NPDES PII Small MS4 General Permit
Annual Report

Part I. General Information

Contact Person: Frank Russo, P.E. Title: Chief Engineer

Telephone #: 978-983-8550 Email: frusso@ci.methuen.ma.us

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: Stephen N. Zanni

Printed Name: Stephen N. Zanni

Title: Mayor

Date: 4/1/17
Part II. Self-Assessment

The City of Methuen has completed the self-assessment and has determined that our municipality is in substantial compliance with permit conditions.
### Part III. Summary of Minimum Control Measures

#### 1. Public Education and Outreach

<table>
<thead>
<tr>
<th>BMP ID #</th>
<th>BMP Description</th>
<th>Responsible Dept./Person Name</th>
<th>Measurable Goal(s)</th>
<th>Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)</th>
<th>Planned Activities – Permit Year 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1</td>
<td>Article / Brochure in City newsletter</td>
<td>DPW</td>
<td>Article / brochure distributed annually</td>
<td>Update / distribute flyer</td>
<td>Update / distribute flyer</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>1-2</td>
<td>Info re: lawn waste disposal to Landscapers</td>
<td>DPW</td>
<td>Flyers mailed out</td>
<td>Collected background data.</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
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</tr>
<tr>
<td>1-3</td>
<td>Staff table at neighborhood cleanup day</td>
<td>DPW</td>
<td>Staff table and distribute flyers</td>
<td>Staffed table at cleanup day</td>
<td>Continue to staff table</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>1-4</td>
<td>Offer education program to children</td>
<td>DPW</td>
<td>Give presentation</td>
<td>N/A</td>
<td>Extend offer to make presentation</td>
</tr>
<tr>
<td>Revised</td>
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</tr>
<tr>
<td>1-5</td>
<td>“Don’t feed waterfowl” signs</td>
<td>DPW</td>
<td>Install new signs and inspect existing</td>
<td>All signs inspected twice per year.</td>
<td>Continue inspection of signs</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
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</tr>
<tr>
<td>1-6</td>
<td>Annual update of SWMP to City Council</td>
<td>DPW / ConComm</td>
<td>Annual update (Spring)</td>
<td>Update planned Spring 2011</td>
<td>Continue annual updates</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
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</tr>
</tbody>
</table>

#### 1a. Additions

|                                                      |                                                      |                                                      |                                                      |                                                      |                                                      |
## 2. Public Involvement and Participation

<table>
<thead>
<tr>
<th>BMP ID #</th>
<th>BMP Description</th>
<th>Responsible Dept./Person Name</th>
<th>Measurable Goal(s)</th>
<th>Progress on Goal(s) — Permit Year 8 (Reliance on non-municipal partners indicated, if any)</th>
<th>Planned Activities — Permit Year 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-1</td>
<td>Public Participation</td>
<td>DPW</td>
<td>Public review and comment period for SWMP</td>
<td>Completed February 2003.</td>
<td>None</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
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</tr>
<tr>
<td>2-2</td>
<td>Comply w/ state notification guidelines</td>
<td>DPW</td>
<td>Continue to follow guidelines</td>
<td>No action – continue current practice</td>
<td>No action – continue current practice</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-3</td>
<td>Offer to assist watershed group activities</td>
<td>DPW</td>
<td>Number of activities assisted</td>
<td>Assisted in the clean up of a portion of the Merrimack River along City property.</td>
<td>DPW will extend offer to local watershed groups to assist in annual activities such as cleanup events, etc.</td>
</tr>
<tr>
<td>Revised</td>
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<td>Revised</td>
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<tr>
<td>Revised</td>
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</tbody>
</table>

### 2a. Additions

|                                  |                                  |                                  |                                  |                                  |                                  |
### 3. Illicit Discharge Detection and Elimination

