

Part II. Self-Assessment

The Town of Boylston has completed the required self-assessment and has determined that our municipality has continued to implement BMPs and meet the General Permit requirements. The **Massachusetts Department of Conservation and Recreation (DCR)** continues to be a key partner for the Town to achieve many of the Small MS4 program requirements. In Permit Year 10, Boylston joined the **Central Massachusetts Regional Stormwater Coalition (CMRSWC)** in its efforts to address stormwater management and benefit from regionalization. Since the beginning of permit coverage, we would like to highlight the following accomplishments:

- Established a Stormwater Committee that communicates regularly.
- Maintained a low cost multi-media Public Education effort covering many stormwater topics for residents and businesses in Boylston by using a combination of DCR resources, free materials (from EPA and MassDEP), and custom-made materials.
- Completed outfall mapping and inventory in the Urbanized Area.
- Screened all outfalls for dry weather flow. Identified and corrected one illicit discharge from a residential property.
- Developed and adopted two stormwater bylaws (*Illicit Discharge By-law* and *Stormwater Control Bylaw*) that meet the permit requirements for prohibition of illicit discharges, construction site runoff control, and post-construction stormwater management.

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. Once the General Permit for the next five years is available from EPA, the Town will prepare and submit a Notice of Intent (NOI) for compliance with the new General Permit. During development of this NOI, Boylston will re-assess its stormwater management program to develop an effective program that meets requirements of the next General Permit and best leverages Boylston's limited staff and financial resources to achieve measurable results.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
PE-1	Partner with Local Organization	Stormwater Committee/Town Admin.	Y3-5: Identify local group/organization with interest in stormwater to partner with	<p>Continued relationship with DCR on all aspects of stormwater within the Wachusett Watershed. 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.</p> <p>A representative from DCR attended the Stormwater Committee meeting on April 9, 2012 to review Permit Year 9 activities and discuss ways that the Town and DCR can collaborate in the future.</p>	<p>Measurable goals for 2003 General Permit have been met.</p> <p>Continue to work with DCR.</p>
PE-2	Stormwater brochure	Town Admin.	Y2-5: Distribute one brochure per year to residents and industries in Boylston	DCR sent 200 dog waste brochures to all residents at Timber Brook Condominiums with their newsletter.	Measurable goals for 2003 General Permit have been met.
Revised				DCR also mailed 20 copies of the Fire Department stormwater brochure to the Boylston Fire Department. This brochure is now available on State Fire Marshal's website.	

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PE-3	Provide stormwater information at Town buildings	Town Admin.	Y2-5: Brochures will be available in the Town Hall	The following brochures continued to be available at Town Hall during Permit Year 11: <ul style="list-style-type: none"> • “Dog Waste” brochures available at Town Hall provided by DCR . • “Storm Water at Construction Sites: A Guide to Federal Requirements” by EPA. 	Measurable goals for 2003 General Permit have been met.
Revised					
PE-4	Pet Waste	Town Admin.	Y1-5: Post signs at public park lands for pet owners to properly dispose of waste	Continued maintenance of pet waste signs. Offered “pet waste” educational brochures (see BMP PE-3) at Town Hall, local veterinarian offices, and at DCR kiosks and flyer boxes. See also BMPs PE-2, PE-3, and PE-6 for additional pet waste education.	Measurable goals for 2003 General Permit have been met.
Revised					
PE-5	Feature SW info on town public access cable station	Town Admin.	Y2-5: Feature SW info on cable station	No measurable goals were planned for Permit Year 11. No new stormwater information was run on the local cable station this year, but measurable goal was met in previous permit years.	Measurable goals for 2003 General Permit have been met. The Town plans to obtain and run “Liquid Assets”, a DVD distributed to CMRSWC communities, on the local cable station.
Revised					
PE-6	Stormwater presentations at schools	Stormwater Committee and DCR	Y2-5: Include stormwater issues in yearly environmental presentations at High School	Rangers and education staff provided educational programs to students at the Tahanto Regional Middle/High School that addressed a variety of topics including stormwater issues.	Measurable goals for 2003 General Permit have been met.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
Revised				<ul style="list-style-type: none"> • An educational program was held on October 25th 2013 for 7th and 8th grades, 20 attendees. • An education program was held on October 30th 2013 for 7th and 8th grades, 25 attendees. <p>Through DCR’s efforts, stormwater is not part of the Mass Envirothon statewide curriculum. Students received copies of DCR’s stormwater brochured, with topics including Pet Waste, Household Stormwater Pollution Prevention, and Non-Permitted Discharges.</p>	

