

**Municipality/Organization:** Town of Wilmington

**EPA NPDES Permit Number:** MA04123/

**MaDEP Transmittal Number:** W-040988

**Annual Report Number**

**& Reporting Period:**

**No. 4: March 06-March 07**

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

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

**Contact Person:** Donald Onusseit

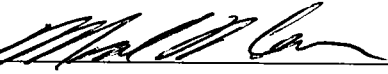
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**Telephone #:** 978.658.4481

**Email:** donusseit@town.wilmington.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:** 

**Printed Name:** Michael A. Caira

**Title:** Town Manager

**Date:**

4/23/07

## **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 and has another day scheduled in May 2007. 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 5 weeks in the spring, 2 weeks in the summer, and 5 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. BMC Corporation, a local private composting facility, offered to accept grass clippings from Wilmington Residents..

Part 3-(1-3): Although approximately 95% of the Town's MS4 has been mapped and hand superimposed onto the Town's topographic map system (to include pipe materials, sizes, and flow direction), the Town has procured the services of SEA Consultants through an advertised procurement process to develop a complete Drainage System Master Plan, which includes the GPS mapping of the Town's drainage system. The majority of the Town's drainage outfalls have already been located as a result of a subsequent water quality study performed by SEA consultants. Necessary testing of outfall discharges will be performed by SEA Consultants and the Town of Wilmington as needed depending on outfall survey results. The final Master Plan, when completed, will provide a prioritized schedule of town drainage projects and recommendations to improve the infrastructure as a whole.

Part 5: Post-construction runoff will be covered in the Stormwater Draft Bylaw which will be under revision this summer. A copy of a Draft Bylaw was included in last year's report, however the revised by-law under consideration as proposed will be somewhat different. The post construction regulations will be revisited as part of the Drainage System Master Plan's recommendations. Members of the Planning and Conservation Office, the Engineering Department, and the Department of Public Works will provide input and work with the Master Plans consultant to finalize post construction efforts.

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. The sixth grade science class at the Wilmington Middle School has been participating in a comprehensive stormwater quality and erosion control curriculum. Furthermore, the highly publicized Low Impact Development (LID) project at Silver Lake has undergone construction and was completed during the summer of 2006.

**1. Public Education and Outreach**

| <b>BMP ID #</b> | <b>BMP Description</b> | <b>Responsible Dept./Person</b> | <b>Measurable Goal(s)</b>                                                                                                                                                                                                                                                                                                                                                                                             | <b>Progress on Goal(s) – Permit Year 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>Planned Activities – Permit Year 5</b>                                                                                                                                                                                                                                                                                                               |
|-----------------|------------------------|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1-1             | Educational Material   | DPW                             | <p>Measurable goals for this BMP will be:</p> <p>1) procurement, development or modification of four brochures or fact sheets that include stormwater information, and</p> <p>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.</p> | <p>The Town published an article in the "Town Topics" quarterly newsletter reminding residents about the regulations prohibiting illicit discharge to the MS4 community. The article also served as a reminder about what an illicit discharge consists of by supplying the definition of illicit and non-illicit discharges and giving examples of them.</p> <p>The DPW has made this year's recycling brochure available for download on the DPW website. Included in the brochure is a collection schedule, information regarding specific collection items, hazardous waste information, a recycle hotline for more information, and the link to the DPW website.</p> <p>The sixth grade science department at the Wilmington Middle School has continued to include a stormwater/wastewater curriculum in the annual plan that provides hands-on learning methods for students. Parents have been actively involved in take-home assignments and demonstrations.</p> <p>The Town of Wilmington Department of Public Works has continued to update the new website with stormwater and recycling related information. Separate links on the website have been dedicated to Phase II stormwater information, an illicit discharge reporting hotline, and recycling scheduling and FAQ's. The website can be viewed at <a href="http://www.town.wilmington.ma.us/old/dpw/index.html">http://www.town.wilmington.ma.us/old/dpw/index.html</a>.</p> <p>Additional information regarding water conservation techniques, recycling information, and warnings about feeding waterfowl have been printed on bookmarks and handouts which have been available to Wilmington Residents.</p> <p>The highly publicized Silver Lake LID Project completed final construction during the summer of 2006. A ribbon cutting ceremony was conducted at which members of the local press, representative James Miceli, and Senator Bruce Tarr were in attendance.</p> | <p>Continue to develop and distribute the remaining stormwater informational brochures.</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> |

