

**Municipality/Organization:** Town of Wilmington

**EPA NPDES Permit Number:** MA04123

**MaDEP Transmittal Number:** X228080

**Annual Report Number**

**& Reporting Period:** No. 9: March 11-March 12

## **NPDES PII Small MS4 General Permit Annual Report**

### **PART I. GENERAL INFORMATION**

**Contact Person:** Donald Onusseit

**Title:** Superintendent, Dept. of Public Works

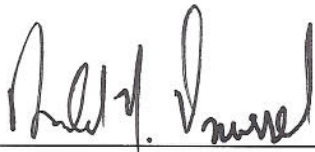
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#### **Certification:**

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:** Donald N. Onusseit, PE

**Title:** Public Works Superintendent

**Date:**

3-1-12

## **PART II. SELF-ASSESSMENT**

The Town of Wilmington has completed the required self assessment and has determined that we are in compliance with all this year's permit conditions, with the exception of some areas which will require greater emphasis during next year's permit period:

Part 2-2: Due to budgetary constraints, the Town has not been able to fund two (2) Household Hazardous Waste Collection Days. The Town has had one (1) day during the reporting period. As a compromise, the Town has reviewed alternatives and offers a relatively extensive recycling program. Mercury is collected 5 days a week year round, while white goods and Cathode Ray Tubes (CRTs) are collected by a private recycle company once a week. The DPW accepts waste oil from Wilmington Residents year round, Monday through Friday. Yard Waste was collected at residences during their normal trash collection day for 3 weeks in the spring and 3 weeks in the fall. Furthermore, residents had the opportunity to drop off yard waste and brush this past reporting year at the Town Recycling Center on selected Wednesday and Saturday dates during the spring and fall.

Part 3-(1-3): Nearly 100% of the Town's MS4 has been mapped and hand superimposed onto the Town's topographic map system (including pipe materials, sizes, and flow direction). During the overall permit period, the Town has procured the services of SEA Consultants through an advertised procurement process to develop a complete Drainage System Master Plan, which included the GPS mapping of the Town's drainage system. The majority of the Town's drainage outfalls were located during the development of the Drainage System Master Plan as part of outfall assessments, which included water quality testing of outfall discharges. Although high and medium suspicion flows have been sampled and analyzed, low suspicion dry weather flows have not yet been analyzed due to testing budget constraints, personnel constraints, and poor accessibility (it shall be noted that "low suspicion" outfalls were identified as outfalls that were blocked or inaccessible, and therefore flagged for follow-up). As recommended in the Drainage Master Plan, the Town of Wilmington will continue to monitor dry weather flow at the identified outfalls and perform additional water quality sampling depending on outfall survey results.

Furthermore, additional programs that are not listed as requirements in our Stormwater Management Permit have been active this past reporting year. Crews from the Massachusetts Mosquito Control Project continue to perform outfall cleaning and maintenance (plus removal of vegetative debris and trash) to reduce the amounts of standing water, thus improving water quality. Ongoing public education has also continued with the publication of a stormwater article in the spring 2011 edition of the Town's quarterly newsletter "Town Topics", the addition of new educational stormwater information on the DPW's website including electronic copies of the Illicit Discharge Bylaw and Stormwater Bylaw, the installation of 300 aluminum catch basin markers along major routes which state "No Dumping, Drains to Waterways", and the approval to hire a part time catch basin stenciler to paint stormwater markings on additional catch basins around Town. Furthermore, the highly publicized Low Impact Development (LID) project at Silver Lake was the subject of a public tour on April 12, 2011 as part of the 2011 American Planner's Association's National Conference held in Boston, MA.



