

**Municipality/Organization:** City of Springfield

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**EPA NPDES Permit Number:**

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**MaDEP Transmittal Number:** W- 040908

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**Annual Report Number  
& Reporting Period:** No. (7): March '10-March '11

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## NPDES PII Small MS4 General Permit Annual Report

### Part I. General Information

**Contact Person:** Kevin Chaffee **Title:** Natural Resources Manager

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**Telephone #:** 413-787-6020 **Email:** N/A

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#### Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

**Signature:** 

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**Printed Name:** Kevin Chaffee

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**Title:** Natural Resources Manager

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**Date:** April 29<sup>th</sup>, 2011

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**Part II. Self-Assessment:**

The City of Springfield has completed the required self assessment and has determined that the municipality is in compliance with permit conditions where budget allows. Many planned improvements have not been possible due to lack of budget and staff. However, the intent of most of the goals has been accomplished wherever possible through alternative means. It is understood that the city's MS4 General Permit expired in May of 2008. This report highlights the City's efforts to address non-point source pollution over the past year using the previous permit's goals and benchmarks.

Items not completely fulfilled include the following:

| BMP ID # | BMP Description   | Measurable Goal(s)  | Obstacle Encountered   |
|----------|---|---|--|
| 2-1a     | Vegetative Cover Data Collection                                      | Establish volunteer program to monitor ground cover at critical locations         | Formal ground cover assessment delayed due to lack of funding. Numerous other City and volunteer efforts underway.   |
| 3-2b     | Illicit Discharge Ordinance Development — Draft Available For Comment | Float new ordinance for one-year comment period. Continue education.              | Currently awaiting schedule for presentation to City Council   |
| 3-2c     | Illicit Discharge Ordinance Development — Passage Process             | Attempt to pass ordinance, continue comment period and educate more if necessary. | Delayed pending completion of items 3-2c.  |
| 3-2d     | Erosion and Sediment Control Ordinance — Develop Draft Ordinance      | Draft new wording. Educate public, officials, and the private sector.             | Draft ordinance has been developed based on template from MA DEP and is undergoing further revision. Currently being combined with Post-construction requirements for one over arching erosion control ordinance. Much progress has been made by in-house Stormwater Steering Committee. |
| 4-2b     | Erosion and Sediment Control Ordinance — Draft Available For Comment  | Float new ordinance for one-year comment period. Continue education.              | Delayed pending completion of item 4-2b.   |
| 4-2c     | Erosion and Sediment Control Ordinance — Passage Process              | Attempt to pass ordinance, continue comment period and educate more if necessary. | Delayed pending completion of items 4-2b and 4-2c.   |

