

Municipality/Organization: City of Leominster, MA  
EPA NPDES Permit Number: MAR041203  
MassDEP Transmittal Number: W-041009  
Annual Report Number & Reporting Period: Year 10  
April 1, 2012 – March 31, 2013

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

**Part I. General Information**

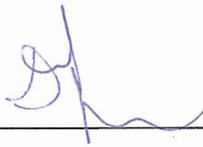
Contact Person: Mayor Dean J. Mazzarella Title: Acting Public Works Director

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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: Dean J. Mazzarella

Title: Mayor

Date: 4/30/13

## Part II. Self-Assessment

During Permit Year 9, the City continued to implement stormwater management practices and has achieved nearly all of the measurable goals for the BMPs selected. The City would like to highlight the following program accomplishments:

- The City has maintained a robust stormwater Public Education and Outreach campaign due in part to their partnership with the Massachusetts Watershed Coalition, a local environmental organization focused on protection and restoration of local watersheds. The City has used multiple forms of media to maximize their stormwater message – Leominster Access TV, public workshops, written brochures and fact sheets, and more.
- The City’s Stormwater Advisory Committee meets regularly to discuss stormwater management activities.
- Residents of Leominster have the opportunity to participate in a number of City sponsored events with the environment and clean waters in mind, such as the Annual Monoosnoc Brook Clean-up, Electronics Recycling Day at City Hall, and free workshops at the Leominster Public Library.
- The City has identified and mapped all known outfalls in the Urbanized Area.
- The *Illicit Connections and Discharges to the Storm Drain System Ordinance* was adopted in March 2005.
- Granite Street Stormwater Demonstration Park. The Granite Street Stormwater Improvements Plan are part of an ongoing MassDEP S.319 project for remediation of stormwater that damages Monoosnoc Brook and Rockwell Pond. The Granite Street Stormwater Park is being retrofitted with stormwater best management practices (BMPs) to treat the first one-half inch of run-off from approximately four acres of asphalt pavement roadway in the City. In the fall of 2010 the sediment vault, infiltration trench and a 1,299 square foot bioretention area (bio-cell) were installed. Additional treatment practices were installed in spring 2011, which included a gravel wetland and tree box filters. In Permit Year 10, two gravel wetland cells were planted with cattails and shrubs. Additional site work included final grading and seeding, installation of walking trails, and interpretive signage.

The City is still in progress implementing some BMPs and permit requirements. The City currently reviews nearly all projects disturbing one acre or greater through the existing local permitting process (Conservation Commission, ZBA, Planning Board, and Building Department). The Stormwater Advisory Committee presented a stormwater ordinance to City Council in March 2005 that was not adopted. A revised *Stormwater and Erosion Control Ordinance* is now before City Council and the City Solicitor in the final stages before adoption.

**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><br>(Reliance on non-municipal partners indicated, if any)  | <b>Planned Activities</b>   |
|-----------------|--|--------------------------------------|---|--|---|
| 1.1<br>Revised  | Educational signage at high-use recreational areas | Recreation & Conservation            | Install signage at watershed trail areas and dog park | <p>BMP complete. The City continues to maintain all posted signs as needed. In May 2005, a total of 36 new signs were installed. During Permit Year 10, 10 new Conservation Signs were added at new locations (Sholan Farms, Wachusett St., Hill St., Barrett Park, and Prospect Park) for a total of 46 maintained signs.</p> <p>Interpretive signs were installed at the Granite Street Stormwater Demonstration Park (see Self-Assessment section for details).</p> | Measurable goals for the 2003 General Permit have been met. Continue to maintain signs. |
| 1.2<br>Revised  | General Education Brochure                         | DPW Engineering                      | Develop and distribute mass mailing in water bills    | <p>BMP complete. No activities were planned for Permit Year 10. Stormwater educational brochures, based on EPA’s educational materials, were distributed in previous Permit Years.</p>   | Measurable goals for the 2003 General Permit have been met.                             |