## 2. Public Involvement and Participation

| BMP ID # | BMP Description       | Responsible Dept./Person Name | Measurable Goal(s)                                                                                                                                                                                                                                                                                                                                                              | Progress on Goal(s) – Permit Year 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Planned Activities – Permit Year 5                                                                                                                                                                                                                                                                                                                |
|----------|-----------------------|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2-1      | Stormwater Task Force | DPW                           | The individuals who will serve on this task force will be identified within the first two months of the permitting period. On a yearly basis, this task force will hold meetings every four months, will be responsible for the development of material, and will keep track of the status of the control measures and record keeping associated with programs being developed. | <p>The Town of Wilmington has procured the services of SEA Consultants through an advertised bid process to develop a 3-phase Townwide Drainage System Master Plan. The plan includes the complete GPS mapping and inventory of the current Wilmington Drainage System, the analysis of the current capacity and integrity of the system, and the development of a Master Plan to improve the drainage system.</p> <p>Since SEA Consultants has developed the Town's highly publicized Comprehensive Water Resource Management Plan (CWRMP), the development of the Drainage System Master Plan by the same consultant will efficiently address the recommendations of the CWRMP.</p> <p>The development of recommended drainage projects in Phase II and III of the Master Plan will involve the input of multiple Town Officials and the general public.</p> <p>The Wilmington Board of Health has helped by including more stringent illicit discharge provisions into their Health Regulations.</p> | Members of the Planning and Conservation Office, the Engineering Department, and the Department of Public Works will continue to meet with the Master Plan Consulting Firm and review their work as it is presented to the Town. In addition to generating a Master Plan, the Team will review and seek to improve the existing Town regulations. |

| <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 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>Planned Activities – Permit Year 5</b>                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------|-------------------------|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2-2             | Promote Public Programs | DPW/BoH                              | 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>Due to budgetary constraints, the Town has held one hazardous waste day this past year, which was on May 6, 2006. No cars are turned away during this collection day, regardless of the amount of hazardous waste. Nearly 1041 cars dropped off hazardous waste during this past year's collection.</p> <p>Mercury is collected 5 days a week year round, and Cathode Ray Tubes (CRTs) are collected by the Town Recycle Company once a week, by special pickup</p> <p>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.</p> <p>Yard Waste was collected at residences during their normal trash collection day for 5 weeks in the spring, 2 weeks in the summer, and 5 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. BMC Corporation, a local private composting facility, offered to accept grass clippings from Wilmington Residents.</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.</p> <p>The Town has scheduled a Hazardous Waste collection day for Saturday May 12, 2007 for household hazardous waste collection. The event is advertised on the town website.</p> |

### 3. Illicit Discharge Detection and Elimination

| BMP ID # | BMP Description       | Responsible Dept./Person Name | Measurable Goal(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Progress on Goal(s) – Permit Year 4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Planned Activities – Permit Year 5                                                                                                                                                                                                                                                                                                                                                                                     |
|----------|-----------------------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 95% of the Wilmington Storm Drain System including such structures as catch basins, manholes and outfalls have been mapped and hand 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 Storm 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 obtained GPS coordinates for the majority of the Drainage System. SEA Consultants has already obtained GPS locations for the majority of the Town's stormwater outfalls.</p> <p>The Wilmington Engineering Department hired an intern to help to provide GPS locating services within High to Medium Priority areas.</p> | <p>Phase I of the Drainage System Master Plan will provide GPS mapping of the system's drainage structures and will provide the Town with a more versatile electronic version of the storm drain system map. This activity is still underway.</p> <p>The Wilmington Engineering Department is planning to continue their internship program which will help to provide man-power for next year's reporting period.</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 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>Planned Activities – Permit Year 5</b>                                                                                                                                                        |
|-----------------|---------------------------------------------|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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. | Although the detection and elimination program has not made physical progress in the past year, the procurement of SEA Consultants to prepare the 3-phase Drainage Master Plan has ensured that the mapping, and therefore illicit discharge detection program, will commence this spring/summer. All known and accessible outfalls have been inspected by SEA.<br>SMC was contracted by the Town to conduct inspections on the catch basins and manholes within the drainage system in both high and medium priority areas. | The Wilmington Engineering Department is planning to obtain another co-op student during next fiscal year (FY 08). The intern will be conducting several tasks associated with the IDDE Program. |
| 3-3             | Conduct Illicit Discharge Education Program | DPW                                  | See BMP 1-1 and BMP 6-1                                                                                                                                                                                                                                                                     | See BMP 1-1 and BMP 6-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | See BMP 1-1 and BMP 6-1                                                                                                                                                                          |

