adopted at the May 2, 2016 Annual Town Meeting and approved by the Attorney General. This bylaw requires Planning Board oversight of erosion and sediment control and stormwater runoff for construction sites disturbing one acre of land or more that may have been otherwise exempt from local permitting.
4B	REQUIRED: BMPs for Construction Site Erosion, Sediment, and Waste Controls	Water Dept / Planning	Assess existing and brainstorm proposed. Prepare draft to include in bylaw. Implement bylaw by year 3.	Refer to BMP 4A for regulatory mechanisms. Littleton’s requirements for construction site controls are consistent with the MA Stormwater Handbook and EPA’s Construction General Permit requirements.
Revised				
4C	REQUIRED: Construction Site Plan Review Procedures	Water Dept / Planning	Assess existing and brainstorm proposed Prepare draft to include in bylaw. Implement review by year 3.	The Town’s Subdivision Regulations and Article IV of the Town’s Zoning Bylaws outline site plan requirements for approval by the Planning Board. On September 26, 2013, the Town also adopted written Site Plan Review Procedures. The Planning Board also has a Site Plan Review Checklist that they utilize.
Revised				
4D	REQUIRED: Construction Site Inspection and Enforcement Procedures	Water Dept / Planning	Assess existing and brainstorm proposed Prepare draft to include in bylaw. Implement inspections by year 3.	The applicable Conservation Commission and Planning Board permitting outlines site inspection requirements during construction.
Revised				

<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> (Reliance on non-municipal partners indicated, if any)
<b>4E</b>	REQUIRED: Response to Public – “Stormwater Hotline	Water Dept	Implement “storm water hotline”. Advertise and test hotline. Implement hotline by year 3.	In Year 14, stormwater management issues remained the responsibility of the Highway and Water Departments. Any reports of illegal dumping or discharges that are received during working hours go through the Highway Department. Calls received after hours by the Police Department are transferred to the appropriate Department (either Highway, Water, or Fire). Illicit discharges are also reported to the Board of Health.
Revised				

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

Note that the “Planned Activities” column has been deleted from this Annual Report. In Fiscal Year 2018, the Town of Littleton 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.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)
5A	REQUIRED: Post-Construction Site Runoff Bylaw / Regulatory Mechanism	Water Dept / Planning	Initial discussion; Review current local/state regulations; Review proposed samples. Develop draft bylaw, involve and educate public. Float new bylaw by year 3 for one year comment period.	Post-construction stormwater management is required for Subdivision approval and to obtain an Order of Conditions under the Wetlands Bylaw. Additionally, Article IV of the Town’s existing Zoning Bylaws outline site plan requirements for other types of development within Town and reference the Subdivision Regulations.  At the May 5, 2007 Town Meeting, amendments to the Town’s Zoning Bylaw were adopted that incorporated by reference a <i>Low Impact Design/Best Management Practices Manual</i> into the bylaw.
Revised				A <i>Stormwater Management and Erosion Control Bylaw</i> was adopted at the May 2, 2016 Annual Town Meeting and was approved by the Attorney General Office. This bylaw regulates post-construction stormwater runoff for both new and redevelopment projects and will require Planning Board oversight of sites disturbing one acre of land or more that may have been otherwise exempt from local permitting.
5B	REQUIRED: Choose Structural and Non-Structural BMPs	Water Dept / Planning	Assess existing and brainstorm proposed. Prepare draft to include in draft bylaw. Implement bylaw in year 3.	The <i>Low Impact Design/Best Management Practices Manual</i> incorporated by reference into the Town’s Zoning Bylaw outlines those BMPs that constitute low impact development and are available for use in Littleton. The Town’s Subdivision Regulations, Wetlands Bylaw, and new Stormwater Management and Erosion Control Bylaw also require drainage designs to conform to the MassDEP Stormwater Handbook.
Revised				
5C	REQUIRED: Long-Term BMP Operation and Maintenance Procedures	Water Dept / Planning	Assess existing and brainstorm proposed. Prepare draft to include in draft bylaw. Implement bylaw in year 3.	The <i>Low Impact Design/Best Management Practices Manual</i> incorporated by reference into the Town’s Zoning Bylaw requires applicants to summarize the operation and maintenance (O&M) required for each BMP planned on site, including schedule for required activities, estimated costs, and responsible parties. During Year 14, the Town continued to enforce this new section of their Zoning Bylaw that they adopted.
Revised				The Town’s Subdivision Regulations, Wetlands Bylaw, and new Stormwater Management and Erosion Control Bylaw all require an O&M Plan and provisions to require long-term O&M of private BMPs consistent with MassDEP’s Stormwater Handbook.