| BMP ID # | BMP Description                             | Responsible Dept./Person Name           | Measurable Goal(s)                | Progress on Goal(s) – Permit Year 10<br>(Reliance on non-municipal partners indicated, if any)   | Planned Activities   |
|----------|---|---|-----------------------------------|--|--|
|          | Lawn care and pet waste brochure and survey | Engineering and Conservation Commission | Continue Public Education Efforts | <p>Stormwater educational fact sheets and displays continue to be displayed at the library and City Hall, outside of the Building Department office. This display was sponsored by the Leominster Public Library and the Massachusetts Watershed Coalition. The information targets residents, developers, businesses, and other institutions in Leominster. Fact Sheets include:</p> <ul style="list-style-type: none"> <li>• <i>Is Your Lawn Care Stormwater-Friendly?</i></li> <li>• <i>Making Auto Care Stormwater-Friendly</i></li> <li>• <i>Pet Waste and Water Quality</i></li> <li>• <i>Example Rain Garden Illustration</i></li> <li>• <i>Reducing Pavement &amp; Permeable Paving Options</i></li> <li>• <i>Using Rock-filled Trenches</i></li> <li>• <i>Vegetated Swales</i></li> <li>• Info re: Fertilizers &amp; Water Quality</li> </ul> | Measurable goals for the 2003 General Permit have been met. Continue to work with the Massachusetts Watershed Coalition to provide stormwater informational materials at City buildings. |
| Revised  | Healthy Lawn Workshop                       | DPW & MassDEP                           | Broadcast on local cable TV       | <p>The City and the Massachusetts Watershed Coalition hosted MassDEP's <i>Healthy Landscaping &amp; Lawn Care Workshop</i> on June 7, 2011 at the Leominster Public Library. A video of this free workshop is available to watch anytime on the LATV website under "Media on Demand."<br/> <a href="http://www.leominster.tv/publicweb/SitePages/latv_mod.aspx">http://www.leominster.tv/publicweb/SitePages/latv_mod.aspx</a></p>   | Measurable goals for the 2003 General Permit have been met. Host additional free workshops related to stormwater and nonpoint source pollution when possible.                            |

| BMP ID #           | BMP Description                                | Responsible Dept./Person Name | Measurable Goal(s)                            | Progress on Goal(s) – Permit Year 10<br>(Reliance on non-municipal partners indicated, if any)  | Planned Activities  |
|--------------------|--|-------------------------------|---|---|---|
| 1.3<br><br>Revised | Stormwater Curriculum for grades 5 & 6         | Conservation & School Dept.   | No measurable goals planned for Permit Year 9 | <p>Fall Brook Elementary School students, working with the Massachusetts Watershed Coalition, installed a rain garden at the school in May 2009. The Fall Brook Rain Garden Project is ongoing, including additional plantings, weeding, public outreach, and scientific investigation by students and teachers.</p> <p>During Permit Year 10, stormwater educational brochures were distributed to two schools and included information on pet waste and stormwater runoff. The high school AP Environmental group also cleaned the Granite Street Stormwater Demonstration Park and created a sign that was posted this year.</p>   | Measurable goals for the 2003 General Permit have been met. Continue to pursue opportunities to incorporate stormwater and nonpoint source pollution into Leominster’s curriculum as budget allows. |
| Revised            | Stormwater Runoff Public Service Announcements | Conservation & DPW            | Reach as many households as possible          | <p>During Permit Year 9, the City hosted a presentation by Ed Himlan of the Massachusetts Watershed Coalition titled, <i>Creating a Rain Garden for Your Home</i> on April 7, 2011 at the Leominster Public Library. A video of this free workshop is available to watch anytime on the LATV website under “Media on Demand.” (<a href="http://www.leominster.tv/publicweb/SitePages/latv_mod.aspx">http://www.leominster.tv/publicweb/SitePages/latv_mod.aspx</a>)</p> <p>The City obtained EPA’s new free stormwater DVD, <i>Reduce Runoff: Slow it Down, Spread it out, Soak it in!</i> and it aired on LATV once per quarter during Permit Year 10. Copies of the DVD are available at City Hall and the library.</p> | <p>Measurable goals for the 2003 General Permit have been met.</p> <p>The City plans to air EPA’s DVD again this year.</p>  |

| BMP ID # | BMP Description            | Responsible Dept./Person Name | Measurable Goal(s)    | Progress on Goal(s) – Permit Year 10<br>(Reliance on non-municipal partners indicated, if any)   | Planned Activities  |
|----------|----------------------------|-------------------------------|-----------------------|--|---|
| Revised  | Pet Waste PSA and Brochure | Conservation & DPW            | Reach local residents | <p>In previous permit years, a Pet Waste brochure was mailed out to all licensed dog owners. The City continued to distribute the brochure during Permit Year 10 – approximately 50 brochures were taken from the Sholan Farms pet waste station.</p> <p>The Conservation Commission mailed educational letters to homeowners on 5 targeted streets regarding pet waste in catch basins.</p> <p>The City continues to provide educational materials on Pet Waste at City buildings, maintain pet waste stations at public parks, and enforces City Code regarding proper pet waste disposal.</p> <p>Fall Brook 5<sup>th</sup> Grade students created a Pet Waste PSA called, <i>Scoop it! Bag it!</i> as part of a comprehensive class project addressing the impact of pet waste on the environment. The PSA continued to be broadcast on LATV and is available to watch anytime on the LATV website under “Media on Demand.”</p> | <p>Measurable goals for the 2003 General Permit have been met. Continue pet waste outreach efforts.</p> |