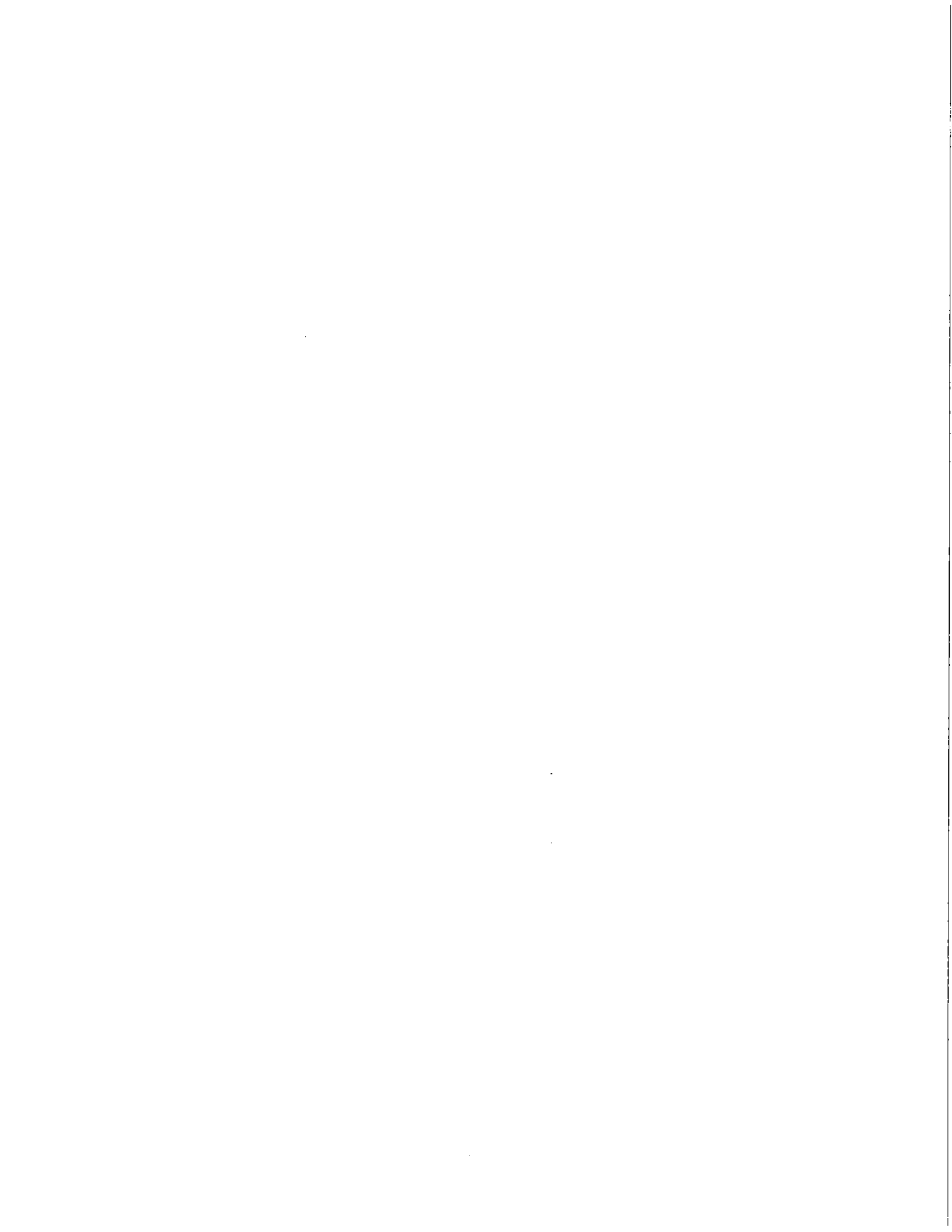
|      |   |   |  |
|------|---|---|--|
| 5-2b | New Bylaw For Post-Construction Runoff— Evaluate Existing Site Plan Process | Assess need for new bylaw/ordinance regarding maintenance of BMPs.            | Sample ordinances have been reviewed. Site plan review process is under revision, which could affect post-construction requirements. Site plan review committee to be established after Citywide revision of review process is complete. Currently being incorporated into a comprehensive bylaw including the erosion and sedimentation requirements by the In-house Stormwater Steering Committee. |
| 5-3a | New Bylaw For Post-Construction Runoff— Develop Draft Guidelines            | Draft new wording. Educate public, officials, and the private sector.         | Draft ordinance has been developed based on template from MA DEP and is undergoing further revision. Further action pending finalization of updated site plan review process as noted in item 5-3a.  |
| 5-3b | New Bylaw For Post-Construction Runoff— Draft Available For Comment         | Float new bylaw for one-year comment period. Continue education.              | Delayed pending completion of items 5-3a and 5-3b.   |
| 5-3c | New Bylaw For Post-Construction Runoff— Passage Process                     | Attempt to pass bylaw, continue comment period and educate more if necessary. | Delayed pending completion of items 5-3a, 5-3b, and 5-3c.  |
|      |   |   |  |

