

Municipality/Organization: Town of Boylston

EPA NPDES Permit Number: MAR041095

MassDEP Transmittal Number: W-049574

Annual Report Number Year 14
& Reporting Period: April 1, 2016 – March 31, 2017

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2017)

Part I. General Information

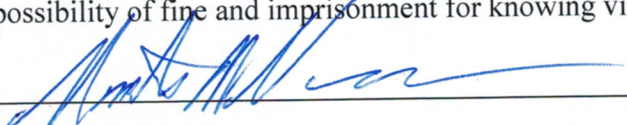
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Certification:

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: Martin McNamara

Title: Town Administrator

Date: 5/1/17

Part II. Self-Assessment

In Permit Year 14 (April 1, 2016 through March 31, 2017), the Town of Boylston continued to implement its Stormwater Management Program. As part of developing the Annual Report, the Town evaluated compliance of the Stormwater Management Program 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 Year 14, the Town has achieved nearly all of the measurable goals for the BMPs selected in the 2003 Notice of Intent and those added in subsequent years to reflect unplanned stormwater activities by the Town.

The Massachusetts Department of Conservation and Recreation (DCR) Division of Water Supply Protection continues to be a key partner for the Town to achieve many of the Small MS4 program requirements.

Planned activities for the next permit term have not been designated unless a BMP under this permit term was not fully completed or is an ongoing effort. During development of a Notice of Intent for the 2016 General Permit, Boylston will re-assess its stormwater management program to develop an effective program that meets requirements of the new General Permit and best leverages Boylston's limited staff and financial resources to achieve measurable results.

Part III. Summary of Minimum Control Measures

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

1. Public Education and Outreach

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)
PE-1	Partner with Local Organization	Stormwater Committee/Town Admin.	Y3-5: Identify local group/organization with interest in stormwater to partner with	Measurable goals for 2003 General Permit have been met. In a previous permit year, the Town partnered with DCR to achieve many program requirements. Continued relationship with DCR on all aspects of stormwater within the Wachusett Reservoir Watershed during Permit Year 14. DCR has taken additional responsibility with regard to public education, public involvement, drainage mapping, construction site inspections, bylaw review and revisions, and municipal employee training over the permit term.
PE-2	Stormwater brochure	Town Admin.	Y2-5: Distribute one brochure per year to residents and industries in Boylston	Measurable goals for 2003 General Permit have been met. DCR continued to provide the Town with educational brochures, including “Household Stormwater Pollution Prevention,” tips to reduce contamination during “Car Wash Fundraisers,” “Non-Permitted Discharges to the Storm Drain System,” information about the “Swimming Pools and Surface Water Quality,” and information about the Central Mass Mosquito Control project in “Mosquitoes and You.” These brochures are available at Town Hall and Tower Hill Botanic Garden.
PE-3	Provide stormwater information at Town buildings	Town Admin.	Y2-5: Brochures will be available in the Town Hall	Measurable goals for 2003 General Permit have been met. Several stormwater brochures continued to be available at Town Hall during Permit Year 14. See BMP PE-2 for brochure topics.

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)
PE-4	Pet Waste	Town Admin.	Y1-5: Post signs at public park lands for pet owners to properly dispose of waste	Measurable goals for 2003 General Permit have been met. The Town continued maintenance of pet waste signs. Pet waste stations were installed at two recreational fields around Town in Permit Year 14. All waste stations are resupplied with waste bags when needed by the Parks & Recreation Department, and maintained on a weekly basis by the Highway Department.
PE-5	Feature SW info on town public access cable station	Town Admin.	Y2-5: Feature SW info on cable station	Measurable goals for 2003 General Permit have been met. No measurable goals were planned for Permit Year 14. No new stormwater information was run on the local cable station this year, but the measurable goal was met in previous permit years.
PE-6	Stormwater presentations at schools	Stormwater Committee and DCR	Y2-5: Include stormwater issues in yearly environmental presentations at High School	Measurable goals for 2003 General Permit have been met. No measurable goals were planned for Permit Year 14. Through DCR's efforts, stormwater is now part of the Mass Envirothon statewide curriculum. DCR Rangers and education staff provide educational programs to students and the general public throughout the year that address a variety of topics, including stormwater issues. Stormwater pollution prevention public service announcements are read by Ranger staff at all public interpretive programs. Programs were held in Boylston at Tahanto Regional High School on two dates in October during this Permit Year that were attended by 43 students.