<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> (Reliance on non-municipal partners indicated, if any)
<b>5D</b>	REQUIRED: Structural BMP Implementation Procedures	Water Dept / Planning	Assess existing and brainstorm proposed. Prepare draft to include in the draft bylaw. Implement bylaw in year 3.	The <i>Low Impact Design/Best Management Practices Manual</i> incorporated by reference into the Town's Zoning Bylaw outlines procedures that developers should follow when implementing structural BMPs with the goal of minimizing water quality impacts and maintaining pre-development runoff conditions. The Town's Subdivision Regulations, Wetlands Bylaw, and new Stormwater Management and Erosion Control Bylaw also require drainage designs to conform to the MassDEP Stormwater Management Handbook.
Revised				

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

Note that the “Planned Activities” column has been deleted from this Annual Report. In Fiscal Year 2018, the Town of Littleton 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.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)
6A	REQUIRED: Employee Training to Prevent/Reduce Stormwater Pollution	Highway / Water Dept.	Assess who, when, and what topics; Create schedule and checklist. Sample/test training.	In previous permit years, staff from the Littleton Highway Department and the Littleton Water Department participated in a Good Housekeeping and Pollution Prevention Training that was held by the Northern Middlesex Stormwater Collaborative.
Revised				In Permit Year 14, staff from the Littleton Highway Department participated in a Technical Stormwater Training that was held by the Northern Middlesex Stormwater Collaborative on March 29 <sup>th</sup> , 2017 in Westford, MA.  Other Town staff, including the Town Administrator, Assistant Town Administrator, and Planning Administrator/Permit Coordinator, attended the MAGIC Stormwater Collaborative Meeting on Wednesday, March 29, 2017, which included topics such as Good Housekeeping Requirements, Mapping and Data Tools, MAGIC Stormwater Partnership, Stormwater Coalitions in MA, and an Overview of the MA MS4 permit.
6B	REQUIRED: Maintenance/Inspection of Storm Sewers and Structural/Non Structural Controls	Highway	Develop New/Improved Schedules and Procedures.	The Town continued to maintain and inspect their storm drainage system, and make repairs as needed during Year 14. All streets were swept at least once, and approximately 90% of the Town’s catch basins were cleaned. Debris in catch basins has been reduced due to elimination of sand application as part of the Town’s de-icing operations.
Revised			No change to existing operational procedures warranted.	
6C	REQUIRED: Pollutant Source Reduction / Elimination from Municipal Facilities & Activities	Highway	Fully Implement proposed BMPs	During Year 14, the Town finalized an updated Oil Spill Prevention, Control, and Countermeasure (SPCC) Plan for the DPW Garage and Water Department (contiguous facilities), implemented BMPs, and took actions to reduce pollutants generated from municipal facilities and activities.
Revised				

<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> (Reliance on non-municipal partners indicated, if any)
<b>6D</b>	REQUIRED: Waste Disposal Procedures from Storm Sewers & Municipal Facilities/Activities	Highway	Assess existing waste disposal procedures. Develop draft procedures.	<b>BMP Completed Year 3.</b> The Town continued to follow their established waste disposal procedures for street sweeping and cleaning of their drainage system, which were previously evaluated and determined to be adequate.
Revised				
<b>6E</b>	Reduction of Sand in De-icing Operations	Highway	Reduction/elimination of sand in de-icing operations to reduce street sweeping/catch basin waste.	The Town continued their use of sodium chloride with a magnesium chloride mixer for deicing. The use of sodium deicing, particularly the amount of sodium and liquid amounts necessary per application, is discussed with employees prior to the start of snow and ice operations. Sand is no longer used for deicing in Town. This has reduced the amount of sediment found in catch basins and the amount of sediment associated with street sweeping operations.
Revised				

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

When the NOI was submitted, there were no approved TMDLs for water bodies directly receiving MS4 discharges where the pollutant is likely to be found in stormwater. However, most of the urbanized area to the east of Route 495 is within the Assabet River watershed, which has been subject to an approved TMDL for Phosphorus since September 2004. The Town is already implementing a number of BMPs that reduce phosphorous within the watershed area (such as ongoing Public Education and Good Housekeeping measures). While the Town does not discharge stormwater directly to the Assabet River, the 2016 General Permit will require additional BMPs to reduce phosphorous loadings to receiving waters in the watershed. Potential BMPs will be evaluated during the development of the NOI and SWMP required by the 2016 General Permit.

There are also impaired receiving waters in Littleton that require the development of a TMDL, as listed on the Final 2014 Integrated List of Waters, including Beaver Brook, Bennetts Brook, Long Pond, Mill Pond, Reedy Meadow Brook, and Spectacle Pond. The Town will reevaluate the need for additional BMPs for these watersheds as part of the development of the SWMP for the 2016 General Permit.

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

Not applicable at this time.

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

No additional information has been collected or analyzed outside of what was listed in Part III above.