<table>
<thead>
<tr>
<th>BMP ID #</th>
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<th>Planned Activities – Permit Year 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-1</td>
<td>Dry weather outfall screening</td>
<td>DPW</td>
<td>Number of outfalls screened</td>
<td>Completed</td>
<td>No action</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-2</td>
<td>Map outfalls / receiving waters</td>
<td>DPW</td>
<td>Map created</td>
<td>Complete</td>
<td>Maintain map</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-3</td>
<td>Map drain system / GIS</td>
<td>DPW</td>
<td>GIS created</td>
<td>Complete</td>
<td>Maintain GIS</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-4</td>
<td>Develop / implement plan to ID &amp; remove illicit discharges</td>
<td>DPW</td>
<td>Prioritize outfalls Locate illicit cons.</td>
<td>Completed construction of illicit discharge elimination in Strathmore Road area. Performed additional IDDE investigation in the Jackson Street Area and identified a direct connection which has been disconnected.</td>
<td>Perform additional IDDE investigation as budget and manpower permit. Perform follow-up in Jackson Street area to confirm problem has been corrected.</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-5</td>
<td>Illegal collection / dumping ordinance</td>
<td>City Solicitor</td>
<td>Draft ordinance &amp; present to Council</td>
<td>Researched available information to develop ordinance.</td>
<td>Draft ordinance and present to council</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
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</tr>
</tbody>
</table>

#### 3a. Additions

| | | |
| | | |
## 4. Construction Site Stormwater Runoff Control

<table>
<thead>
<tr>
<th>BMP ID #</th>
<th>BMP Description</th>
<th>Responsible Dept./Person Name</th>
<th>Measurable Goal(s)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>4-1</td>
<td>Erosion &amp; sediment control ordinance</td>
<td>City Solicitor</td>
<td>Draft ordinance &amp; present to Council</td>
<td>Researched available information to develop ordinance.</td>
<td>Draft ordinance and present to council</td>
</tr>
<tr>
<td>4-2</td>
<td>Require waste mgt. plan at const. sites &gt; 1 acre</td>
<td>Chief Engineer</td>
<td>Waste mgt. plans created</td>
<td>Researching information necessary to require waste management plans at construction sites.</td>
<td>Implement plan to require waste management plans at construction sites &gt; 1 acre.</td>
</tr>
<tr>
<td>4-3</td>
<td>Review site plans</td>
<td>Chief Engineer</td>
<td>Percent of plans reviewed</td>
<td>Continue current program to review all site plans</td>
<td>Continue</td>
</tr>
<tr>
<td>4-4</td>
<td>New construction project ordinance, sedimentation &amp; erosion control plans &gt; 1 acre</td>
<td>City Solicitor</td>
<td>Draft ordinance &amp; present to Council</td>
<td>Researched available information to develop ordinance.</td>
<td>Draft ordinance and present to council</td>
</tr>
<tr>
<td>4-5</td>
<td>Develop draft ordinance to implement inspection &amp; enforcement of sediment &amp; erosion controls</td>
<td>City Solicitor</td>
<td>Draft ordinance &amp; present to Council</td>
<td>Researched available information to develop ordinance.</td>
<td>Draft ordinance and present to council</td>
</tr>
</tbody>
</table>

### 4a. Additions

|                                |                                |                                |                                |                                |                                |

### 5. Post-Construction Stormwater Management in New Development and Redevelopment
<table>
<thead>
<tr>
<th>BMP ID #</th>
<th>BMP Description</th>
<th>Responsible Dept./Person Name</th>
<th>Measurable Goal(s)</th>
<th>Progress on Goal(s) – Permit Year 8</th>
<th>Planned Activities – Permit Year 9</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-1</td>
<td>Ordinance to apply standards 2, 3, 4, 7 &amp; 9 of Mass. Stormwater policy</td>
<td>City Solicitor</td>
<td>Draft ordinance &amp; present to Council</td>
<td>Researched available information to develop ordinance.</td>
<td>Draft ordinance and present to council</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5-2</td>
<td>Specify BMP manual</td>
<td>Chief Engineer</td>
<td>BMP Manual selected</td>
<td>No action to date</td>
<td>Identification of BMP Manual will be included in BMP 5-1. DEP Stormwater Management Volume 2: Stormwater Technical Handbook</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>5-3</td>
<td>Ordinance to ensure long-term maint. Of structural BMPs</td>
<td>City Solicitor</td>
<td>Draft ordinance &amp; present to Council</td>
<td>Researched available information to develop ordinance.</td>
<td>Draft ordinance and present to council</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
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<td>Revised</td>
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<tr>
<td>Revised</td>
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</tr>
</tbody>
</table>