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|-----------------|----------------------------|--------------------------------------|--|--|--|
| 1.8             | Develop Stormwater Website | ConCom & DPW                         | Add stormwater page to existing web site by Spring '05 | Information regarding stormwater management is available on City websites. For example, the DPW Annual Reports, which include stormwater and drainage activities, can be downloaded on the City website ( <a href="http://www.leominster-ma.gov/">http://www.leominster-ma.gov/</a> ).<br><br>Stormwater related PSAs are available to watch anytime on the LATV website under “Media on Demand” (see BMPs 1.2 and 1.3). | The City plans to improve the DPW and/or Conservation Commission pages to include information more specific to the “Small MS4” General Permit program. |
| 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><br>(Reliance on non-municipal partners indicated, if any)   | <b>Planned Activities</b>  |
|-----------------|-------------------------------|--------------------------------------|---------------------------------------|---|--|
| 2.1             | Stormwater Advisory Committee | Public Works & ConCom                | Establish Committee by Fall '03, etc. | The Stormwater Advisory Committee includes City staff from Public Works, Conservation, Health, and Water Departments. In Permit Year 10, this Committee met on the following dates: <ul style="list-style-type: none"> <li>• April 9, 2012</li> <li>• May 16, 2012</li> <li>• June 21, 2012</li> <li>• December 12, 2012</li> <li>• December 19, 2012</li> <li>• February 12, 2013</li> <li>• March 21, 2013</li> </ul> | Measurable goals for the 2003 General Permit have been met. The Stormwater Advisory Committee will continue to communicate and meet as needed to discuss stormwater management activities. |
| Revised         |                               |                                      |                                       |   |  |

| <b>BMP ID #</b> | <b>BMP Description</b>  | <b>Responsible Dept./Person Name</b> | <b>Measurable Goal(s)</b>  | <b>Progress on Goal(s) – Permit Year 10</b><br>(Reliance on non-municipal partners indicated, if any)   | <b>Planned Activities</b>  |
|-----------------|-------------------------|--------------------------------------|--|---|--|
| 2.2             | Public Meetings on SWMP | SW Advisory Committee                | Host annual public meetings each fall, beginning November 2005   | During Permit Year 9, the City hosted educational workshops for the general public on stormwater issues presented by the Massachusetts Watershed Coalition and MassDEP. Please refer to BMPs 1.2 and 1.3.   | Measurable goals for the 2003 General Permit have been met. The Stormwater Advisory Committee will solicit public comment during development of a new Notice of Intent and Stormwater Management Plan when the reissued General Permit is finalized.         |
| Revised         |                         |                                      |  |   |  |
| 2.3             | Shoreline Clean-ups     | Public Works & ConCom                | Expand annual Monoosnoc Brook cleanup. Remove trees along the north side of the brook through partnership with Mosquito Control. | On August 4, 2012, the 18 <sup>th</sup> Annual Monoosnoc Brook Cleanup was held from 9 a.m. to noon. A City project to clear Monoosnoc Brook for flood control (through a partnership with Mosquito Control) was completed in a previous permit year. | Continue to support community stewardship for the Monoosnoc Brook watershed through the Nashua River Watershed Association's <i>Monoosnoc Brook Greenway Project</i> (MBGP) and the Massachusetts Watershed Coalition's <i>Monoosnoc Brook Rescue Plan</i> . |
| Revised         |                         |                                      |  | The annual City-wide City Pride Cleanup Day was held on May 5, 2012, from 8 a.m. to noon.   | The next annual City-wide City Pride Cleanup Day is scheduled for April 20, 2013.  |
| 2.4             | Catch basin stenciling  | Public Works                         | Stencil priority basins by Fall 2004. Will inspect March 2007.   | BMP complete. Storm drain stenciling was completed by volunteer groups in September 2005. Upon inspection, Public Works noted that the stenciling has worn and should be redone.  | Measurable goals for the 2003 General Permit have been met. Upon reissuance of the General Permit, City will reassess the appropriateness of this BMP.   |
| Revised         |                         |                                      |  |   |  |