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 Boylston 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)
PP-1	Partner with local organization	Stormwater Committee/Town Administrator	Y3-5: Identify group to partner with (DCR)	Measurable goals for 2003 General Permit have been met. Continued cooperation and partnership with DCR (see BMP PE-1).
PP-2	Place Traveling Display at various locations	Town Admin.	No activities planned for Y2-5.	Measurable goals for 2003 General Permit have been met. No measurable goals were planned for Permit Year 14.
PP-3	Incorporate SW into public meetings	Town Admin.	Y3-5: Present updates to the SWMP. Continue to invite stormwater discussion at one meeting per year.	Measurable goals for 2003 General Permit have been met. Stormwater issues were discussed periodically at Stormwater Committee meetings and Conservation Commission meetings, which are open to the public in accordance with MGL Ch 39 S23B and local public notice meeting requirements. DCR Ranger Staff read a “Stormwater Pollution Prevention Public Service Announcement” at all public interpretive programs.
PP-4	Poster Contest	Town Admin.	Develop concept and approach local scouting troops.	Measurable goals for 2003 General Permit have been met. The Stormwater Committee has contacted the scout troops in previous permit years and given them opportunities to participate in the Stormwater Program. In Permit Year 14, a local Boy Scout troop completed a cleanup effort on the trail system around Town. Continued relationship with DCR and work with them on outreach to local school age children (see BMP PE-6) to meet intent of this BMP.

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)
PP-5	Stormwater Committee	Town Admin.	Y1-5: Review SWMP each year and coordinate efforts of all Town offices.	The Stormwater Committee continued to work together to manage the Town's stormwater program and met as needed to implement planned stormwater management activities. The Committee also communicates frequently throughout the year by email and phone. The Town's local stormwater bylaws are enforced by the Board of Health and the Conservation Commission.
PP-6	DCR Sponsored Events	DCR	Y9: Continue efforts to engage the general public in stormwater issues and watershed topics	In 2013 and 2014, DCR staff participated in the Wachusett Reservoir Dam Openings in late May and October by having a table with stormwater education materials. The event was attended by approximately 3,000 people. Stormwater brochures and activities were available at both of these events. Programs were held in Boylston at Tahanto Regional High School on two dates in October during this Permit Year that were attended by 43 students.

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 Boylston 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)
ID-1	Drainage Mapping	Stormwater Committee	Y5: Update map with outfall locations in priority areas.	Measurable goals for 2003 General Permit have been met. Drainage system mapping was conducted by a consultant during Permit Year 6. A GPS unit was used to locate 171 drainage structures, including 14 outfalls, in the Urbanized Area outside of the Wachusett Reservoir Watershed. Structure locations and features were included in a GIS-based map of the drainage system. DCR has also mapped more than 350 drainage structures within the Wachusett Reservoir watershed, which is largely outside of Boylston’s Urbanized Area. Highway Department staff and the Town’s stormwater consultant conducted an additional day of field investigation during Permit Year 7 that focused on the additional potential outfall locations identified in Permit Year 6. Field personnel GPS-located 7 additional outfalls, 4 additional drain manholes, and 9 additional catch basins. In total, the Town has located 191 drainage structures, including 20 outfalls. It was determined that one outfall from the mapping effort completed in Permit Year 6 was actually a culvert, and therefore Boylston has 19 outfalls in the MS4. DCR continues to improve and update mapping, and intends to add connectivity in future Permit Years. This updated mapping will be provided to Boylston.

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)
ID-2	Eliminate Illicit Discharges	DPW and Board of Health	Y3-Y5: Implement Plan	Measurable goals for 2003 General Permit have been met. All outfalls in Boylston’s urbanized area have been inspected during dry weather. Highway Department staff is trained to identify illicit discharges during routine infrastructure maintenance. No illicit discharges or connections are suspected at this time. The DCR continues to conduct weekly monitoring at three tributaries to the Wachusett Reservoir in Boylston and completes visual observations for illicit discharges or other stormwater problems. During Permit Year 14, DCR has not found evidence of an illicit discharge from Boylston’s urbanized area.
ID-3	Develop and implement an illicit discharge by-law	Board of Health and Stormwater Committee	Y4: Present by-law at Town meeting and finalize Y5: Implement and enforce by-law.	Measurable goals for 2003 General Permit have been met. The Illicit Discharge By-law was adopted at Annual Town Meeting on May 4, 2009. This by-law prohibits non-stormwater discharges, including illegal dumping, into the MS4 and includes enforcement procedures and actions. The Board of Health is responsible for implementing and enforcing the by-law.
ID-4	Educate citizens	Board of Health	Y3: Notify public of IDDE plan Y4: Notify public of upcoming IDDE by-law Y5: Notify public of new by-law in place Y6: Notify public of upcoming IDDE by-law	Measurable goals for 2003 General Permit have been met. No additional activities were planned for Permit Year 14. Measurable goal has been met in prior permit years. DCR has developed and distributed a “Non-Permitted Discharges to the Storm Drain System” brochure which supports the by-law. (See PE-2 and PP-6 for more information.)

