

Municipality/Organization: Littleton, MA

EPA NPDES Permit Number: MA041204

MaDEP Transmittal Number: W-035458

**Annual Report Number
& Reporting Period:** Year 15: April 1, 2017 – March 31, 2018

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Keith A. Bergman

Title: Town Administrator

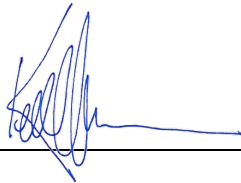
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Certification:

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

Title: Town Administrator

Date: May 1, 2018

Part II. Self-Assessment

In Permit Year 15 (April 1, 2017 through March 31, 2018), 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 15, the Town is generally in compliance with the conditions of the permit. See Part III for status of BMPs. Note that some of the BMPs and measurable goals have been revised since submission of the Town's Notice of Intent in 2003. Part III incorporates all revisions that have been proposed in previous reports and deemed approved pursuant to Section II.D.2 of the 2003 Permit, and proposes some additional revisions.

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 2019, 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 15 (Reliance on non-municipal partners indicated, if any)
1A	Stormwater Flyer for Residents	Water Dept	Flyer distributed to a minimum of 75% of residents	BMP Completed, Related Activities Ongoing. Flyers were mailed to all Littleton residents in a previous permit year, as reported in previous annual reports. The Town of Littleton has been using materials provided by the SuAsCo Watershed Community Council to assist in ongoing public education and outreach. During Permit Year 15, the Town received additional stormwater outreach materials from SuAsCo and displayed them in the Conservation Commission office and at public meetings.
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.	In previous permit years, the LELWD sponsored a field trip to their facility for Littleton students, where stormwater management was discussed and a demonstration of stormwater runoff was shown. LELWD plans to sponsor additional field trips for local school groups, with the next scheduled trip on June 18, 2018.
Revised			Host annual field trip to LELWD facility for students, including a presentation on stormwater	
1C	Stormwater Flyer for Community Businesses	Water Dept	Develop flyer and distribute to 50% of businesses	BMP Completed, Related Activities Ongoing. The Town developed a brochure entitled “Two New Stormwater Bylaws” to support the stormwater bylaws proposed for adoption at the 2016 Annual Town Meeting. Local businesses received the brochure with the water bill. On an ongoing basis, the LELWD’s “Watts & Drops” newsletter is delivered to local businesses with their water bills.
Revised				
1D	Stormwater Media Campaign	Water Dept	Media Info Package delivered to Media	BMP Completed, Related Activities Ongoing. In previous permit years, the Town obtained a PowerPoint and Media Toolkit from SuAsCo for media distribution. During Year 15, the Town continued to further the goal of this completed BMP by making stormwater management information available on the Town’s website. In addition, the Town and its committees regularly post water quality and conservation information on their respective social media pages. Finally, the Sustainability Committee has promoted a number of programs and events focusing on water quality and conservation. Town departments use this platform to reach the public in an effective and efficient way.
Revised				