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|-----------------|---------------------------------------|--------------------------------------|-------------------------------------|--|---|
| 2.5             | HHW and Electronics Collection Events | Public Works                         | Host 4 annual HHW collection events | Measurable goal met. In Permit Year 10, Public Works hosted Hazardous Waste Collection days on March 24, 2012, June 23, 2012, August 25, 2012, and November 17, 2012. The City also continues to provide Yard Waste Drop-Off days on Saturdays.<br><br>The City provides detailed information on the Health Department's web page ( <a href="http://www.leominster-ma.gov/health_department_rubbish.htm">http://www.leominster-ma.gov/health_department_rubbish.htm</a> ) regarding how, where, and the cost of disposal for almost any household item (from yard waste to bulk items to construction and demolition materials). | Continue to hold Hazardous Waste and Electronics collection events for citizens of Leominster. The next Electronics Recycling day is planned for April 27, 2013. Continue to provide information on proper disposal of all rubbish to discourage illegal dumping. |
| Revised         |                                       |                                      |                                     |  |   |

### 3. Illicit Discharge Detection and Elimination

| <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><br>(Reliance on non-municipal partners indicated, if any)                            | <b>Planned Activities</b>  |
|-----------------|--|--------------------------------------|---------------------------------------|--|--|
| 3.1             | Identify & map outfalls and receiving waters | Engineering                          | Map all outfalls in GIS by Spring '05 | Measurable goal met. The City has completed GIS outfall mapping that includes receiving waters, and has identified 450 outfalls. | Measurable goals for the 2003 General Permit have been met. Continue to improve drainage mapping as budget allows. |
| Revised         |  |                                      |                                       |  |  |

| <b>BMP ID #</b> | <b>BMP Description</b>                  | <b>Responsible Dept./Person Name</b> | <b>Measurable Goal(s)</b>               | <b>Progress on Goal(s) – Permit Year 10</b><br>(Reliance on non-municipal partners indicated, if any)  | <b>Planned Activities</b>  |
|-----------------|---|--------------------------------------|---|--|--|
| 3.2             | Screen outfalls for illicit connections | Public Works                         | Screen all outfalls by Spring '05       | Public Works and the Massachusetts Watershed Coalition have performed in-stream monitoring at priority areas (North Nashua River, Monoosnoc Brook) in wet and dry weather. The City has not performed dry weather screening at all of their outfalls.  | Upon reissue of the General Permit, the City will develop an Outfall Monitoring Program according to EPA's requirements. |
| Revised         |   |                                      |   |  |  |
| 3.3             | Draft Illicit Connection Bylaw          | Engineering & ConCom                 | Submit to City Council Spring '04       | BMP complete. The City amended their Municipal Code of Ordinances on March 28, 2005. <i>Article V. Illicit Connections and Discharges to the Storm Drain System</i> was added to Chapter 21 – Water & Sewers, which prohibits illicit discharges to the MS4 and City waters, illicit connections, and obstructions of the drainage system. | Measurable goals for the 2003 General Permit have been met.  |
| Revised         |   |                                      |   |  |  |
| 3.4             | Revise Sewer and Drain Use Regulations  | Engineering                          | Revise and adopt with new Illicit bylaw | See BMP 3.3 above.   | Measurable goals for the 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<br>(Reliance on non-municipal partners indicated, if any)   | Planned Activities  |
|----------|---|----------------------------------|---|--|---|
| 4.1      | Construction Site ESC Bylaw and regulations for sites >1-acre | Con Com, Public Works            | Review existing mechanisms for adequacy and completeness by Spring '05, etc.          | The City currently reviews nearly all projects disturbing one acre or greater through the existing local permitting process (Conservation Commission, ZBA, Planning Board, and Building Department). The Stormwater Advisory Committee presented a stormwater ordinance to City Council in March 2005 that was not adopted. A revised <i>Stormwater and Erosion Control Ordinance</i> is now before City Council and the City Solicitor in the final stages before adoption. | The Stormwater Advisory Committee will continue efforts to adopt the <i>Stormwater and Erosion Control Ordinance</i> as soon as possible.   |
| Revised  |   |                                  |   |  |   |
| 4.2      | Site Plan Review  | Planning, Building & Engineering | Incorporated into Development Review Board process with appropriate ordinance changes | Changes to the existing Site Plan Review ordinance and procedures were investigated in a prior permit year.  | Improved construction site runoff control requirements will be included in the <i>Stormwater and Erosion Control Ordinance</i> and Regulations developed thereunder.  |
| Revised  |   |                                  |   |  |   |
| 4.3      | Site Inspections  | Health Dept. & ConCom            | Implement new site inspection process for Spring '07                                  | The Health Inspector and/or the Conservation Agent/Environmental Inspector have performed weekly inspections at all construction sites since 2005. The City maintains records of site inspections and persistently enforces local stormwater requirements. A list of projects on hold or under enforcement (non-conformance orders) is available through the Conservation Agent.   | Continue construction site inspections by City personnel. Additional construction site runoff control measures and site inspection requirements will be included in the <i>Stormwater and Erosion Control Ordinance</i> and Regulations developed thereunder. |
| Revised  |   |                                  |   |  |   |