# 1. Public Education and Outreach

| BMP ID # | BMP Description      | Responsible Dept./Person | Measurable Goal(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Progress on Goal(s) – Permit Year 9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Planned Activities – Permit Year 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------|----------------------|--------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1-1      | Educational Material | DPW                      | <p>Measurable goals for this BMP will be:</p> <ol style="list-style-type: none"> <li>1) procurement, development or modification of four brochures or fact sheets that include stormwater information, and</li> <li>2) posting of stormwater information on the Town's web site. During Years 2 through 5, distribute one of the brochures or fact sheets annually to property owners based on Assessors records and update the web site semi-annually.</li> </ol> | <p>The DPW has again made this year's recycling brochure available for download on the DPW website.</p> <p>The Spring 2011 edition of the Town's Newsletter "Town Topics" included an informational article on stormwater awareness and illicit discharge education.</p> <p>The Town of Wilmington Department of Public Works has continued to update the DPW website with stormwater and recycling related information. Separate links on the website have been dedicated to Phase II stormwater information, illicit discharge education, and recycling scheduling and FAQ's. The website can be viewed at <a href="http://www.town.wilmington.ma.us">http://www.town.wilmington.ma.us</a></p> <p>The website now contains electronic copies of the Illicit Discharge Bylaw and Stormwater Bylaw, along with specifics on each program.</p> <p>The highly publicized Silver Lake LID Project completed final construction during the summer of 2006. The 2011 National American Planners Association Conference was held in Boston, MA and included a workshop tour of the project on April 12, 2011.</p> <p>The Town's trash hauler has been further enforcing the Recycling Bylaw by rejecting trash loads which contain visible recyclables.</p> <p>300 catch basin markers stating "No Dumping, Drains to Waterways" were installed this past reporting year.</p> | <p>Continue to develop and distribute stormwater informational brochures.</p> <p>Continue to publish articles in "Town Topics" including reminders about what an illicit discharge consists of by supplying the definition of illicit and non-illicit discharges and giving examples of them.</p> <p>Continue to update the Department of Public Works web page with stormwater-related information and modify/add FAQ's.</p> <p>Continue to distribute the recycling informational brochure to Wilmington residents and responding to hotline inquiries.</p> <p>The Town plans to further enforce the Recycling Bylaw by instructing trash collectors to leave recyclable materials for separate collection.</p> <p>The Town was granted approval to hire a part-time catch basin stenciler during 2012 to paint a stormwater awareness message on catch basins throughout Town. The DPW plans to implement this program during the spring of 2012.</p> |

| ID # | Description             | Dept./Person |                                                                                                                                                                                                            | Permit Year 9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Permit Year 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------|-------------------------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2-2  | Promote Public Programs | DPW/BoH      | <p>The Town will hold a household hazardous waste day two times per year and will support community clean-up days by providing clean-up materials and will pick up and dispose of the waste collected.</p> | <p>Due to budgetary constraints, the Town has held one hazardous waste day this past year. No cars are turned away during this collection day, regardless of the amount of hazardous waste. Over 413 cars dropped off hazardous waste during this past year's collection.</p> <p>Mercury is collected at a drop off location at the Board of Health 5 days a week year round, and Cathode Ray Tubes (CRTs) are collected by the Town Recycle Company once a week, by special pickup. The DPW accepts waste oil from Wilmington Residents year round, Monday through Friday.</p> <p>The Town has supported community clean-up programs for local volunteer groups to perform stream and roadway clean-up and has provided materials and safety equipment at the expense of the Town, organized by the Office of Planning and Conservation.</p> <p>The Public Buildings Department collects fluorescent bulbs from residents Monday through Friday.</p> <p>Yard Waste was collected at residences once a week for the month of April and the month of November in 2011. Furthermore, residents had the opportunity to drop off yard waste and brush this past reporting year at the Town Recycling Center on selected Wednesday and Saturday dates during the spring and fall.</p> | <p>The Town will continue to hold household hazardous waste days and support citizen group clean-up efforts. Also, the DPW will continue to investigate the possibility of sharing hazardous waste days with surrounding communities to maximize opportunities for area residents, as the Town of Lexington has shared their year-round collection facility with Town of Wilmington residents, at a low cost to the resident.</p> <p>The Town continues to use the Town website and the "Town Topic" newsletter to provide education and promote public programs. Additionally, the local newspaper, the "Town Crier" will be used to advertise Hazardous Waste Days.</p> <p>The Town will continue to offer water conservation kits to residents, as they are available.</p> |