5a. Additions


6. Pollution Prevention and Good Housekeeping in Municipal Operations
<table>
<thead>
<tr>
<th>BMP ID #</th>
<th>BMP Description</th>
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</thead>
<tbody>
<tr>
<td>6-1</td>
<td>Continue employee training</td>
<td>DPW</td>
<td>Percent of employees trained</td>
<td>Continue ongoing practices.</td>
<td>Continue ongoing practices</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-2</td>
<td>Identify sensitive receptors</td>
<td>DPW</td>
<td>List developed, staff notified</td>
<td>Preliminary list of sensitive receptors has been developed.</td>
<td>Continue to update list and notify / train staff</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>6-3</td>
<td>Street &amp; Parking lot sweeping</td>
<td>DPW</td>
<td>Streets &amp; lots swept</td>
<td>Continue ongoing practices of sweeping all streets twice per year</td>
<td>Continue ongoing practices</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-4</td>
<td>Roadway deicing</td>
<td>DPW</td>
<td>Amount of deicers used</td>
<td>Calibrated spreaders. Maintain calibration and deicer usage records. Monitor industry standards</td>
<td>Continue</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-5</td>
<td>Storm drain maintenance</td>
<td>DPW</td>
<td>Number of catch basins cleaned</td>
<td>Continue ongoing practices. Approximately 1/3 of the city’s basins cleaned in permit year. New cleaner purchased.</td>
<td>Continue ongoing practices</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>6-6</td>
<td>Park &amp; Landscape maintenance</td>
<td>DPW</td>
<td>Employee training Record keeping</td>
<td>N/A</td>
<td>Conduct training and develop record keeping for fertilizer &amp; pesticide use</td>
</tr>
<tr>
<td>Revised</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>6-7</td>
<td>Annual Hazardous Waste Drop-off Day</td>
<td>DPW</td>
<td>Drop-off day held</td>
<td>Annual HW drop-off day held in October 2011.</td>
<td>Continue to hold annual drop-off day</td>
</tr>
<tr>
<td>Revised</td>
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</tr>
<tr>
<td>6-8</td>
<td>Proper snow disposal</td>
<td>DPW</td>
<td>Continue current practices</td>
<td>Continue current practices</td>
<td>Continue current practices</td>
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<td>Revised</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) *<<if applicable>>*

<table>
<thead>
<tr>
<th>BMP ID #</th>
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</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td></td>
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<tr>
<td>Revised</td>
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<td>Revised</td>
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</tbody>
</table>

7a. Additions

|               |               |                |                     |                                                                                                 |                                   |
|               |               |                |                     |                                                                                                 |                                   |

7b. WLA Assessment
Part IV. Summary of Information Collected and Analyzed

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

| Stormwater management position created/staffed | (y/n) |
| Annual program budget/expenditures | ($) |

Education, Involvement, and Training

| Estimated number of residents reached by education program(s) | (# or %) |
| Stormwater management committee established | (y/n) |
| Stream teams established or supported | (# or y/n) |
| Shoreline clean-up participation or quantity of shoreline miles cleaned | (y/n or mi.) |
| Household Hazardous Waste Collection Days |
| days sponsored | (#) |
| community participation | (%) |
| material collected | (tons or gal) |
| School curricula implemented | (y/n) |
Legal/Regulatory

<table>
<thead>
<tr>
<th>Regulatory Mechanism Status (indicate with “X”)</th>
<th>In Place Prior to Phase II</th>
<th>Under Review</th>
<th>Drafted</th>
<th>Adopted</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Illicit Discharge Detection &amp; Elimination</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Erosion &amp; Sediment Control</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>• Post-Development Stormwater Management</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Accompanying Regulation Status (indicate with “X”)</th>
<th>In Place Prior to Phase II</th>
<th>Under Review</th>
<th>Drafted</th>
<th>Adopted</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Illicit Discharge Detection &amp; Elimination</td>
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<tr>
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<td></td>
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<tr>
<td>• Post-Development Stormwater Management</td>
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</tbody>
</table>