**Part III. Summary of Minimum Control Measures**

**1. Public Education and Outreach**

| <b>BMP ID #</b> | <b>BMP Description</b>   | <b>Responsible Dept./Person Name</b>  | <b>Measurable Goal(s)</b>  | <b>Progress on Goal(s) – Permit Year (6)</b>   | <b>Planned Activities – Future Permit</b>   |
|-----------------|--|---------------------------------------|--|--|---|
| 1-1a<br>Revised | Watershed Maps and Door Hangers, posters and Greenscapes newsletters with Stormwater Pollution Prevention Tips | Dept. of Public Works, Planning Dept. | Continue to make watershed maps and door hangers available at the DPW        | 1) Watershed maps distributed at DPW and Planning Dept. Public counter for public use.<br>2) Door hangers, posters, Greenscapes Newsletters distributed via membership in the Connecticut River Stormwater Committee and the Think Blue Stormwater education campaign. | Continue to make watershed maps available for public use. Continue paying dues to remain in CT River Stormwater Committee, enrolled in Greenscapes Program and maintain Think Blue Website. |
| 1-1b<br>Revised | Catch Basin Markers  | Dept. of Public Works, Planning Dept. | One set of markers to be placed per year                                     | 55 catch basin placards placed throughout city over past year.   | Acquire funding to purchase and continue to place catch basin markers.  |
| 1-1c<br>Revised | Stormwater Video   | Dept. of Public Works, Planning Dept. | Show video on public access channel once per year.                           | Stormwater education video (30 second PSA) acquired from Pioneer Valley Planning Commission, set to run on local access  | 2) Continue to run video on Public Access channel in accordance with requirements.  |
| 1-2<br>Revised  | Promote Waste Disposal Programs  | Dept. of Public Works                 | Publicize waste disposal and recycling programs through flyers in DPW lobby. | 1) Continued to promote special collection days through publications, emails and flyers.<br>2) DPW Solid Waste Division Recycling Coordinator promoted recycling and conservation at events throughout the year.   | 1) Continue current efforts for advance notification of Special Waste Collection Days.<br>2) Continue having Recycling Coordinator attend civic functions promoting recycling.              |

|         |                         |  |   |   |   |
|---------|-------------------------|--|---|---|---|
| 1-3a    | Stormwater Matters Talk | Dept. of Public Works, Planning Dept.              | Presentation on stormwater will be given once per year at public event or meeting | <p>1.) As part of CT Stormwater Committee, stormwater pollution prevention talks were given at local events throughout the year.</p> <p>2.) Talks given to several local classrooms about stormwater pollution and to water/waste water/stormwater lessons given to 5<sup>th</sup> and 7<sup>th</sup> graders at the Bondi's Island Treatment facility</p> <p>3.) Water and Sewer implemented Rain Barrel distribution in partner with EPA Watersense Program</p> <p>4) Stormwater education curriculum created and submitted to Springfield elementary and middle schools.</p> | <p>Schedule stormwater matters talk with neighborhood councils. Provide update on past year's efforts, identify new volunteers, and establish schedule of tasks to be accomplished.</p> <p>Springfield Water and Sewer to continue Rain barrel program, offering them at discounted rates to local residents.</p> |
| Revised |                         |  |   |   |   |
| 1-3b    | ECOS Springfield Event  | Dept. of Public Works, Conservation Commission     | Assess possibility of establishing stormwater event if resources allow            | <p>Combined Earth Day/Keep Springfield Beautiful event on May 1, 2010 included stormwater materials, tree planting, and trash cleanup. Earth Day cleanup collected 40.6 tons of trash, 840 lbs of recyclable metals, and 407 lbs of electronics.</p>  | <p>Continue stormwater and clean-up components of these events, Keep Springfield Beautiful will hold 2011 event on April 30<sup>th</sup>.</p>   |
| Revised |                         |  |   |   |   |
| 1-4a    | No Dumping Signs        | Dept. of Public Works                              | Place "No Dumping" signs as needed.   | <p>1) Neighborhood councils were encouraged to report illegal dumping activities</p> <p>2) Police Dept. monitored target areas for dumping</p> <p>3) Over 42,000 tons of waste collected through municipal pickup.</p> <p>4) Repair replace "No Dumping" signs as needed</p> <p>5) Parks Dept. placed 3 "No Dumping" signs</p>  | <p>1) Continue established efforts.</p> <p>2) If funding allows, order and install additional "No Dumping" signs and increase monitoring in areas most frequented for dumping.</p> <p>3) Continue Clean City program devoted solely to cleaning up illegal dumping sites.</p>                                     |
| Revised |                         |  |   |   |   |
| 1-4b    | Dog Waste Signs         | Dept. of Public Works, Parks Dept., Planning Dept. | Assess need for signage. Install one new park sign per year if funding allows.    | <p>1) Continued public awareness efforts for dog waste, including posters in DPW.</p> <p>2) Maintained existing park dog waste collection systems.</p> <p>3) 11 Pet waste signs installed near</p>  | <p>1) Continue public awareness efforts on the effects of dog waste.</p> <p>2) Assess need for additional dog waste collection stations within city parks.</p> <p>3) Install additional signs as needed.</p>  |