### 3. Illicit Discharge Detection and Elimination

| BMP ID # | BMP Description       | Responsible Dept./Person Name | Measurable Goal(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Progress on Goal(s) – Permit Year 9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Planned Activities – Permit Year 10                                                                                                                                                            |
|----------|-----------------------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3-1      | Map Stormwater Assets | DPW                           | <p>Using GPS, the exact locations will be identified for outfalls. All information from field investigations will be attached to the database. During the first two years of this permit, this mapping will be updated on a quarterly basis to integrate all information into the database system from investigations. Following the first two years, this schedule will be revised based on the amount of data to be added, however, at a minimum, the database will be updated every six months. A Goal of completing mapping of 50 percent of surface water outfalls, major stormwater drainage structures, and receiving surface water bodies by the end of Year 5.</p> | <p>Approximately 100% of the Wilmington drain system, including catch basins, manholes and outfalls have been mapped and superimposed onto the Town's topographic map system. Pipe sizes and materials, direction of flow, and estimated age of the subsystem have also been included in the mapping. The Town drain system map can be viewed upon request at the Department of Public Works.</p> <p>As part of the Drainage System Master Plan, the Town has developed GPS mapping of the system's drainage structures and provided the Town with a more versatile electronic version of the storm drain system map.</p> <p>The Town currently employs one full-time GIS technician. Each summer the Wilmington Engineering Department hires an intern to help to provide GPS locating services.</p> <p>During the past reporting year, more detailed stormwater structure assets have been surveyed and input into the drainage system database, including invert heights, inlet and outlet sizes, structure condition, etc.</p> | <p>Ongoing incorporation of conditional assessment information into the Town's geodatabase.</p> <p>The Wilmington Engineering Department is planning to continue their internship program.</p> |



| BMP ID # | BMP Description                             | Responsible Dept./Person Name | Measurable Goal(s)                                                                                                                                                                                                                                                                          | Progress on Goal(s) – Permit Year 9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Planned Activities – Permit Year 10                                                                                                                                                                                                                                                                                                      |
|----------|---------------------------------------------|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3-2      | Detection and Elimination Program           | DPW/Boh                       | The goal is to identify a plan for completing dry weather sampling during the first year of the permit term. Subsequent years will include completing dry weather investigations of all outfalls along the Ipswich River and Maple Meadow Brook, and 50% of outfalls along other waterways. | <p>S E A Consultants and its subcontractors completed the mapping and illicit discharge detection and elimination program in spring/summer of Permit Year 4. All known and accessible outfalls were inspected which revealed 63 potential dry weather flows (DWF) of which 3 are highly suspected to be an illicit discharge. The 3 DWF's which were highly suspicious to be an illicit discharge were sampled along with 2 other outfalls identified by the Town for sampling.</p> <p>Furthermore, the outfalls marked as Medium Suspicion were inspected during the summer of 2010, and samples were taken to the laboratory for testing.</p> <p>The outfall sampling analysis did not reveal any conclusive indication of an illicit connection at neither High Suspicion or Medium Suspicion Areas.</p> <p>The Town has issued 2 enforcement orders for illicit connections found during daily Catch Basin cleaning operations over the 8-year permit period.</p> | <p>The Town will continue to investigate the potential DWF in upstream manholes in order to trace the illicit discharges to the sources. Additional sampling as outlined in the Drainage System Master Plan will be conducted.</p> <p>Low suspicion DWF will be sampled and analyzed for illicit criteria, as accessibility permits.</p> |
| 3-3      | Conduct Illicit Discharge Education Program | DPW                           | See BMP 1-1 and BMP 6-1                                                                                                                                                                                                                                                                     | See BMP 1-1, BMP 3-2 and BMP 6-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | See BMP 1-1, BMP 3-2 and BMP 6-1                                                                                                                                                                                                                                                                                                         |

