

**Municipality/Organization:** Town of Boylston

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**EPA NPDES Permit Number:** MAR041095

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**MassDEP Transmittal Number:** W-049574

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**Annual Report Number** Year 10  
**& Reporting Period:** April 1, 2012 – March 31, 2013

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## NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2013)

### Part I. General Information

Contact Person: Chip Burkhardt Title: Chairman, Conservation Commission

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Telephone #: 508-869-6127 Email: conservation@boylston-ma.gov

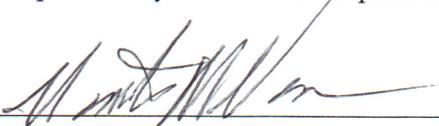
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Mailing Address: 221 Main Street, Boylston, MA 01505

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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: 

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Printed Name: Martin McNamara

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Title: Town Administrator

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Date: 5/1/13

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## 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. 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.
- Secured funding at Town Meeting for continued efforts under this General Permit over the next five years.

In Permit Year 10, Boylston joined the Central Massachusetts Regional Stormwater Coalition in its efforts to address stormwater management and benefit from regionalization. This group of over 20 communities will be provided with education and training, unified mapping of stormwater infrastructure and database management and standardized policies, procedures and forms. Boylston was invited to join the original thirteen communities that started this Coalition with a \$310,000 Community Innovation Challenge (CIC) Grant. The Coalition was awarded additional CIC funds to continue the program this year.

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**

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 10</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – Next Permit Term</b>
PE-1	Partner with Local Organization	Stormwater Committee/Town Admin.	Y3-5: Identify local group/organization with interest in stormwater to partner with	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. 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.	Measurable goals for 2003 General Permit have been met.  Continue to work with DCR.
PE-2  Revised	Stormwater brochure	Town Admin.	Y2-5: Distribute one brochure per year to residents and industries in Boylston	Fifty-eight brochures titled “Stormwater Basins and the Importance of Routine Maintenance” were mailed to homeowners and business owners as part of the DCR BMP Inventory and Maintenance project.	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 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
PE-3	Provide stormwater information at Town buildings	Town Admin.	Y2-5: Brochures will be available in the Town Hall	<p>The following brochures continued to be available at Town Hall during Permit Year 10:</p> <ul style="list-style-type: none"> <li>• “Dog Waste and Surface Water Quality” provided by DCR</li> <li>• “Storm Water at Construction Sites: A Guide to Federal Requirements” by EPA</li> <li>• “Downstream” newsletter by DCR (main article on stormwater management)</li> <li>• “Wachusett Earth day” with information on the Regional Recycling Center</li> </ul>	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	<p>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.</p> <p>DCR Ranger Staff continue to hand out fact cards describing the link between dog waste and surface water quality problems to violators of the “no dogs on DCR Property” rule. The fact card also encourages waste pick up on personal property.</p> <p>200 copies of the “Dog Waste and Surface Water Quality” brochure were provided to be included with a newsletter to owners and renters at a condominium complex in Boylston.</p>	Measurable goals for 2003 General Permit have been met.
Revised					

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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 10. 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.  Town will re-assess need for BMP to comply with next Phase II Small MS4 General Permit.
Revised					
PE-6	Stormwater presentations at schools	Stormwater Committee and DCR	Y2-5: Include stormwater issues in yearly environmental presentations at High School	This year DCR did not teach stormwater education at Boylston schools.	Measurable goals for 2003 General Permit have been met. DCR has conducted stormwater and watershed educational activities at Boylston schools in past permit years and plans to continue as resources are available.
Revised					

## 2. Public Involvement and Participation

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 10</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – Next Permit Term</b>
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).	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 Y10.	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.
PP-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 10. 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>In addition, DCR’s EQ staff staffed a table at the West Boylston Fall Festival. All DCR Stormwater brochures and EPA materials were available. Two hundred children were given a copy of MWRA’s Dwayne the Storm Drain activity booklet.</p>	Continue to sponsor events and activities for the general public as budget allows.

### 3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 10 (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. 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 <b>one additional day of field investigation on October 14, 2010.</b> 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 <b>located 191 drainage structures, including 20 outfalls.</b> (It was determined that one outfall from 2009 was actually a culvert.)</p>	Measurable goals for the 2003 General Permit have been met. <b>All known outfalls in the Urbanized Area have been mapped.</b>

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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. No illicit discharges are suspected at this time.	Measurable goals for 2003 General Permit have been met. The Town’s IDDE Program is ongoing.  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.
Revised					
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 10. Measurable goal met in prior permit year.	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 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
CS-1 <hr/> Revised	Develop and implement Construction Site Runoff Control Program	Con. Com.	Y3-Y5: Implement Construction Site Runoff Control Program	<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. 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 inspected large construction sites (disturbing one acre or more) during wet and dry weather for compliance with stormwater standards. A total of 9 dry inspections and 3 wet weather inspections were completed on one site in Boylston. No significant problems were identified and all minor necessary remedial activities were completed promptly.</p>	Measurable goals for 2003 General Permit have been met.
CS-2 <hr/> Revised	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.

## 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 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
PC-1  Revised	Develop and implement Post-Construction Runoff Control Program	Con. Com.	Y3-5: Implement Post-Construction Runoff Control Program	<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>Post-construction runoff control measures are implemented through the stormwater permitting process.</p>	Measurable goals for 2003 General Permit have been met.
PC-2  Revised	Develop and implement post-construction runoff regulations	Planning Board & Con. Com.  <i>Con. Com.</i>	Y4: Implement by-law. Y5: Review effectiveness of by-law and enhance if necessary.	<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>Post-construction runoff control measures are implemented through the stormwater permitting process.</p> <p>DCR inspected six 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.</p>	<p>Measurable goals for 2003 General Permit have been met.</p> <p>As the Conservation Commission continues to issue and enforce Stormwater Control Permits, the by-law and regulations will be enhanced as deemed necessary.</p>

## 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 10 (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.  Eight employees of the Boylston DPW attended the Stormwater Pollution Prevention Training Program at DCR Headquarters in West Boylston.	Measurable goals for 2003 General Permit have been met.
Revised					
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 Spring and as needed.	Continue to sweep streets in the urbanized area at least once per year.
Revised					



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GH-5 cont.				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 and is available to all municipal employees. The list was handed out at the Stormwater Pollution Prevention training program, and is on display in the Boylston garage.	
GH-6 Revised	Reporting	Highway Dept.	Record stormwater management activities	The Highway Superintendent prepares a weekly report of Highway Dept. activities for the Town Administrator, which includes stormwater related activities.	Measurable goals for 2003 General Permit have been met. Continue Highway Department weekly reporting to the Town Administrator.

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

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 10</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – Next Permit Term</b>
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 2012 Integrated List of Waters and MassDEP TMDL website.  A Draft pathogen TMDL report is available for the Nashua River Watershed, which includes Malagasco Brook. However, Malagasco Brook is no longer listed as Category 5 for pathogens based on new assessment. Is it still listed as impaired for macroinvertebrates and nutrients/ eutrophication.  There is a final TMDL of Phosphorus for Selected Northern Blackstone Lakes, including Newton Pond.	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.	Since bacteria are no longer the cause of impairment, Boylston will address other pollutants of concern through the Stormwater Program.
Revised					

**7b. WLA Assessment: N/A**

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
<b>Total Inputs</b>	<b>330</b>	<b>257</b>

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**

The Town of Boylston did not collect/analyze any additional water quality data for the Stormwater Management Plan during Permit Year 10.

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, who runs a summer camp there.