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|---------|------------------------|---|--|--|--|
| Revised | Geese Waste Signs      | Dept. of Public Works, Parks Dept., Planning Dept., Conservation Commission | Assess need for signage. Install one new park sign per year if funding allows. | No additional progress due to fiscal constraints.<br>Geese waste information included on Kiosks.   | 1) Address any signage needs if funding allows.<br>2) Geese waste information is included in kiosk (1-4d). Kiosk installation planned pending funding.<br>3) City will consider new signs when planning any work in parks. |
| Revised | Stormwater Kiosks      | Dept. of Public Works, Planning Dept.                                       | Place kiosks with information on water quality and pollution prevention.       | 1) New sign at Riverfront Park addresses water quality and was installed last March.<br>2) 2 Kiosks installed by Parks Dept.   | Future kiosk installation planned pending funding.   |
| Revised | Press Releases         | Dept. of Public Works, Planning Dept.                                       | Distribute at least one educational press release on BMPs per year.            | 1) Television and radio spots provided through membership in Connecticut River Stormwater Committee.<br>2) BMP informational sheets distributed to businesses, automotive and food industry entities in the City.<br>3) Business guides distributed through Development Services Monthly eNewsletter (~1,800 recipients) | Continue press releases and advertisements, and promote any progress on BMPs listed above for 2010/11.   |
| Revised | Stormwater Display     | Dept. of Public Works, Conservation Commission, Planning Dept.              | Establish a stormwater display at DPW one month per year.                      | 1) Continued display of stormwater education materials in lobby of DPW<br>2) Continued participation with Pioneer Valley Planning Commission (PVPC) and Connecticut River Stormwater Committee, which develops stormwater education programs. Dues paid for 2010-2011 year.  | 1) Continue display effort.<br>2) Refine and improve display as funding allows.<br>3) Continue participation with PVPC and Connecticut River Stormwater Committee in developing stormwater education programs.             |
| Revised | Educate Local Business | Dept. of Public Works, Conservation Commission, Planning Dept.              | Assess stormwater educational opportunities with Business and Industries.      | 1) Conservation Commission held pre-design meetings to educate developers on the importance and cost-effectiveness of proper stormwater maintenance. Implemented DEP's Stormwater Management<br>2) "Preventing Stormwater Pollution Fact Sheets" distributed to target:  | 1) Con Comm to continue holding pre-design meetings with development project proponents.<br>2) Continue to educate the public through multiple media.  |



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|---------|-------------------|---------------------------------------|--|---|--|
| Revised | Display Materials | Dept. of Public Works, Planning Dept. | Assess existing City events for opportunities to display stormwater materials. | <p>1) Earth Day Cleanup 2011 identified as event for Stormwater Display.</p> <p>2) Stormwater educational material display continued in lobby of DPW (see 1-5b) and City Hall.</p> <p>3) Stormwater web materials created on DPW-Engineering and Conservation Commission website</p> <p>4) PSA's run on PVRTA buses through Pioneer Valley from Feb. '11 to July '11.</p> <p>5) PSA's placed in local malls as part of media campaign for Think Blue.</p> | <p>1) Continue display effort.</p> <p>2) Refine and improve display as funding allows.</p> |
| Revised |                   |                                       |  |   |  |