| BMP ID # | BMP Description                                                        | Responsible Dept./Person Name | Measurable Goal(s)                                                                                                                                                                                                                                                                                                                                | Progress on Goal(s) – Permit Year 8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Planned Activities – Permit Year 9                                                                                                                                                                                                                                                      |
|----------|------------------------------------------------------------------------|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3-4      | Proposed by-law to prohibit illicit discharges and illegal connections | DPW                           | The draft bylaw will be developed by the end of Year 2 of the permit period, and the final bylaw will be prepared by the end of Year 3. The bylaw will be presented to Town Meeting in Year 4. If it is not approved, it will be revised, if appropriate, and presented to Town Meetings in Year 5.                                               | <p>In order to allow this by-law to advance, the Town has determined that a comprehensive by-law addressing all facets of the NPDES permit requirements was not feasible, and has generated separate by-laws to address respective minimum control measures. The Draft by-law to prohibit illicit discharges and illegal connections was developed and presented as an article on the Town Warrant for the May 2007 Town Meeting. The by-law passed at Town Meeting in May of 2007.</p> <p>The Wilmington Health Department has amended their environmental regulations to include a specific “illicit discharge” regulation which includes a \$300 per day fine. A copy of the Health Department Regulation was included in Year 5’s annual report.</p> <p>The Town has instructed their catch basin cleaner to inspect structures and identify an illicit connections or dry weather flow during catch basin cleaning activities.</p> | <p>The Town will continue to monitor the effectiveness of the newly amended Health Regulation regarding Illicit Discharges and the Town’s Illicit Discharge Bylaw.</p> <p>The Town will continue to attempt to identify illicit connections during catch basin cleaning activities.</p> |
| 3-5      | Enforce illicit discharges and illegal connections By-law              | DPW                           | The draft changes to regulations and policies will be developed by the end of Year 2 of the permit period. The final changes will be prepared by the end of Year 3. Adoption of the new regulations and policies will be dependent upon approval of the bylaw. Regulations will be proposed for adoption within one year of approval of the bylaw | <p>The Town will continue to investigate the potential DWF in upstream manholes in order to trace the illicit discharges to the sources. Additional sampling as outlined in the Drainage System Master Plan will be conducted at outfalls with high suspicion of illicit connections.</p> <p>See BMP 3-4 above.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | See BMP 3-4 above.                                                                                                                                                                                                                                                                      |

| <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 9</b>                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Planned Activities – Permit Year 10</b>                                                                                                                                                                            |
|-----------------|----------------------------------|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4-1             | Revise Site Plan Review Bylaw    | Planning                             | Draft changes to the bylaw will be developed by the end of Year 2 of the permit period. The proposed changes will be presented to Town Meeting in Year 4. . If they are not approved, they will be revised, if appropriate, and presented to Town Meeting in Year 5.                                                                | The Stormwater Bylaw was passed at Town Meeting on May 2, 2009.                                                                                                                                                                                                                                                                                                                                                                                                     | Rule and Regulations governing the Bylaw have been approved through the Planning Board. Planning Board sessions have included public outreach for the new Rules and Regulations to the public and to area developers. |
| 4-2             | Improve Site Plan Review Process | DPW                                  | The revised process will be developed with departments involved in the Construction Site Plan Review Process. A checklist or similar tracking tool will be developed during the first year of the permitting period. This tool will be adopted during the second year of the permitting period and employed as described thereafter | <p>A site plan review checklist has been developed and was presented in Year 5's annual report. The Engineering Department uses this checklist during inspections and it has been incorporated into the current site plan review process.</p> <p>A Stormwater Checklist has been created and is used in Stormwater Permitting to assure adherence to the Bylaw. The checklist is available online at the DPW's website and the Planning / Conservation website.</p> | The Town will continue to utilize the checklist.                                                                                                                                                                      |
|                 |                                  |                                      |                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                       |