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)
1E	Stormwater Video	Water Dept	Show stormwater video at a minimum of one public meeting; Air stormwater video at least once on local cable station	BMP Completed, Related Activities Ongoing. In Permit Year 8, the stormwater video provided to the Town by the SuAsCo Watershed Community Council was aired on the local cable access channel. In Permit 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 “Source Water Protection” webpage: http://www.lelwd.com/water-department/source-water-protection/ .
Revised				
1F	Littleton-Specific Stormwater Flyers	Water Dept	Distribute Littleton-specific along with SuAsCo brochures	BMP Completed, Related Activities Ongoing. The Town’s Clean Lakes Committee continued to provide educational materials to watershed groups in Permit Year 15 through handouts distributed at meetings. During Permit Year 15, the Town received new stormwater outreach materials from SuAsCo and displayed them in the Conservation Commission office and at public meetings. On an ongoing basis, the LELWD’s “Watts & Drops” newsletter is delivered to local businesses with their water bills and often includes information related to stormwater management (see BMP 1J).
Revised				
1G	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 15. Recycling information is posted on the Town’s “Transfer Station” webpage. Recyclable materials are accepted at the town’s transfer station. Flyers and postcards are distributed outlining the recycling program. Littleton is one of 12 communities that are members of the North Central Regional Solid Waste Cooperative (“MassToss”), which provides assistance to its member communities in all areas of solid waste handling. The Town is also part of 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 twice per month at the Devens collection center. Information on the Recycling Facility is available on the Town’s website (https://www.littletonma.org/transfer-station).
Revised			Advertise household hazardous waste disposal and recycling programs	
1H	Business Education	Water Dept	Expand Commending Businesses for Environmental Practices	This recognition program for local businesses was expected to be conducted in conjunction with an existing Nashoba Valley Chamber of Commerce program that was never implemented regionally. It is not feasible for the Town to implement this BMP. To meet the intent of the original BMP on an ongoing basis, the LELWD’s “Watts & Drops” newsletter is delivered to local businesses with their water bills (see BMP 1J). Other Town departments make additional stormwater educational materials available to businesses.
Revised			Provide pollution prevention and/or stormwater management information to businesses	
1I	Stormwater Flyer for Agriculture	Water Dept	Develop flyer and distribute to agricultural land owners	BMP Completed, Related Activities Ongoing. 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.
Revised				

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)
1J	Newsletter / Newspaper Articles	Water Dept	Write at least one article in <i>Watts & Drops</i> newsletter and newspaper per year	BMP Completed, Related Activities Ongoing. In Year 15, the <i>Watts & Drops</i> newsletter was distributed to local business owners and residents on a bi-monthly basis (April, June, August, October, and December 2017, February 2018) and include topics such as water conservation and stormwater management as applicable.
Revised			Write at least one article in <i>Watts & Drops</i> newsletter per year	
1K	Stormwater Info on Town Website	Water Dept	Provide storm water links by year 2; provide Littleton specific information by year 4	BMP Completed, Related Activities Ongoing. The Town established a Stormwater webpage (https://www.littletonma.org/stormwater) in Year 15 which includes information about the EPA MS4 program, Littleton’s stormwater management activities, bylaws and regulations, and an email address for the Stormwater Department. In Year 15, the <i>Watts & Drops</i> newsletters were posted on LELWD’s website (http://www.lelwd.com/watts-drops/). 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 2019, 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 15 (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	In previous permit years, the Town posted stormwater information on kiosks in key locations to assist with public education and involvement. During Year 14, the Town obtained updated outreach materials from the SuAsCo Watershed Community Council, which contained information about stormwater management practices and were put on display in the Conservation Commission office in Year 15.
Revised				
2B	Poster Contest for Fifth Graders	Water Dept.	Poster contest is held and entries are received, judged and displayed	BMP Completed, Related Activities Ongoing. Poster contests were held in previous years with assistance from the SuAsCo Watershed Community Council. LELWD continues to conduct outreach activities with students.
Revised				
2C	Photo Contest for High Schoolers	Water Dept.	Photo contest is held and entries are received, judged and displayed	In Permit Year 15, the Town proposes replacing the one-time photo contest with a family-friendly clean-up event. On April 22, 2018, the Town hosted an Earth Day community clean-up event. This event was promoted on Facebook and 224 people attended. The Town dump accepted 600 bags of trash from the cleanup, t-shirts were provided for participants, and there was a lunchtime “thank you BBQ” in Fay Park after the event.
Revised	Community Clean Up Day	Parks, Recreation, and Community Education	Promote and host Family-friendly Clean Up Event	
2D	Stormwater Summit Event	Water Dept	Hold Local or multi community stormwater summit year 4	BMP Completed (Year 4), Related Activities Ongoing (see 2E).
Revised				