| <b>BMP ID #</b> | <b>BMP Description</b>                              | <b>Responsible Dept./Person Name</b> | <b>Measurable Goal(s)</b>  | <b>Progress on Goal(s) – Permit Year 10</b><br>(Reliance on non-municipal partners indicated, if any)  | <b>Planned Activities</b>   |
|-----------------|---|--------------------------------------|--|--|---|
| 4.4             | Establish system to report non-compliant activities | Con Com                              | Establish during 2004 construction season & use web site reporting | ConCom has taken the lead in doing site inspections of construction sites during heavy rain events and every week during construction. The Conservation Agent receives calls and complaints from the public, which are reported, along with any action taken, to the Conservation Commission in the Agent's monthly reports. | The City will publish additional information on the web regarding situations when citizens should report non-compliant activities and who to call as part of BMP 1.8.<br><br>Continue to enforce the Municipal Code of Ordinances Chapter 6 <i>Dogs</i> § 6-8. <i>Pet waste disposal</i> to the extent possible based on observed violations. |
| Revised         |   |                                      |  | The contractors that clean the City's catch basins report violations of the City Code regarding proper pet waste disposal to the Director of Public Works.   |   |

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

| <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><br>(Reliance on non-municipal partners indicated, if any)  | <b>Planned Activities</b>   |
|-----------------|---|--------------------------------------|--|--|---|
| 5.1             | Stormwater Management Ordinance and regulations for sites >1-acre | ConCom                               | Research and/or revise existing ordinances to comply with SWMP | The City currently reviews nearly all projects disturbing one acre or greater through the existing local permitting process (Conservation Commission, ZBA, Planning Board, and Building Department). The Stormwater Advisory Committee presented a stormwater ordinance to City Council in March 2005 that was not adopted. A revised <i>Stormwater and Erosion Control Ordinance</i> is now before City Council and the City Solicitor in the final stages before adoption. | The Stormwater Advisory Committee will continue efforts to adopt the <i>Stormwater and Erosion Control Ordinance</i> as soon as possible. |
| 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 10<br>(Reliance on non-municipal partners indicated, if any)   | Planned Activities  |
|----------------|---|-------------------------------|---|--|---|
| 6.1<br>Revised | Employee Training                       | Public Works                  | Conduct stormwater training each winter   | The Conservation Agent attended two training sessions conducted by the Massachusetts Association of Conservation Commissions.<br><br>Public Works staff continues to receive hands-on training from the Nashua River Watershed Association and Massachusetts Watershed Coalition through ongoing sampling efforts. | Continue to identify training workshops for Stormwater Advisory Committee members and City staff responsible for implementing the SWMP. |
| 6.2<br>Revised | Street Sweeping                         | Public Works                  | Sweep all City streets annually by 6-30 and downtown areas once a week. Sweep outfall areas while doing main roads. | The City currently sweeps streets twice per year and twice per week downtown.  | Continue the annual street sweeping program.  |
| 6.3<br>Revised | Predictive catch basin cleaning program | Public Works                  | Clean all basins once per year (3600). Total costs per year.  | The City cleaned 5,903 catch basins in Permit Year 10. Approximately 2,200 tons of material was removed during catch basin cleaning operations. Now using a Vactor to clean some basins with BMPs (such as hoods).   | Upon reissuance of the General Permit, prioritize the cleaning schedule to reach outfall areas and other sensitive areas first.         |

| <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><br>(Reliance on non-municipal partners indicated, if any)  | <b>Planned Activities</b>  |
|-----------------|---|--------------------------------------|---------------------------------|--|--|
| 6.4             | O&M Schedule for City owned structural BMPs | Engineering                          | Implement program by Spring '05 | <p>The City owns and operates a number of structural BMPs through watershed restoration projects with BMP retrofits. These projects include the Granite Street Stormwater Demonstration Park, the Rockwell Pond Source Reduction Pilot Project, and the Lower Monoosnoc Brook Remediation Project. BMPs in use include bioretention areas or rain gardens, infiltration trenches, a sediment vault, a gravel wetland, tree box filters, and more. O&amp;M Plans for these BMPs were developed for compliance with local permits.</p> <p>During 2012, additional work was completed for the Granite Street Stormwater Park, including planting the wetland cells with cattails and shrubs, final grading and hydro-seeding, installation of stone dust trails, interpretative signage, flowering trees, perennial beds and a granite bench. Accumulated sediments were removed from the tank cleanout by a DPW vacuum truck in Spring 2013.</p> | <p>Continue to work with the Massachusetts Watershed Coalition on these watershed restoration projects that include structural BMPs as funding is available. DPW will continue to maintain the Granite Street Stormwater Park by routinely monitoring and removing sediments captured by the sedimentation tank, and monitoring the planted cattails and shrubs in wetland cells. Additional work includes removing flagged trees located at rear of Park site. Continue to develop O&amp;M Plans for each new structural BMP.</p> |