| BMP ID # | BMP Description                                                                         | Responsible Dept./Person Name | Measurable Goal(s)                                                                                                                                                                                                                                                                                         | Progress on Goal(s) – Permit Year 9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Planned Activities – Permit Year 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------|-----------------------------------------------------------------------------------------|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4-3      | Develop Procedures for receipt and consideration of information submitted by the public | Planning                      | This program will be developed with departments involved in the Construction Site Plan Review Process. The review of existing procedures will be completed by the end of Year 2. If revisions to the procedures are deemed necessary, they will be drafted by the end of Year 3 and adopted during Year 4. | <p>The CWRMP's local media publicity and public meetings have helped to provide the public with a public input forum. Furthermore, the Town has received a grant from EPA through the Department of Conservation and Recreation for an LID techniques demonstration project at Silver Lake. Several public hearings have been held at Wilmington Town Hall to publicize this innovative project.</p> <p>Meetings include the televised presentation to the Board of Selectmen, Conservation Hearings, and several "Informational Meetings" for the abutting residents.</p> <p>The DPW dedicated phone number and email address is advertised on the Town website to be contacted for stormwater questions.</p> <p>See also BMP's 1-1 and 2-1.</p> | <p>The local media publicity and public hearings pertaining to the CWRMP and the new Drainage System Master Plan will continue to provide an informational forum for the residents of the Town of Wilmington. Furthermore, the Silver Lake LID project includes a public outreach program that will educate the public on why and how the LID techniques were chosen.</p> <p>The Town continues to use the Town website and the "Town Topics" quarterly newsletter to provide education and promote public programs. Additionally, the local newspaper, the "Town Crier" will be used to advertise Hazardous Waste Days.</p> |
| 4-4      | Develop site inspection and enforcement of control measures program                     | DPW                           | The program will be developed by the end of Year 2, and will be implemented in Years 3, 4 and 5.                                                                                                                                                                                                           | <p>See BMP 3-4 above. Current inspection and enforcement control measures are being exercised by the Engineering Department, the Health Department, and the Conservation Commission.</p> <p>There is now a permitting process to connect sump pumps to the MS4.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <p>The Engineering Department and Conservation Commission will continue with their inspections as required and as needed.</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 9</b>                                                                                                                                                                                                                                                                                                      | <b>Planned Activities – Permit Year 10</b>                                                                                                                                                                       |
|-----------------|------------------------------------------------------------------|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 5-1             | Develop Post-construction runoff bylaw, regulations and guidance | Planning                             | A draft of the post-construction runoff bylaw will be completed by the end of Year 2. The final bylaw will be developed for inclusion on the Town Meeting warrant for Year 3. If the article does not pass, it will be revised as appropriate, and presented at Town Meeting in Years 4 and 5. The associated regulations and guidance will be developed in Year 3. If and when the bylaw is approved, a public meeting will be held to solicit input from municipal departments and the public on the regulations and guidance. If necessary, the regulations and guidance will be modified, and they will be presented for a vote at a public hearing of the Planning Board.                                                                     | See BMP 3-4 and 4-1 above. Post-construction runoff is covered in the Stormwater Bylaw, and was passed on May 2, 2009.                                                                                                                                                                                                                          | Members of the Planning and Conservation Commission, the Engineering Department, and the Department of Public Works will work with the new Bylaw and the requirements of the Rules and Regulations of the Bylaw. |
| 5-2             | Develop Post-construction monitoring program                     | Planning                             | The post-construction monitoring program will be developed during Years 3 and 4, and implemented in Year 5, provided the bylaw is approved by Town Meeting.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Efforts include inspections on an as-needed basis and the involvement of enforcement power of the Health Department and Conservation Dept.                                                                                                                                                                                                      | The post-construction monitoring program will continue to progress with the Stormwater Bylaw.                                                                                                                    |
| 5-3             | Ensure adequate long-term operation and maintenance of BMPs      | DPW                                  | A draft procedure for evaluation of BMPs for operation and maintenance issues will be developed by the end of Year 2 of the permitting period, and the final procedure will be prepared by the end of Year 3. This effort will be coordinated with the revisions to the procedure for joint board's review of construction projects. During Year 2, the DPW and Planning Board will investigate potential funding mechanisms, develop a draft warrant article, and hold a public meeting to solicit input from the community. During Year 3, the draft article will be revised if necessary and presented to Town Meeting. If it is not approved, it will be revised, if appropriate, and presented to Town Meeting in Years 4 and 5, if necessary | See BMP 3-4 above.<br><br>The Drainage System Master Plan includes long term operation and maintenance recommendations based on inspections within the high and medium priority areas. Recommendations include catch basin cleaning, street sweeping, periodic inspections and targeted maintenance at outfalls, detention basins and culverts. | The Engineering Department, the Department of Public Works, the Conservation Commission, and the Health Department will coordinate to implement the recommendations outlined in the Drainage System Master Plan  |