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)
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 membership in the Northern Middlesex Stormwater Collaborative (NMSC). NMSC has hosted a number of regional stormwater workshops and training opportunities throughout the Permit term. In Permit Year 15, multiple staff from the Littleton Highway Department participated in NMSC trainings, which included topics such as MS4 Permit requirements, SWPPPs for municipal facilities, and stormwater asset data collection with GPS. Other Town staff attended the Minuteman Advisory Group on Interlocal Coordination (“MAGIC”) Stormwater Partnership meetings on June 29 and November 30, 2017, which included topics such as mapping and ranking outfall catchments, pet waste management, stormwater recharge analysis, stormwater financing and utilities, outreach and education resources, and evaluating bylaws for General Permit requirements.
Revised	Intermunicipal Coordination	Highway/Water Dept.	Attend meetings and trainings by regional and state-wide stormwater collaboratives	
2F	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 15, public meetings were held by the Planning Board and the Board of Selectmen. Stormwater management initiatives and watershed restoration efforts were discussed at these meetings, including adopting the <i>Stormwater Management and Erosion Control Regulations</i> in July 2017.
Revised	Annual Meeting Regarding Stormwater Management Program		Discuss stormwater program at one public meeting per year	
2G	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 15, the Clean Lakes Committee continued to meet regularly on strategies for stormwater management and lake restoration efforts. In addition, the Town, along with the Clean Lakes Committee, continued to make low-impact drought tolerant grass seed and rain barrels available to residents as part of their water conservation efforts. The Long Lake Neighborhood Association also held their annual spring clean-up on April 30, 2017, picking up trash and debris in the neighborhood and lake shore.
Revised				
2H	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 worked with a local Boy Scout troop to label catch basins with storm drain markers to educate the public and prevent illegal dumping into the storm drain system.
Revised				

3. Illicit Discharge Detection and Elimination

Note that the “Planned Activities” column has been deleted from this Annual Report. In Fiscal Year 2019, 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 15 (Reliance on non-municipal partners indicated, if any)
3A	REQUIRED: Illicit Discharge Bylaw / Regulatory Mechanism	Water Dept has assumed lead role.	Develop draft bylaw; involve and educate public, municipal officials, etc.	BMP Completed, Related Activities Ongoing. 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		Board of Health / Highway		
3B	REQUIRED: Storm Drain Map	Highway	Compile existing record plans and surveyed data. Find and locate drainage outfalls in the field.	BMP Completed, Related Activities Ongoing. 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. All known outfalls have been identified and field-located. Mapping of drainage structures and connectivity is in progress. In Year 15, the Highway Department implemented a tablet-based program to GPS locate additional drainage structures.
Revised				

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)
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)	BMP Completed, Related Activities Ongoing. The Town hired a consultant to develop a written IDDE Plan which was completed in PY15. This Plan includes procedures for dry weather screening of outfalls/interconnections, responsible parties, and procedures for eliminating illicit discharges and connections in accordance with the 2016 Permit.
Revised				Approximately two-thirds of the Town’s drainage outfalls have been inventoried and screened for dry weather flow by the Town’s stormwater consultant since Year 14. The Town is well on track to complete screening at the final third of outfalls prior to the three-year deadline of the 2016 General Permit. During Year 15, the Highway Department continued to visually screen drainage structures, including outfalls, for illicit discharges during routine inspections and nearby road-related work. Illicit discharges are reported to the Board of Health, and the Water Department and/or Highway Department follows 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 detected during Year 15.
3D	REQUIRED: Illicit Discharge Education for General Public & Businesses	Water Dept.	Include illicit discharge education in the community, business, and Littleton specific flyers.	BMP Completed, Related Activities Ongoing. In previous permit years, the Town completed storm drain stenciling and included information in the <i>Watts & Drops</i> newsletter discussing the community notification system in place for use in emergency situations such as hazardous waste spills, etc. Additionally, LELWD 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.
Revised				
3E	REQUIRED: Illicit Discharge Education for Municipal Employees	Water Dept.	Include illicit discharge education in training under measure 6	In Permit Year 15, multiple staff from the Littleton Highway Department participated in NMSC trainings, which included topics such as MS4 Permit requirements, SWPPPs for municipal facilities, and stormwater asset data collection with GPS. The MAGIC Stormwater Partnership meetings described in BMP 2D, attended by the Town’s Planning Administrator/Permit Coordinator, included IDDE topics such as mapping and ranking outfall catchments and pet waste management.
Revised				