| <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 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>Planned Activities – Permit Year 5</b>                                                                                                                                                                                                                  |
|-----------------|------------------------------------------------------------------------|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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.                                               | 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 has been developed and presented as an article on the Town Warrant for the May 2007 Town Meeting. The Town expects that this by-law will pass at Town Meeting, but is prepared to re-submit the by-law in subsequent Town Meetings if it does not pass in May 2007. In the meantime, 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 last year’s annual report. | The Town will continue to monitor the effectiveness of the newly amended Health Regulation regarding Illicit Discharges. If the proposed by-law does not pass at May 2007 Town Meeting, the DPW will present the by-law again in subsequent Town Meetings. |
| 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 | See BMP 3-4 above.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | See BMP 3-4 above.                                                                                                                                                                                                                                         |

#### 4. Construction Site Stormwater Runoff Control

| BMP ID # | BMP Description                  | Responsible Dept./Person Name | Measurable Goal(s)                                                                                                                                                                                                                                                                                                                  | Progress on Goal(s) – Permit Year 4                                                                                                                                                                                                                                                                                                                                                                                                                | Planned Activities – Permit Year 5                                                                                                                                                                                                                                                      |
|----------|----------------------------------|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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.                                                                | A draft by-law to address construction and post-construction stormwater controls has been developed and is under consideration by the Town's Stormwater Task Force. Due to the complexity of the by-law as it relates to the Town's obligations under the CWRMP/EIR which includes stormwater management, the Task Force has elected to postpone presentation of the by-law at the May 2007 Town Meeting and will take up the measure this summer. | The Stormwater Task Force will work with the Town's consultant to further develop and clarify a by-law that adequately addresses the requirements of the NPDES permit as well as the Town's obligations under the CWRMP/EIR addressing comprehensive water management in the community. |
| 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 | A draft site plan review checklist has been developed and was presented in last year's yearly report.                                                                                                                                                                                                                                                                                                                                              | The draft site plan review checklist is currently in the review process and will be finalized with the help of the Engineering Department and SEA Consultants as part of the Drainage System Master Plan.                                                                               |
| Revised  |                                  |                               | Once the recommendations of the CWRMP are finalized, this BMP will be revisited.                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                         |

| <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 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>Planned Activities – Permit Year 5</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------|-----------------------------------------------------------------------------------------|--------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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. | 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. Meetings include the televised presentation to the Board of Selectmen, Conservation Hearings, and several "Informational Meetings" for the abutting residents. See also BMP's 1-1 and 2-1. | The local media publicity and public hearings pertaining to the CWRMP and the new Drainage System Master Plan, which is in the beginning stages, 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. The consulting engineering firm for the Silver Lake Project has agreed to conduct a public tour of the LID demonstration project at Silver Lake. |
| 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.                                                                                                                                                                                                           | See BMP 3-4 above. Current inspection and enforcement control measures are being exercised by the Engineering Department, the Health Department, and the Conservation Department.                                                                                                                                                                                                                                                                                                                                                                                                        | The Engineering department and conservation office will continue with their inspections as required and as needed. Once the recommendations of the Drainage System Master Plan have been finalized, amended enforcement procedures will be considered, as needed.                                                                                                                                                                                                                                                                                      |

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

| <b>BMP ID #</b> | <b>BMP Description</b>                                           | <b>Responsible Dept./Person Name</b> | <b>Measurable Goal(s)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <b>Progress on Goal(s) – Permit Year 4</b>                                                                                                                                                                                                                                                                                                                                                         | <b>Planned Activities – Permit Year 5</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 will be covered in the Stormwater Draft Bylaw under revision this summer. A copy of a Draft Bylaw was included in last year's report, however the revised by-law under consideration as proposed will be somewhat different. The post construction regulations will be revisited as part of the Drainage System Master Plan's recommendations. | The post construction regulations will be revisited as part of the Drainage System Master Plan's recommendations. Members of the Planning and Conservation Office, the Engineering Department, and the Department of Public Works will provide input and work with the Master Plans consultant to finalize post construction efforts. |
| 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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Preliminary 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 development of the recommendations of the Drainage System Master Plan.                                                                                                                                                                                    |