Mapping and Illicit Discharges

<table>
<thead>
<tr>
<th>Outfall mapping complete (%)</th>
<th>100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estimated or actual number of outfalls (#)</td>
<td></td>
</tr>
<tr>
<td>System-Wide mapping complete (%)</td>
<td>100%</td>
</tr>
<tr>
<td>Mapping method(s)</td>
<td></td>
</tr>
<tr>
<td>• Paper/Mylar (%)</td>
<td></td>
</tr>
<tr>
<td>• CADD (%)</td>
<td></td>
</tr>
<tr>
<td>• GIS (%)</td>
<td>100%</td>
</tr>
<tr>
<td>Outfalls inspected/screened (# or %)</td>
<td>100%</td>
</tr>
<tr>
<td>Illicit discharges identified (#)</td>
<td>0</td>
</tr>
<tr>
<td>Illicit connections removed (#) (est. gpd)</td>
<td>0</td>
</tr>
<tr>
<td>% of population on sewer (%)</td>
<td>95%</td>
</tr>
<tr>
<td>% of population on septic systems (%)</td>
<td>5%</td>
</tr>
</tbody>
</table>

Construction
<table>
<thead>
<tr>
<th>Table 1: Stormwater Management Data Collection Sheet</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number of construction starts (&gt;1-acre)</strong></td>
</tr>
<tr>
<td><strong>Estimated percentage of construction starts adequately regulated for erosion and sediment control</strong></td>
</tr>
<tr>
<td><strong>Site inspections completed</strong></td>
</tr>
<tr>
<td><strong>Tickets/Stop work orders issued</strong></td>
</tr>
<tr>
<td><strong>Fines collected</strong></td>
</tr>
<tr>
<td><strong>Complaints/concerns received from public</strong></td>
</tr>
</tbody>
</table>

### Post-Development Stormwater Management

| **Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control** | (%) |
| **Site inspections completed**                       | (# or %) |
| **Estimated volume of stormwater recharged**         | (gpy) |

### Operations and Maintenance

| **Average frequency of catch basin cleaning (non-commercial/non-arterial streets)** | (times/yr) |
| **Average frequency of catch basin cleaning (commercial/arterial or other critical streets)** | (times/yr) |
| **Total number of structures cleaned**               | (#)       |
| **Storm drain cleaned**                              | (LF or mi.) |
| **Qty. of screenings/debris removed from storm sewer infrastructure** | (lbs. or tons) |
| **Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)** | Cemetery lots |
| **Cost of screenings disposal**                      | ($)       |

<p>| <strong>Average frequency of street sweeping (non-commercial/non-arterial streets)</strong> | (times/yr) |
| <strong>Average frequency of street sweeping (commercial/arterial or other critical streets)</strong> | (times/yr) |
| <strong>Qty. of sand/debris collected by sweeping</strong>        | (lbs. or tons) |
| <strong>Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)</strong> | (location) |</p>
<table>
<thead>
<tr>
<th>Cost of sweepings disposal</th>
<th>($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacuum street sweepers purchased/leased</td>
<td>(#)</td>
</tr>
<tr>
<td>Vacuum street sweepers specified in contracts</td>
<td>(y/n)</td>
</tr>
</tbody>
</table>

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

- Fertilizers (lbs. or %)
- Herbicides (lbs. or %)
- Pesticides (lbs. or %)

**Anti-/De-Icing products and ratios**

<table>
<thead>
<tr>
<th>% NaCl</th>
<th>% CaCl₂</th>
<th>% MgCl₂</th>
<th>% CMA</th>
<th>% Kac</th>
<th>% KCl</th>
<th>% Sand</th>
</tr>
</thead>
</table>

| Pre-wetting techniques utilized | (y/n) | N |
| Manual control spreaders used | (y/n) | Y |
| Automatic or Zero-velocity spreaders used | (y/n) |
| Estimated net reduction in typical year salt application | (lbs. or %) |
| Salt pile(s) covered in storage shed(s) | (y/n) | Y |
| Storage shed(s) in design or under construction | (y/n) |