| <b>BMP ID #</b> | <b>BMP Description</b>                                  | <b>Responsible Dept./Person Name</b> | <b>Measurable Goal(s)</b>                         | <b>Progress on Goal(s) – Permit Year 10</b><br>(Reliance on non-municipal partners indicated, if any)   | <b>Planned Activities</b>   |
|-----------------|---|--------------------------------------|---|---|---|
|                 | O&M Schedule for City owned structural BMPs (continued) |                                      |   | Drainage repairs, drain/sewer separations and drain installation was done on a total of 62 streets during the construction season. This work consisted of installing new under-drains, new catch basins, new manholes, new drain lines, culvert repairs, and broken sewer line repairs.   | Upon reissuance of the General Permit, the City plans to formalize their O&M procedures for City-owned properties and infrastructure according to EPA's requirements. |
| Revised         |   |                                      |   | The Department of Public Works is responsible for snow removal City-wide, including all municipal parking lots, the Library, City Hall, Court House, Schools, downtown, Housing Authority parking lot, Senior Center, and Public Works facility.  |   |
| 6.5             | Vehicle Washing: separate garage floor drains           | Public Works                         | Tie garage drains into sanitary sewer             | In prior permit years, the City determined that it was necessary to install an oil/water separator at the Public Works facility and redirect the floor drains to the sanitary sewer. All of the recommended work at the DPW garage has been completed, including retrofitting catch basins with hoods, eliminating floor drain sumps, and installing new drain and sewer lines. | BMP complete. Measurable goals for the 2003 General Permit have been met.   |
| Revised         |   |                                      |   |   |   |
| 6.6             | Separate Combination Sewer/Drain Manholes               | Public Works                         | Separate when encountered                         | Completed all 500 separations by September 2011.  | BMP complete. Measurable goals for the 2003 General Permit have been met.   |
| Revised         |   |                                      |   |   |   |
| 6.7             | Repair leaking sewer trunk lines                        | Public Works                         | Relined leaking sewer trunk line – Granite Street | Sewer line repairs were completed at Granite Street. Approximately 2,700 feet of sewer main was rehabilitated.  | The Sewer Department will continue to repair and replace problematic sewer lines as budget is available.  |
| Revised         |   |                                      |   |   |   |

**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><br>(Reliance on non-municipal partners indicated, if any)   | <b>Planned Activities</b>  |
|-----------------|--|--------------------------------------|--|---|--|
| 7.1<br>Revised  | Check current impairment lists and TMDL status | Public Works                         | Annually review the current MA Integrated List of Waters | Reviewed the Proposed Massachusetts 2012 Integrated List of Waters and MassDEP TMDL website. Monoosnoc Brook and the North Nashua River are listed as Category 5 waterbodies requiring development of a TMDL for E.Coli (pathogens). A draft pathogen TMDL report is available for the Nashua River Watershed, which includes these water bodies. | The TMDL and impairment status of receiving waters in Leominster’s Urbanized Area will be reevaluated during development of the next NOI for compliance with the reissued General Permit. The City will determine appropriate BMPs given the pollutants of concern and targeted land uses and activities in impaired watersheds. |
| 7.2<br>Revised  | Bring sanitary sewer to 2 streets in 2007      | New England Development              | Finish in 2007   | BMP completed in September 2007. Additional sanitary sewer extensions, such as Debbie Drive in Fall 2012, are ongoing.  | BMP complete. Measurable goals for the 2003 General Permit have been met.  |
| 7.3<br>Revised  | Street Sweeping Summer/Fall 2007               | Public Works                         | Increase sweeping to 3-4 times/yr. in watershed areas.   | BMP complete. See BMP 6.2.  | Upon reissuance of the General Permit, prioritize the sweeping schedule to reach watershed areas and other sensitive areas first.  |

**7b. WLA Assessment**

At this time, there are no final TMDLs for receiving waters in Leominster’s Urbanized Areas. The City will reevaluate the status of receiving waters once the General Permit is reissued and will consider adding BMPs to address pollutants of concern during development of the next NOI.