## 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 9                                                                                                                                               | Planned Activities – Permit Year 10                                                                                                                                                                                      |
|----------|-----------------------------|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6-1      | Educate Municipal Employees | DPW                           | <p>General stormwater training sessions will be held by the Department of Public Works on an annual basis. The goal will be for 90% of municipal employees with storm water management responsibilities to attend at least one session over the permit period. Department specific training sessions will be held annually, with a goal of 50% of personnel responsible for storm water management attending 90% of the sessions.</p> | <p>Ongoing DPW staff training has taken place throughout the permit period including discussions on old and new erosion control efforts and reporting suspicious connections.</p> | <p>Education efforts will continue throughout the permit period.</p> <p>Consideration for a new educational framework will be given during development of the new five-year program, once requirements are released.</p> |

| ID # | Description                                              | Dept./Person Name |                                                                                                                                  | Permit Year 9                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Permit Year 10                                                                                                                                                                                                                                                                                                                                            |
|------|----------------------------------------------------------|-------------------|----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 6-2  | Develop and adhere to operation and maintenance schedule | DPW               | The Municipal Operation and Maintenance Schedule will be created and implemented within the first two years of the permit period | <p>The Town owns one vacuum street sweeper and a mechanical sweeper and contracts for a third mechanical sweeper. This additional equipment has enabled the Town to increase its street sweeping and catch basin cleaning schedule, and helps the Town achieve spring cleaning by the end of May. Each catch basin in Wilmington is cleaned at least every three years, and high-load areas are cleaned multiple times every year. A draft plan for residuals management has been developed and is currently still being reviewed by the DEP.</p> <p>The Town of Wilmington is part of the Mosquito Control Project, which performs routine stream maintenance throughout the year. Furthermore, a summer crew was hired last year to perform stream cleaning activities throughout the Town.</p> <p>The Town is in the process of funding a new vacuum street sweeper as part of this fiscal year's budget process. Acquisition of this new sweeper will help to further adhere to seasonal cleanups and thus reduction of TSS from stormwater.</p> | <p>The DPW will continue to hire summer employees to perform stream-cleaning activities and will continue to provide regular street sweeping and cleaning operations throughout the Town.</p> <p>The Town now owns a sewer cleaning jet-truck, which will be used to clean underground infiltration chambers and help blow out existing storm drains.</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 9</b> | <b>Planned Activities – Permit Year 10</b> |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|---------------------------|--------------------------------------------|--------------------------------------------|
| 1-1             | Educational Material                                                                                                                            | DPW                                  | See BMP 1-1               | See BMP 1-1                                | See BMP 1-1                                |
| 3-3,4,5         | Conduct Illicit Discharge Education Program, Propose & Enforce Illicit Discharge By-Law                                                         | DPW                                  | See BMP 3-4               | See BMP 3-4                                | See BMP 3-4                                |
| 5-1,2,3         | Develop Post-Construction Runoff By-Law, Regulations & Guidance, Develop Post-Construction Monitoring Program, & Ensure Long-Term O&M of BMP's. | DPW                                  | See BMP 5-1               | See BMP 5-1                                | See BMP 5-1                                |

#### **7b. WLA Assessment**

A relatively small portion of Wilmington lies within the Shawsheen River basin, for which the TMDL has been developed. The majority of the Stormwater Drainage System has already been mapped within the Shawsheen River Basin, and GIS locations for all known Town outfalls have been obtained during the development of the Town's Comprehensive Water Resource Management Plan (CWRMP) by SEA Consultants. Furthermore, the recommendations of the Drainage Master Plan target high priority areas, in conjunction with standards of the Massachusetts Stormwater Management Guidelines.

#### **Part IV. Summary of Information Collected and Analyzed**

As presented in BMP ID#3-1 of this report, the majority of the entire MS4 for the Town of Wilmington has been mapped and labeled for pipe material, size, and approximate age of the sub-system. In conjunction with the Drainage System Master Plan, potential illicit discharges discovered as a result of outfall inspections have been ranked in terms of degree of suspicion. Water quality testing has been performed on outfalls indicated in the above report and does not conclusively indicate illicit connections. Follow up inspections and testing of potential illicit discharges is recommended under the Drainage System Master Plan. Copies of outfall inspection reports and data collected to date can be provided upon request.