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 Boylston 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)
CS-1	Develop and implement Construction Site Runoff Control Program	Con. Com.	Y3-Y5: Implement Construction Site Runoff Control Program	Measurable goals for 2003 General Permit have been met. The Stormwater Control By-law was adopted on October 16, 2006. The Stormwater regulations were adopted by the Conservation Commission on December 17, 2007. Construction site runoff control measures are implemented through the stormwater permitting process. The Conservation Commission or their authorized agent inspects all construction sites that require a local Stormwater Management Permit or Wetlands Notice of Intent. The Stormwater Bylaw continues to be actively enforced. The Boylston Conservation Commission tracks the number of projects, enforcement actions taken, and remedial activities completed. In Permit Year 14, 5 permits were processed and 2 required enforcement. DCR staff routinely inspects large construction sites (disturbing one acre or more) during wet and dry weather for compliance with stormwater standards. 1 dry inspection was completed on 3 sites in Boylston in Permit Year 14. No problems were identified and very little site work was being completed.

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)
CS-2	Develop and implement Erosion and Sediment Control By-law	Con. Com	Y5: Implement by-law	Measurable goals for 2003 General Permit have been met. The Stormwater Control By-law was adopted on October 16, 2006. The Stormwater regulations were adopted by the Conservation Commission on December 17, 2007. Construction site runoff control measures are implemented through the stormwater permitting process.

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 Boylston 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)
PC-1	Develop and implement Post-Construction Runoff Control Program	Con. Com.	Y3-5: Implement Post-Construction Runoff Control Program	Measurable goals for 2003 General Permit have been met. The Stormwater Control By-law was adopted on October 16, 2006. The Stormwater regulations were adopted by the Conservation Commission on December 17, 2007. Post-construction runoff control measures are implemented through the stormwater permitting process. In Permit Year 14, 5 permits were processed and 2 required enforcement.
PC-2	Develop and implement post-construction runoff regulations	Con. Com.	Y4: Implement by-law. Y5: Review effectiveness of by-law and enhance if necessary.	Measurable goals for 2003 General Permit have been met. Post-construction runoff control measures are implemented through the Stormwater Control By-laws and Regulations (see BMP PC-1 above). DCR continues to monitor agricultural sites in Boylston for stormwater related issues such as erosion and manure runoff. No problems or violations were noted at any of the 7 locations visited during Permit Year 14. DCR routinely monitors structural BMPs to identify any maintenance needs. DCR inspected 4 sites in Boylston during Permit Year 14, and noted that there was a need for sediment and vegetation removal at 1 site. This site is owned by a private homeowner’s association and is not the responsibility of the Town. DCR’s routine construction inspections included 1 site in Boylston during dry weather. No problems were identified.

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 Boylston 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)
GH-1	Employee training program	Highway Dept.	Y2-Y5: Hold one good housekeeping workshop per year at Highway Department	Measurable goals for 2003 General Permit have been met. Housekeeping is completed on a regular basis. During regular meetings with personnel, good housekeeping measures for the drainage system (such as drain system maintenance and identifying illicit discharges) are discussed as they relate to stormwater practices. Highway staff have also participated in training events held by the DCR when offered.
GH-2	Catch basin cleaning	Highway Dept.	Y1-Y5: Highway Department will clean each catch basin in the urbanized area of Town once per year.	The Highway Department cleaned all catch basins at least once in Permit Year 14 and cleaned priority areas twice using a clamshell truck. Outfalls are also cleaned on an as-needed basis.
GH-3	Street sweeping	Highway Dept.	Y1-Y5: Highway Dept. will sweep every street in the urbanized area once per year	Highway Department swept all streets and roads during Permit Year 14 and more frequently in high priority areas.

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)
GH-4	Recycling program	Highway Dept.	Y1-Y5: Continue Town's waste oil collection	In addition to curbside recycling, residents of the seven Wachusett towns, including Boylston, may bring recycling, paints/chemicals, and bulk items to the Wachusett Watershed Regional Recycling Center in West Boylston. Information about items collected (free or for a fee), operating hours, and special events is available at http://www.wachusettearthday.org. Wachusett Earthday, the volunteer organization which operates the Recycling Center, displays brochures in Town Hall about the services they provide. The Town advertises the Recycling Center services through local cable TV advertisements and a mailed flyer.
GH-5	Municipal Operation and Maintenance Plan	Highway Dept.	Develop schedule for municipal maintenance activities	The Town has required preparation of O&M Plans that include stormwater management and pollution prevention at some private properties in Town, including the Regional High School, the Frito Lay facility, and the Cyprian Keyes Golf Club. O&M of private BMPs is also a requirement for all development and redevelopment projects that require a local Stormwater Management Permit. The Town conducts routine operations and maintenance of infrastructure, roadways, and Town-owned properties. The Highway Department also continues to make operational improvements, such as upgrading the vehicle fleet for increased fuel efficiency. The Town completed construction of a new highway facility during Permit Year 14, which incorporates stormwater pollution prevention practices.
GH-6	Reporting	Highway Dept.	Record stormwater management activities	Measurable goals for 2003 General Permit have been met. The Highway Superintendent presents a monthly report of Department activities to the Board of Selectmen, which includes stormwater-related activities. The report is recorded in the meeting minutes, which are available on the Town website.