4. Construction Site Stormwater Runoff Control

Note that the “Planned Activities” column has been deleted from this Annual Report. In Fiscal Year 2019, 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 15 (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.	BMP Completed, Related Activities Ongoing. A <i>Stormwater Management and Erosion Control Bylaw</i> was adopted and approved by the Attorney General in Permit Year 14. 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. Additionally, the Planning Board adopted <i>Stormwater Management and Erosion Control Regulations</i> at a public hearing on July 13, 2017. The regulations are posted on the Town’s website.
Revised				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.
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.	BMP Completed, Related Activities Ongoing. 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.	BMP Completed, Related Activities Ongoing. 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. A Site Plan Review Checklist is used by the Planning Board during site plan reviews.
Revised				

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)
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.	BMP Completed, Related Activities Ongoing. The applicable Conservation Commission and Planning Board permitting processes outline site inspection requirements during construction. As described in BMP 4A, erosion and sediment control plans are required through the construction permitting process. Every site that requires a permit is inspected by Town staff once erosion and sediment controls are in place, prior to construction. The Littleton Conservation Commission tracks the number of projects, enforcement actions taken, and remediation activities completed under the local Wetlands regulations. 2 enforcement orders were issued for construction impacts to wetlands and waterways in Year 15.
Revised				
4E	REQUIRED: Response to Public – “Stormwater Hotline”	Water Dept	Implement “stormwater hotline”. Advertise and test hotline. Implement hotline by year 3.	BMP Completed, Related Activities Ongoing. In Year 15, the Town established a Stormwater Department email address (stormwater@littletonma.org) and advertises the address on the Stormwater webpage. A “SeeClickFix” program was also implemented, where residents can report local concerns or problems in their neighborhoods to the Department of Public Works, including illegal dumping, drainage problems, and other stormwater issues. This program was advertised in a local newspaper in August 2017 and on the Town website. Any reports of illegal dumping or discharges that are received during working hours are investigated by the Highway Department. Calls received after hours by the Police Department are transferred to the appropriate Town 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 2019, 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 15 (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.	BMP Completed, Related Activities Ongoing. A <i>Stormwater Management and Erosion Control Bylaw</i> was adopted and approved by the Attorney General Office in Permit Year 14. 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. Additionally, the Planning Board adopted <i>Stormwater Management and Erosion Control Regulations</i> at a public hearing on July 13, 2017. The regulations are posted on the Town’s website.
Revised				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.
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.	BMP Completed, Related Activities Ongoing. 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 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.	BMP Completed, Related Activities Ongoing. 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. These requirements continued to be enforced during Year 15.
Revised				The Town’s Subdivision Regulations, Wetlands Bylaw, and 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.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)
5D	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.	BMP Completed, Related Activities Ongoing. 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 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 2019, 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 15 (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.	The Town’s Conservation Coordinator attended a full-day training on April 28, 2017 hosted by the Massachusetts Association of Conservation Commissions. The training included topics such as Effective Erosion and Sediment Controls and Stormwater Requirements for Wetlands Protection.