## 2. Public Involvement and Participation

| BMP ID #        | BMP Description                  | Responsible Dept./Person Name                        | Measurable Goal(s)   | Progress on Goal(s) – Permit Year 5  | Planned Activities – Future Permit   |
|-----------------|----------------------------------|--|--|--|--|
| 2-1a<br>Revised | Catch Basin Markers              | Dept. of Public Works, Planning Dept.                | One set of markers to be placed per year.                                  | 55 Placards placed near catch basins   | Acquire funding to purchase and continue to place catch basin markers.                                       |
| 2-1b<br>Revised | Water Quality Monitoring         | Planning Dept.                                       | Coordinate volunteer water quality monitoring program.                     | <ol style="list-style-type: none"> <li>1) Nitrogen and Oxygen level testing performed at Abbey Brook through a Renaissance school Student project (year 3)</li> <li>2) Monitoring is performed at all swimming locations by the Board of Health.</li> <li>3) Monitoring performed at 15 water bodies on parks property.</li> <li>4) Pioneer Valley Planning Commission continued E. coli monitoring of CT river (3 year ongoing project)</li> </ol>                                    | Continue volunteer relationship with Springfield schools or identify new volunteer opportunities.            |
| 2-1c<br>Revised | Vegetative Cover Data Collection | Planning Dept., Parks Dept.                          | Establish volunteer program to monitor ground cover at critical locations. | <ol style="list-style-type: none"> <li>1) GIS/GPS technology used to manage tree planting and staffing.</li> <li>2) Formal ground cover assessment delayed due to lack of funding.</li> <li>3) Volunteer flower organizations at Five Mile and Loon Pond have reported on species variety.</li> <li>4) Groundwork Springfield, a volunteer urban improvement group, is working to improve urban environments throughout the City through landscaping and site improvements.</li> </ol> | Coordinate with volunteer organizations, and perform ground cover assessment as staffing and funding allows. |
| 2-1d<br>Revised | Earth Day clean-up               | Museum Assoc., Dept. of Public Works, Planning Dept. | Plan and conduct Earth Day events.   | <p>Combined Earth Day/Keep Springfield Beautiful event on May 1, 2010 included stormwater materials, tree planting, and trash cleanup. Earth Day cleanup collected 40.26 tons of trash, 840 lbs of recyclable metals, and 407 lbs of electronics.</p>  | Continue stormwater and clean-up components of these events  |

|                 |   |                       |  |  |   |
|-----------------|---|-----------------------|--|--|---|
| 2-2<br>Revised  | Stormwater Management Plan Public Participation | Dept. of Public Works | DPW will make stormwater plan available to public.   | "2003 Summary Report on Water Quality for Springfield's Lakes and Ponds" available to public. City-wide Stormwater Management plan drafted by the newly created In-house Stormwater Steering Committee.  | Provide update information on 2003 Summary Report to public as it is developed. Continue to meet monthly with department heads assigned to Stormwater Steering Committee. |
| 2-3a<br>Revised | Household Hazardous Waste Collection            | Dept. of Public Works | Hold Haz. Collection Day for residents to drop off materials for disposal.   | 1) Advertised collection day through newspaper and flyer distribution. 2) Held six collection events to limit possibility of illegal dumping of hazardous material. Approximately 950 cars came to drop off hazardous materials for the six events combined. | Continue to advertise and hold Hazardous Material Collection Event for households Citywide.   |
| 2-3b<br>Revised | Bulk Item Collection                            | Dept. of Public Works | Residents can call to schedule Bulk Material Collection Day of up to 5 items.  | Bulk Collection Program on-going with residents able to call to schedule pickups. Approximately 382 tons bulk material landfilled.   | Continue to make program available to residents if funding allows.  |
| 2-3c<br>Revised | Curbside Collection                             | Dept. of Public Works | Residential recycling is to be picked-up every other week year round. Recycling is required per Springfield ordinance. | Single stream program launched. Program on-going: 6, 652 tons recycled.  | Continue to make program available to residents.  |
| 2-3d<br>Revised | Rechargeable Battery Recycling                  | Dept. of Public Works | Maintain residential drop-off of rechargeable batteries at DPW.  | Collection program on-going.   | Continue to make program available to residents.  |
| 2-3e<br>Revised | Leaf and Yard Waste Collection                  | Dept. of Public Works | Maintain current leaf and brush collection program. Compost material is made available to residents.                   | Collection and composting program on-going at DPW yard and landfill. Residents can also drop off brush waste directly at the landfill. 9,079 tons of yard waste composted.   | Continue to make program available to residents.  |