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

##### **Programmatic**

|                                                  |       |    |
|--------------------------------------------------|-------|----|
| Stormwater management position created / staffed | (y/n) | No |
| Annual program budget / expenditures             | (\$)  |    |

##### **Education, Involvement, and Training**

|                                                                         |               |                               |
|-------------------------------------------------------------------------|---------------|-------------------------------|
| Estimated number of residents reached by education program(s)           | (# or %)      | 95%                           |
| Stormwater management committee established                             | (y/n)         | Yes                           |
| Stream teams established or supported                                   | (# or y/n)    | Yes                           |
| Shoreline clean-up participation or quantity of shoreline miles cleaned | (y/n or mi.)  | N/A                           |
| Household Hazardous Waste Collection Days                               |               |                               |
| • Days sponsored                                                        | (#)           | 1                             |
| • Community Participation                                               | (%)           | Unknown                       |
| • Material Collected                                                    | (tons or gal) | 130 carloads<br>283 half load |
| School curricula implemented                                            | (y/n)         | No                            |

## Construction

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

## Post-Development Stormwater Management

|                                                                                                                            |          |                        |
|----------------------------------------------------------------------------------------------------------------------------|----------|------------------------|
| Estimated percentage of development / redevelopment projects adequately regulated for post-construction stormwater control | (%)      | 80%                    |
| Site Inspections Completed                                                                                                 | (# or %) | 100%                   |
| Estimated volume of stormwater recharged                                                                                   | (gpy)    | 30,000 gpy est.<br>+/- |

## Operations and Maintenance

|                                                                                               |                |               |
|-----------------------------------------------------------------------------------------------|----------------|---------------|
| Average frequency of catch basin cleaning (non-commercial / non-arterial streets)             | (times/yr)     | 0.5           |
| Average frequency of catch basin cleaning (commercial / arterial or other critical streets)   | (times/yr)     | 1             |
| Total number of structures cleaned                                                            | (#)            | 1,800         |
| Storm drain cleaned                                                                           | (LF or mi.)    | 9 00 LF       |
| Qty. of screenings / debris removed from storm sewer infrastructure                           | (lbs. or tons) | 40 tons       |
| Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial us, etc.) |                |               |
| Cost of screenings disposal                                                                   | (\$)           |               |
| Average frequency of street sweeping (non-commercial / non-arterial streets)                  | (times / yr)   | 1.5           |
| Average frequency of street sweeping (commercial / arterial or other critical streets)        | (times / yr)   | 1             |
| Qty of sand / debris collected by sweeping                                                    | (lbs. or tons) | 60 tons       |
| Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)                         | (location)     | Mix residuals |
| Cost of sweepings disposal                                                                    | (\$)           |               |
| Vacuum street sweepers purchased / leased                                                     | (#)            | 0             |



|                                                                                    |                                                                                    |      |
|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|------|
| Vacuum street sweepers specified in contracts                                      | (y/n)                                                                              | No   |
| Reduction in application on public land of: (N/A – never used; “100%” elimination) |                                                                                    |      |
| • Fertilizers                                                                      | (lbs. or %)                                                                        | 0%   |
| • Herbicides                                                                       | (lbs. or %)                                                                        | 0%   |
| • Pesticides                                                                       | (lbs. or %)                                                                        | 100% |
| Anti-/De-Icing products and ratios                                                 | %NaCl<br>%CaCl <sub>2</sub><br>%MgCl <sub>2</sub><br>%CMA<br>%Kac<br>%KCl<br>%Sand | 50%  |
| Pre-wetting techniques utilized                                                    | (y/n)                                                                              | No   |
| Manual control spreaders used                                                      | (y/n)                                                                              | Yes  |
| Automatic or Zero-Velocity spreaders used                                          | (y/n)                                                                              |      |
| Estimated net reduction in typical year salt application                           | (lbs. or %)                                                                        | 0%   |
| Salt pile(s) covered in storage shed(s)                                            | (y/n)                                                                              | Yes  |
| Storage shed(s) in design or under construction                                    | (y/n)                                                                              | N/A  |