Revised			Provide training for town employees regarding stormwater pollution prevention and/or good housekeeping	In September 2017, staff from the Littleton Highway Department participated in a training held by their stormwater consultant regarding catch basin cleaning and inspections. A tablet-based application was created to track catch basin cleaning and maintenance. On January 23, 2018, staff from the Water and Highway Departments completed a site walk and on-site audit of the LELWD facility with the Town’s stormwater consultant as part of the development of an Oil Spill Prevention, Control, and Countermeasure (SPCC) Plan update and Stormwater Pollution Prevention Plan (SWPPP), during which existing operations and good housekeeping practices were discussed. Throughout the permit term, staff from the Littleton Highway and Water Departments have participated in Good Housekeeping and Pollution Prevention trainings held by the Northern Middlesex Stormwater Collaborative. In Permit Year 15, multiple staff from the Littleton Highway Department participated in NMSC trainings, which included topics such as MS4 Permit requirements, SWPPPs for municipal facilities, and stormwater asset data collection with GPS. The MAGIC Stormwater Partnership meetings described in BMP 2D included IDDE topics such as mapping and ranking outfall catchments and pet waste management. This was attended by the Town’s Planning Administrator/Permit Coordinator.
6B	REQUIRED: Maintenance/Inspection of Storm Sewers and Structural/Non Structural Controls	Highway	No change to existing operational procedures warranted.	BMP Completed, Related Activities Ongoing. The Town continued to maintain and inspect their storm drainage system, and made repairs as needed during Year 15. In May and November 2017, Highway Department staff located, cleaned, and repaired multiple outfalls as part of the IDDE outfall investigation and dry weather screening program described in BMP 3C.
Revised				All streets were swept at least once during Year 15, with additional sweeping completed on an as-needed basis. 736 of the Town’s catch basins were cleaned in Year 15, and repairs were made as needed. Debris in catch basins has been reduced due to elimination of sand application as part of the Town’s de-icing operations.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)
6C	REQUIRED: Pollutant Source Reduction / Elimination from Municipal Facilities & Activities	Highway	Fully Implement proposed BMPs	BMP Completed, Related Activities Ongoing. During Year 14, the Town finalized an updated Oil SPCC Plan for the DPW Garage and Water Department (contiguous facilities). In Year 15, the Departments implemented the SPCC Plan BMPs and took actions to reduce pollutants generated from municipal facilities and activities. On January 23, 2018, staff from the Water and Highway Departments completed a site walk and on-site audit of the LELWD facility with the Town’s stormwater consultant as part of the development of an Oil Spill Prevention, Control, and Countermeasure (SPCC) Plan update and Stormwater Pollution Prevention Plan (SWPPP). Both plans are under review and will be finalized in PY16.
Revised				
6D	REQUIRED: Waste Disposal Procedures from Storm Sewers & Municipal Facilities/Activities	Highway	Assess existing waste disposal procedures. Develop draft procedures.	BMP Completed, Related Activities Ongoing. 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				
6E	Reduction of Sand in De-icing Operations	Highway	Reduction/elimination of sand in de-icing operations to reduce street sweeping/catch basin waste.	BMP Completed, Related Activities Ongoing. 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. In Year 15, 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.
Revised				

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

When the NOI was submitted in 2003, there were no approved TMDLs for waterbodies 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, including ongoing Public Education and Good Housekeeping measures. Additional information is listed below. 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 additional and/or modified BMPs will be evaluated during the development of the NOI and SWMP required by the 2016 General Permit.

To help address the Assabet River TMDL, the Town has implemented the following BMPs:

- MCM 1: Public educational BMPs have included topics to reduce phosphorus, including lawncare tips for fertilizer, leaf litter, and watering, management of pet waste, and agricultural runoff.
- BMP 4A and BMP 5A: Local bylaws and regulations require stormwater infiltration where feasible and reduction of pollutants of concern for development and redevelopment as well as erosion and sediment control
- BMP 6A: Employee educational program, which includes training on proper drain maintenance and municipal operations
- BMP 6B: Street sweeping and Catch basin cleaning

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

In Year 15, the Littleton Clean Lakes Committee conducted monthly water quality monitoring of phosphorus, nitrogen, DO, TSS, etc. at 11 stream and lake sites from May through September. A copy of this information is available at the Water Department. Additionally, summary reports for outfall investigations conducted under the IDDE Program are available at the Highway Department.