### 3. Illicit Discharge Detection and Elimination

| BMP ID #        | BMP Description   | Responsible Dept./Person Name                                   | Measurable Goal(s)  | Progress on Goal(s) -- Permit Year 5  | Planned Activities -- Future Permit  |
|-----------------|---|---|---|---|--|
| 3-1a<br>Revised | Sewer Book Maintained   | Dept. of Public Works   | Maintain existing drainage system map.  | <ol style="list-style-type: none"> <li>Existing infrastructure (sewer and drainage) book is updated annually.</li> <li>Developers are aware that the City plans to require AutoCAD files of design plans, but these files are not yet required</li> </ol>   | <ol style="list-style-type: none"> <li>Continue update on sewer and drainage system book as new system are constructed/upgraded.</li> <li>Require all new developers to provide AutoCAD files of design plans to aid in update.</li> </ol>   |
| 3-1b<br>Revised | Sewer GIS Available   | Dept. of Public Works, Water & Sewer Commission                 | GIS mapping of infrastructure.  | <ol style="list-style-type: none"> <li>On-going establishment/update of GIS system with new/replacement infrastructure.</li> <li>Updates made to ~15% of sewer system including: GPS data point collection, field verification, geospatial adjustments, digital archive linkage, video inspection linkage, and condition assessment</li> <li>Development of Risk Model for infrastructure completed.</li> </ol> | <ol style="list-style-type: none"> <li>Continue update of GIS system as systems are constructed or upgraded.</li> <li>Require all new developers to provide AutoCAD files of design plans to aid in update.</li> <li>To implement standardized data collection methods and to develop a sewer atlas for operations crews.</li> </ol> |
| 3-2a<br>Revised | Illicit Discharge Ordinance Development<br>— Evaluate Existing Illicit Discharge Ordinances | Dept. of Public Works, Planning Dept., Water & Sewer Commission | Review current City ordinance. Obtain and review ordinances from other communities. | Sample ordinances reviewed.   | Task completed.  |
| 3-2b<br>Revised | Illicit Discharge Ordinance Development<br>— Develop Draft Ordinance                        | Dept. of Public Works, Planning Dept., Water & Sewer Commission | Draft new wording. Educate public, officials, and the private sector.               | Draft ordinance has been developed based on template from MA DEP. Ordinance has been reviewed and approved by Stormwater Steering Committee.  | Task completed   |
| 3-2c            | Illicit Discharge Ordinance Development<br>— Draft Available For Comment                    | Dept. of Public Works, Planning Dept., Water & Sewer Commission | Float new ordinance for one-year comment period. Continue education.                | Ordinance currently slated to be presented to City Council for formal approval.   | Educate stakeholders with concerns/questions about ordinance.  |