| <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 4</b>                                                                                                                                                                                     | <b>Planned Activities – Permit Year 5</b>                                                                                                                                                                                                                                                                              |
|-----------------|-------------------------------------------------------------|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 boards 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. Long term operation and maintenance has been discussed as part of the requirements of the Drainage System Master Plan. This will be revisited during further development of the Master Plan recommendations | This will be revisited with the input of the Engineering Department, the Conservation Department, and the Health Department. SEA has completed a majority of the inspections within the high and medium priority areas. Bases upon the results of the inspections an operation and maintenance plan will be developed. |
| Revised         |                                                             |                                      | The potential funding and public input will be in conjunction with discussions and public forums of the CWRMP and 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 4                                                                                                                                                                                                                                                                                                                                                   | Planned Activities – Permit Year 5                            |
|----------|-----------------------------|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------|
| 6-1      | Educate Municipal Employees | DPW                           | 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. | The latest Employee training occurred on March 22, 2007 and discussed old and new erosion control efforts and reporting suspicious connections. Comprehensive Environmental Incorporated (CEI) has been hired by the Town to perform the in-house training for DPW Staff. Scheduling conflicts have postponed the training by 1 month. Sign-in sheets will be available upon request. | Education efforts will continue throughout the permit period. |

| <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 4</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>Planned Activities – Permit Year 5</b>                                                                                                                                              |
|-----------------|----------------------------------------------------------|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 two vacuum street sweepers 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> | 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. |

## 7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) <<if applicable>>

| BMP ID # | BMP Description                                                                                                                                 | Responsible Dept./Person Name | Measurable Goal(s) | Progress on Goal(s) – Permit Year 4 | Planned Activities – Permit Year 5 |
|----------|-------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------|--------------------|-------------------------------------|------------------------------------|
| 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 most 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 will seek to 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. Follow up inspections and testing of potential illicit discharges will be performed during the spring of 2007. 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) | 1041 carloads |
| School curricula implemented                                            | (y/n)         | Yes           |

**Legal/Regulatory**

|                                                    | In Place Prior | Under Review | Drafted | Adopted          |
|----------------------------------------------------|----------------|--------------|---------|------------------|
| Regulatory Mechanism Status (indicate with "X")    |                |              |         |                  |
| • Illicit Discharge Detection & Elimination        |                | X            |         |                  |
| • Erosion & Sediment Control                       |                | X            |         |                  |
| • Post-Development Stormwater Management           |                | X            |         |                  |
| Accompanying Regulation Status (indicate with "X") |                |              |         |                  |
| • Illicit Discharge Detection & Elimination        |                | X            |         | X (for BOH only) |
| • Erosion & Sediment Control                       |                | X            |         |                  |
| • Post-Development Stormwater Management           |                | X            |         |                  |

**Mapping and Illicit Discharges**

|                                        |                |               |
|----------------------------------------|----------------|---------------|
| Outfall mapping complete               | (%)            | 100%          |
| Estimated or actual number of outfalls | (#)            | 164           |
| System-Wide mapping complete           | (%)            | 80% (non-GPS) |
| Mapping Methods                        |                |               |
| • Paper / Mylar                        | (%)            | 80%           |
| • CADD                                 | (%)            |               |
| • GIS                                  | (%)            | 60%           |
| Outfalls inspected / screened          | (# or %)       | 75%           |
| Illicit discharges identified          | (#)            | 25-30         |
| Illicit connections removed            | (#) (est. gpd) | 1 (Hamlin Ln) |
| % of population on sewer               | (%)            | 15            |
| % of population on septic systems      | (%)            | 85            |
|                                        |                |               |
|                                        |                |               |

**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 \$) | 1 |
| 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)    | 40,000 gpy est. |
|                                                                                                                            |          |                 |
|                                                                                                                            |          |                 |

### Operations and Maintenance

|                                                                                               |                |               |
|-----------------------------------------------------------------------------------------------|----------------|---------------|
| Average frequency of catch basin cleaning (non-commercial / non-arterial streets)             | (times/yr)     | 1             |
| Average frequency of catch basin cleaning (commercial / arterial or other critical streets)   | (times/yr)     | 2             |
| Total number of structures cleaned                                                            | (#)            | 3,200         |
| Storm drain cleaned                                                                           | (LF or mi.)    | 2,500 LF      |
| Qty. of screenings / debris removed from storm sewer infrastructure                           | (lbs. or tons) | 80 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)   | 2             |
| 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%<br><br><br><br><br><br><br>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                                |