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
PP-1	Partner with local organization	Stormwater Committee/Town Administrator	Y3-5: Identify group to partner with (DCR)	Continued cooperation and partnership with DCR (see PE-1). DCR has had an increased opportunity to participation in stormwater management decisions and activities as a result of the efforts of the Central Massachusetts Regional Stormwater Coalition.	Measurable goals for 2003 General Permit have been met.
PP-2	Place Traveling Display at various locations	Town Admin.	No activities planned for Y2-5.	No activity planned for Y11. DCR created a “Stormwater Pollution Prevention Public Service Announcement” to be read by Ranger Staff at all public interpretive programs.	Measurable goal for 2003 General Permit was met in Y1.
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.	Stormwater issues were discussed at periodic Stormwater Committee meetings and Conservation Commission meetings, which are open to the public.	Measurable goals for 2003 General Permit have been met.
PP-4	Poster Contest	Town Admin.	Develop concept and approach local scouting troops.	The Stormwater Committee has contacted the scout troops in past years and given them opportunities to participate in the Stormwater Program. They have not been interested. Continued relationship with DCR and work with them on outreach to local school age children (BMP PE-6) to meet intent of this BMP.	Measurable goals for 2003 General Permit have been met. Boylston will continue to work with DCR on local school outreach programs.

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PP-5	Stormwater Committee	Town Admin.	Y1-5: Review SWMP each year and coordinate efforts of all Town offices.	<p>The Town’s local stormwater bylaws are enforced by the Board of Health and the Conservation Commission.</p> <p>The Stormwater Committee continued to work together to manage the overall stormwater program and met as needed to implement planned stormwater management activities. The Committee also communicates frequently throughout the year by email and phone.</p>	The Stormwater Committee will continue to work together to manage the overall stormwater program.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
P-6	DCR Sponsored Events	DCR	Y9: Continue efforts to engage the general public in stormwater issues and watershed topics	<p>No measurable goals were planned for Permit Year 11. BMP met by activities held in previous permit years, including an Earth Day event where DCR displayed stormwater management information including storm drain stenciling, toxic use reduction, appropriate landscaping, and water conservation, dog waste, agricultural runoff, pharmaceutical disposal, and household stormwater pollution prevention.</p> <p>DCR staff participated in the Wachusett Reservoir Dam Openings in late May 2013 and October 2013 by having a table with stormwater education materials. The event was attended by 3,000 or more people. “We All Live Downstream” wristbands, stormwater brochures (Household Stormwater Pollution Prevention, Dog Waste, Non-Permitted Discharges to the Storm Drain System) and coloring sheets, activity sheets, and “Dwayne, the Storm Drain” books for children were available at both of these events. EPA “After the Storm” and “Be a Solution to Stormwater Pollution” brochures were also distributed.</p>	<p>Continue to sponsor events and activities for the general public as budget allows.</p> <p>DCR remains open to proposals to work cooperatively with citizens in the watershed communities on activities that engage the public in efforts to control stormwater runoff and protect surface water quality.</p>

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
ID-1	Drainage Mapping	Stormwater Committee	Y5: Update map with outfall locations in priority areas.	<p>Drainage system mapping was conducted by a consultant on July 24, August 7, August 18 and August 19, 2009. A GPS unit was used to locate 171 drainage structures, including 14 outfalls, in the Urbanized Area outside of the Wachusett Reservoir Watershed.</p> <p>Structure locations and features were uploaded to the computer to generate a GIS-based map of the drainage system. This builds on DCR’s mapping efforts in Boylston. They have mapped 365 drainage structures within the Wachusett Reservoir watershed, which is largely outside of the Urbanized Area at this time.</p> <p>The Highway Superintendent and the Town’s stormwater consultant conducted one additional day of field investigation on October 14, 2010. This investigation focused on the potential outfall locations identified in 2009. Field personnel GPS-located seven (7) additional outfalls, four additional (4) drain manholes, and nine additional (9) catch basins.</p> <p>In total, the Town has located 191 drainage structures, including 20 outfalls. (It was determined that one outfall from 2009 was actually a culvert.)</p>	<p>Measurable goals for the 2003 General Permit have been met. All known outfalls in the Urbanized Area have been mapped.</p> <p>The Town has an opportunity to use the CMRSWC’s mapping and data collection equipment. The Town will determine how to integrate existing storm drain system mapping with regional mapping and prioritize this year’s mapping and inspection efforts.</p>