**Part V. Program Outputs & Accomplishments (OPTIONAL)**

(Since beginning of permit coverage unless specified otherwise by a \*\*, which indicates response is for period covering April 1, 2010 through March 31, 2011)

**Programmatic**

|   | (Preferred Units) | Response |
|---|-------------------|----------|
| Stormwater management position created/staffed                | (y/n)             | N        |
| Annual program budget/expenditures **                         | (\$)              |          |
| Total program expenditures since beginning of permit coverage | (\$)              |          |
| Funding mechanism(s) (General Fund, Enterprise, Utility, etc) |                   |          |
|   |                   |          |

**Education, Involvement, and Training**

|  |               |   |
|--|---------------|---|
| Estimated number of property owners reached by education program(s)        | (# or %)      | 10,000 –<br>LATV &<br>Televised<br>ConCom &<br>City Council |
| Stormwater management committee established                                | (y/n)         | Y   |
| Stream teams established or supported                                      | (# or y/n)    | Y   |
| Shoreline clean-up participation or quantity of shoreline miles cleaned ** | (y/n or mi.)  | Y   |
| Shoreline cleaned since beginning of permit coverage                       | (mi.)         |   |
| Household Hazardous Waste Collection Days                                  |               |   |
| ▪ days sponsored **  | (#)           | 4   |
| ▪ community participation **   | (# or %)      |   |
| ▪ material collected **  | (tons or gal) |   |
| School curricula implemented   | (y/n)         | Y   |
|  |               |   |

**Legal/Regulatory**

|  | In Place<br>Prior to<br>Phase II | Reviewing<br>Existing<br>Authorities | Drafted | Draft<br>in<br>Review | Adopted |
|--|----------------------------------|--------------------------------------|---------|-----------------------|---------|
| Regulatory Mechanism Status (indicate with "X")    |                                  |                                      |         |                       |         |
| ▪ Illicit Discharge Detection & Elimination        |                                  |                                      |         |                       | X       |
| ▪ Erosion & Sediment Control                       |                                  |                                      |         | X                     |         |
| ▪ Post-Development Stormwater Management           |                                  |                                      |         | X                     |         |
| Accompanying Regulation Status (indicate with "X") |                                  |                                      |         |                       |         |
| ▪ Illicit Discharge Detection & Elimination        |                                  |                                      |         |                       | N/A     |
| ▪ Erosion & Sediment Control                       |                                  |                                      |         | X                     |         |
| ▪ Post-Development Stormwater Management           |                                  |                                      |         | X                     |         |

**Mapping and Illicit Discharges**

|  | (Preferred Units)       | Response |
|--|-------------------------|----------|
| Outfall mapping complete   | (%)                     | 99       |
| Estimated or actual number of outfalls                             | (#)                     | 450      |
| System-Wide mapping complete (complete storm sewer infrastructure) | (%)                     |          |
| Mapping method(s)  |                         |          |
| ▪ Paper/Mylar  | (%)                     |          |
| ▪ CADD   | (%)                     |          |
| ▪ GIS  | (%)                     | 100      |
| Outfalls inspected/screened **                                     | (# or %)                |          |
| Outfalls inspected/screened (Since beginning of permit coverage)   | (# or %)                |          |
| Illicit discharges identified **                                   | (#)                     |          |
| Illicit discharges identified (Since beginning of permit coverage) | (#)                     |          |
| Illicit connections removed **                                     | (# ); and<br>(est. gpd) |          |
| Illicit connections removed (Since beginning of permit coverage)   | (#); and<br>(est. gpd)  |          |
| % of population on sewer   | (%)                     |          |
| % of population on septic systems                                  | (%)                     |          |

## Construction

|  | (Preferred Units) | Response |
|--|-------------------|----------|
| Number of construction starts (>1-acre) **   | (#)               | 36       |
| Estimated percentage of construction starts adequately regulated for erosion and sediment control ** | (%)               | 100      |
| Site inspections completed **  | (# or %)          | 72       |
| Tickets/Stop work orders issued **   | (# or %)          | 5        |
| Fines collected **   | (# and \$)        | 0        |
| Complaints/concerns received from public **  | (#)               | 10       |
|  |                   |          |
|  |                   |          |

## Post-Development Stormwater Management

|  |          |     |
|--|----------|-----|
| Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control | (%)      | 90% |
| Site inspections (for proper BMP installation & operation) completed **  | (# or %) | 15  |
| BMP maintenance required through covenants, escrow, deed restrictions, etc.  | (y/n)    | 15  |
| Low-impact development (LID) practices permitted and encouraged  | (y/n)    | 4   |
|  |          |     |
|  |          |     |