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

Note that the “Planned Activities” column has been deleted from this Annual Report. In Fiscal Year 2018, the Town of Boylston 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)
TMDL-1	Check current impairment lists	DPW	Y1: There are no completed TMDL studies for receiving waters in Boylston’s urbanized area. Y2-Y5: Check current MA Integrated List of Waters each Winter for newly listed waters	Measurable goals for 2003 General Permit have been met. The Town reviewed the final Massachusetts 2014 Integrated List of Waters and MassDEP TMDL website during Permit Year 14. A Draft pathogen TMDL report is available for the Nashua River Watershed. Wachusett Reservoir is currently listed as Category 4A for Mercury in Fish Tissue. Note that mercury is considered a legacy pollutant that is not associated with stormwater. There is a final TMDL of Phosphorus for Selected Northern Blackstone Lakes, including Newton Pond. Newton Pond is currently listed as Category 4A for Aquatic Plants. The 2016 General Permit indicates that only Shrewsbury has responsibility for reducing phosphorus contributions to Newton Pond. However, a portion of the pond is within Boylston. The 2016 General Permit indicates that Boylston must meet phosphorus reduction requirements for the Assabet River watershed TMDL, which includes Rocky Pond and Cold Harbor Brook in Boylston. These waters are adjacent to a newly regulated portion of Boylston and therefore the applicability of the 2016 General Permit requirements have not yet been evaluated these waterbodies.

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)
TMDL-2	Malagasco Brook Pathogens	Stormwater Committee	Y3: Partner with DCR	Outfalls along Malagasco Brook have been located and mapped. DCR continues to monitor the brook. Malagasco Brook is no longer listed as Category 5 for pathogens, per the final Massachusetts 2014 Integrated List of Waters. Is it still listed as impaired for macroinvertebrates and nutrients/eutrophication.

7b. WLA Assessment

Per Part I.D.3. of the 2003 General Permit, *“if the MS4 is required to implement storm water waste load allocation provisions of the TMDL, the permittee must assess whether the WLA is being met through implementation of existing storm water control measures or if additional control measures are necessary. The permittee’s assessment of whether the WLA is being met is expected to focus on the adequacy of the permittee’s storm water controls (implementation and maintenance), not on the response of the receiving water.”*

There is a final TMDL of Phosphorus for Selected Northern Blackstone Lakes (2002), including Newton Pond within Boylston and Shrewsbury. Because the TMDL is for a pollutant potentially found in stormwater discharges from Boylston’s MS4, the Town’s Stormwater Management Program includes BMPs that address the load allocation. The TMDL includes a target in-lake total phosphorus concentration is 25 ppb and a load allocation of 257 kg/year, as shown below in Table 4k from the TMDL report.

Table 4k. Newton Pond MA51110 TMDL Load Allocation.

Source	Current TP Loading (kg/yr)	Target TP Load Allocation (kg/yr)
Forest	88	88
Agriculture	10	7
Open Land	30	21
Residential (Low den.)	33	23
Residential (High den.)	128	90
Comm. Indust.	33	23
Septic System	8	5
Other	0	0
Total Inputs	330	257

At this time, Boylston is making steady progress towards meeting the load allocation through implementation of existing BMPs. Boylston’s Stormwater Management Program includes a number of existing stormwater control measures, as discussed in this Annual Report, which address total phosphorus and other pollutants of concern in water quality impaired waters. The BMPs identified under

Minimum Control Measures (MCMs) 1 through 6, including, but not limited to, those relating to public education, pet waste, illicit discharges, construction and post-construction inspections, employee training, and the good housekeeping measures such as street sweeping and catch basin cleaning, all help prevent phosphorus from entering water bodies in Town.

Part IV. Summary of Information Collected and Analyzed

DCR continued its routine sampling at 3 tributaries to the Wachusett Reservoir in Boylston. DCR personnel continue to look for illicit discharges or other stormwater problems during routine stream investigations, and will pass on any relevant information to the Town upon request. The Conservation Commission received satisfactory annual reports from Cyprian Keyes Golf Course, Frito-Lay, and Phillips Precision during Permit Year 14. Cyprian Keyes samples annually for nutrients in surface water. A new FedEx facility is being constructed in Town and will be required to submit annual reports once complete.

The Haven Country Club is also required to submit an annual report, but is currently completing a reconstruction project, which is covered by an Order of Conditions and Stormwater Permit. The Country Club will resume reporting post-construction.