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ID-2	Eliminate Illicit Discharges	DPW and Board of Health	Y3-Y5: Implement Plan	All outfalls in Boylston’s regulated urbanized area have been inspected during dry weather conditions. Highway Department staff is trained to identify illicit discharges during routine infrastructure maintenance.	Measurable goals for 2003 General Permit have been met. The Town’s IDDE Program is ongoing.
Revised				No illicit discharges are suspected at this time.	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.
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.	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.	Measurable goals for 2003 General Permit have been met. Continue to implement and enforce the Illicit Discharge By-law.
Revised					
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	No additional activities planned for Permit Year 11. Measurable goal met in prior permit years. DCR has developed and distributed a “Non-Permitted Discharges to the Storm Drain System” brochure which supports the bylaw.	Measurable goals for 2003 General Permit have been met.
Revised					

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
CS-1	Develop and implement Construction Site Runoff Control Program	Con. Com.	Y3-Y5: Implement Construction Site Runoff Control Program	The Stormwater Control Bylaw was adopted on October 16, 2006. The Stormwater regulations were adopted by the Conservation Commission on December 17, 2007.	Measurable goals for 2003 General Permit have been met.
Revised				<p>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.</p> <p>DCR staff routinely inspects large construction sites (disturbing one acre or more) during wet and dry weather for compliance with stormwater standards. A total of 20 dry inspections and 3 wet weather inspections were completed on two sites in Boylston. No significant problems were identified and all minor necessary remedial activities were completed promptly.</p> <p>Monthly summaries of inspections and any remediation efforts are on file at DCR offices in West Boylston and are available for review. The Boylston Conservation Commission also tracks the number of projects, enforcement actions taken, and remedial activities completed.</p>	

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

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

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
PC-1	Develop and implement Post-Construction Runoff Control Program	Con. Com.	Y3-5: Implement Post-Construction Runoff Control Program	The Stormwater Control Bylaw was adopted on October 16, 2006. The Stormwater regulations were adopted by the Conservation Commission on December 17, 2007.	Measurable goals for 2003 General Permit have been met.
Revised				Post-construction runoff control measures are implemented through the stormwater permitting process.	
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.	The Stormwater Control Bylaw 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. DCR continues to monitor agricultural sites in Boylston for stormwater related issues such as erosion and manure runoff. No problems were noted at any location during the past twelve months. Routine inspections identified six stormwater-related issues in the watershed during this reporting period, including a construction project in Boylston that needed improvements to the access road.	Measurable goals for 2003 General Permit have been met. As the Conservation Commission continues to issue and enforce Stormwater Control Permits, the by-law and regulations will be enhanced as deemed necessary.
Revised					

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
GH-1	Employee training program	Highway Dept.	Y2-Y5: Hold one good housekeeping workshop per year at Highway Department	During daily meetings with personnel, good housekeeping measures (such as drain system maintenance and identifying illicit discharges) are discussed as they relate to stormwater practices.	Measurable goals for 2003 General Permit have been met.
Revised				The Highway Super. and Foreman participated in training events offered by the CMRSWC.	DCR staff assembled a physical stormwater pollution prevention matching game that can be lent out to watershed DPWs, schools, or other groups. Consider using this activity as part of staff training. The Town will identify additional training opportunities for staff through the CMRSWC and/or DCR.
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 Dept. cleaned catch basins twice per year and as needed to address complaints and localized drainage issues. Outfalls are also cleaned as needed.	Continue to clean catch basins at least once per year in the urbanized area of Town.
Revised					
GH-3	Street sweeping	Highway Dept.	Y1-Y5: Highway Dept. will sweep every street in the urbanized area once per year	Highway Dept. swept streets once in the Spring and as needed.	Continue to sweep streets in the urbanized area at least once per year.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
GH-4	Recycling program	Highway Dept.	Y1-Y5: Continue Town's waste oil collection	<p>Waste oil is no longer collected at the Town Barn and the furnace now burns #2 fuel oil.</p> <p>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. For information about items collected (free or for a fee), operating hours, and special events, visit http://www.wachusettearthday.org.</p>	Continue to fund partnership with regional collection center.
Revised				<p>The Town advertises the Recycling Center services through local cable TV advertisements and a mailed flyer (twice this permit year).</p>	