## Operations and Maintenance

|  |                |            |
|--|----------------|------------|
| Average frequency of catch basin cleaning (non-commercial/non-arterial streets) **           | (times/yr)     | 1.5        |
| Average frequency of catch basin cleaning (commercial/arterial or other critical streets) ** | (times/yr)     |            |
| Qty of structures cleaned **   | (#)            | 5,903      |
| Qty. of storm drain cleaned **   | (%, LF or mi.) |            |
| Qty. of screenings/debris removed from storm sewer infrastructure **                         | (lbs. or tons) | 2,220 tons |
| Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **             | (location)     |            |

|   |                         |         |
|---|-------------------------|---------|
| Basin Cleaning Costs                              |                         |         |
| • Annual budget/expenditure (labor & equipment)** | (\$)                    |         |
| • Hourly or per basin contract rate **            | (\$/hr or \$ per basin) |         |
| • Disposal cost**                                 | (\$)                    |         |
| Cleaning Equipment                                |                         |         |
| • Clam shell truck(s) owned/leased                | (#)                     | 1 owned |
| • Vacuum truck(s) owned/leased                    | (#)                     | 2 owned |
| • Vacuum trucks specified in contracts            | (y/n)                   |         |
| • % Structures cleaned with clam shells **        | (%)                     | 99%     |
| • % Structures cleaned with vector **             | (%)                     | 1%      |

|   | (Preferred Units)  | Response |
|---|--------------------|----------|
| Average frequency of street sweeping (non-commercial/non-arterial streets) **           | (times/yr)         | 2        |
| Average frequency of street sweeping (commercial/arterial or other critical streets) ** | (times/yr)         |          |
| Qty. of sand/debris collected by sweeping **  | (lbs. or tons)     |          |
| Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **                | (location)         |          |
| Annual Sweeping Costs   |                    |          |
| • Annual budget/expenditure (labor & equipment)**                                       | (\$)               |          |
| • Hourly or lane mile contract rate **  | (\$/hr. or ln mi.) |          |
| • Disposal cost**   | (\$)               |          |
| Sweeping Equipment  |                    |          |
| • Rotary brush street sweepers owned/leased   | (#)                |          |
| • Vacuum street sweepers owned/leased   | (#)                |          |
| • Vacuum street sweepers specified in contracts   | (y/n)              |          |
| • % Roads swept with rotary brush sweepers **   | %                  |          |
| • % Roads swept with vacuum sweepers **   | %                  |          |

Reduction (since beginning of permit coverage) in application on public land of:  
 (“N/A” = never used; “100%” = elimination)

|  |             |   |
|--|-------------|---|
| ▪ Fertilizers  | (lbs. or %) |   |
| ▪ Herbicides   | (lbs. or %) |   |
| ▪ Pesticides   | (lbs. or %) |   |
| Integrated Pest Management (IPM) Practices Implemented | (y/n)       | y |

|  | (Preferred Units)   | Response |
|--|---|----------|
| Average Ratio of Anti-/De-Icing products used **<br><br>(also identify chemicals and ratios used in specific areas, e.g., water supply protection areas) | % NaCl<br>% CaCl <sub>2</sub><br>% MgCl <sub>2</sub><br>% CMA<br>% Kac<br>% KCl<br>% Sand |          |
| Pre-wetting techniques utilized **   | (y/n or %)  |          |
| Manual control spreaders used **   | (y/n or %)  |          |
| Zero-velocity spreaders used **  | (y/n or %)  |          |
| Estimated net reduction or increase in typical year salt/chemical application rate   | (±lbs/l <sub>n</sub> mi.<br>or %)   |          |
| Estimated net reduction or increase in typical year sand application rate **   | (±lbs/l <sub>n</sub> mi.<br>or %)   |          |
| % of salt/chemical pile(s) covered in storage shed(s)  | (%)   |          |
| Storage shed(s) in design or under construction  | (y/n or #)  |          |
| 100% of salt/chemical pile(s) covered in storage shed(s) by May 2008   | (y/n)   |          |
|  |   |          |
|  |   |          |

### Water Supply Protection

|   |          |  |
|---|----------|--|
| Storm water outfalls to public water supplies eliminated or relocated                             | # or y/n |  |
| Installed or planned treatment BMPs for public drinking water supplies and their protection areas | # or y/n |  |
| Treatment units induce infiltration within 500-feet of a wellhead protection area                 | # or y/n |  |