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
GH-5	Municipal Operation and Maintenance Plan	Highway Dept.	Develop schedule for municipal maintenance activities	<p>The Town conducts routine operations and maintenance of infrastructure, roadways, and town-owned properties. A formal written schedule for municipal activities was not developed in anticipation of enhanced requirements in the reissued General Permit.</p> <p>The Town has required preparation of O&M Plans that include stormwater management and pollution prevention at some private properties in Town, including the new 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.</p> <p>The Highway Department continues to make operational improvements, such as upgrading the fleet for more fuel efficiency. The Town is in the process of designing a new highway facility, which will incorporate stormwater pollution prevention practices.</p> <p>DCR produced a list titled “DPW Good Housekeeping” that addresses fleet maintenance, road/infrastructure work, salt and sand storage, detention basins, and field/park maintenance. The list is on display in the Boylston garage.</p>	<p>The Highway Department plans to develop a written inventory of municipal operation and maintenance activities and Town owned and operated properties in the Urbanized Area before the General Permit is reissued.</p> <p>The Conservation Commission will continue to require and enforce long-term operation and maintenance of private stormwater BMPs through local permits.</p>

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
GH-6	Reporting	Highway Dept.	Record stormwater management activities	The Highway Superintendent presents a monthly report of Department activities to the Board of Selectmen, which includes stormwater related activities. This is recorded in the meeting minutes.	Measurable goals for 2003 General Permit have been met. Continue Highway Department monthly presentation to the Board of Selectmen.
Revised					

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

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
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	Reviewed Proposed Massachusetts 2014 Integrated List of Waters and MassDEP TMDL website. A Draft pathogen TMDL report is available for the Nashua River Watershed. Waschusett Reservoir is currently listed as Category 4A for Mercury in Fish Tissue. 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.	Measurable goals for 2003 General Permit have been met.
Revised					
TMDL-2	Malagasco Brook Pathogens	Stormwater Committee	Y3: Partner with DCR	Outfalls along the Brook have been located and mapped. DCR continues to monitor the brook. Malagasco Brook is no longer listed as Category 5 for pathogens. Is it still listed as impaired for macroinvertebrates and nutrients/ eutrophication.	Since bacteria are no longer the cause of impairment, Boylston will address other pollutants of concern through the Stormwater Program.
Revised					

7b. WLA Assessment

Per Part I.D.3. of the 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, including Newton Pond within Boylston and Shrewsbury. Because the TMDL is for a pollutant potentially found in storm water discharges from Boylston’s MS4, their 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.

<i>Source</i>	<i>Current TP Loading (kg/yr)</i>	<i>Target TP Load Allocation (kg/yr)</i>
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 reported in the above Annual Report, that address pollutants of concern in water quality impaired waters and total phosphorus. 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.

At this time, the Town does not plan to add any BMPs to address the load allocation, but will consider additional BMPs to address the TMDL during development of the next NOI.

Part IV. Summary of Information Collected and Analyzed

DCR continued its routine tributary sampling in Boylston at French Brook and Malagasco Brook. DCR personnel continue to look for illicit discharges or other stormwater problems during routine stream investigations and as indicated after review of weekly water quality data, and will pass on any relevant information to the towns.

The Town receives an annual report on Sewall Pond from the YMCA, which runs a summer camp there.

Cyprian Keyes Golf Course and The Haven Country Club will be required to submit an annual report to the Conservation Commission. Cyprian Keyes samples annually for nutrients in surface water.