|         |   |   |   |  |  |  |
|---------|---|---|---|--|--|--|
| Revised |   |   |   |  |  |  |
| 3-2d    | Illicit Discharge Ordinance Development — Passage Process | Dept. of Public Works, Planning Dept., Water & Sewer Commission | Attempt to pass ordinance, continue comment period and educate more if necessary. | Delayed pending completion of items 3-2c.  | Attempt to pass new ordinance when 3-2c are completed. Currently slated to be heard by City Council                                      |  |
| Revised |   |   |   |  |  |  |
| 3-3a    | Determine Priority Areas                                  | Dept. of Public Works, Water & Sewer Commission                 | Determine priority areas. Inspect outlets at two water bodies per year.           | All CSO Outlets inspected twice a week.<br>~\$12,000,000 spent on CSO separation: 15,000 feet of new pipe, 90 manholes and 80 deep sump catch basins installed | 1) Establish priorities for 2010-2011 as finances allow.<br>2) Establish and coordinate volunteer inspection programs as finances allow. |  |
| Revised |   |   |   |  |  |  |
| 3-3b    | Inspections   | Dept. of Public Works   | Visually screen outfalls.   | Inspections continued — thirteen (13) outfalls inspected.  | Establish inspection criteria and program for implementation.  |  |
| Revised |   |   |   |  |  |  |
| 3-3c    | Investigation   | Dept. of Public Works, Water and Sewer Commission               | Trace the source of illicit discharges.   | Ongoing formal investigation program in place. 0 Illicit service connections identified by Water and Sewer Commission.   | Continue program.  |  |
| Revised |   |   |   |  |  |  |
| 3-3d    | Correct any problems found                                | Dept. of Public Works, Water & Sewer Commission                 | Remove source of illicit discharges.  | 0 Illicit service connections located.   | Continue program of inspection, investigation, and correction.   |  |
| Revised |   |   |   |  |  |  |

#### 4. Construction Site Stormwater Runoff Control

| BMP ID #        | BMP Description  | Responsible Dept./Person Name   | Measurable Goal(s)   | Progress on Goal(s) - Permit Year 5   | Planned Activities - Future Permit                       |
|-----------------|--|---|--|---|--|
| 4-1<br>Revised  | Wetland Protection   | Conservation Commission   | Review existing regulations which require compliance with stormwater policy within wetland buffer.   | 1) On-going pre-construction review of new projects for permit issuance and compliance with wetland and SWM performance standards.<br>2) City construction site plan requirements are available on the web.<br>3) MA Wetland Protection Act stormwater management standards enforced by Conservation Commission.<br>Sample ordinances reviewed. | On-going review of new projects.                         |
| 4-2a<br>Revised | Erosion and Sediment Control Ordinance - Evaluate Existing Plans     | Conservation Commission, Law Dept., Dept. of Public Works, Planning Dept. | Review sample regulations for other communities.<br>Initiate discussions for ordinance establishment | Draft ordinance has been developed based on template from MA DEP and is under review by Stormwater Steering Committee. This will be incorporated into one over arching ordinance that includes post-construction runoff requirements.<br>Currently being reviewed and commented on.   | Finish draft, schedule a time to present to City Council |
| 4-2b<br>Revised | Erosion and Sediment Control Ordinance - Develop Draft Ordinance     | Conservation Commission, Law Dept., Dept. of Public Works, Planning Dept. | Draft new wording.<br>Educate public, officials, and the private sector.                             | Float new ordinance for one-year comment period.<br>Continue education.   | Float new ordinance for comment when 4-2b is completed.  |
| 4-2c<br>Revised | Erosion and Sediment Control Ordinance - Draft Available For Comment | Conservation Commission, Law Dept., Dept. of Public Works, Planning Dept. | Attempt to pass ordinance, continue comment period and educate more if necessary.                    | Attempt to pass new ordinance when 4-2b and 4-2c are completed.   |  |
| 4-2d            | Erosion and Sediment Control Ordinance - Passage Process             | Conservation Commission, Law Dept., Dept. of Public Works, Planning Dept. |  |   |  |



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

| BMP ID # | BMP Description  | Responsible Dept./Person Name                                  | Measurable Goal(s)   | Progress on Goal(s) – Permit Year 5   | Planned Activities – Future Permit   |
|----------|--|--|--|---|--|
| 5-1      | Wetland Protection   | Conservation Commission, Dept. of Public Works                 | Review existing regulations which require compliance with stormwater policy within wetland buffer. | Ongoing pre-construction review of new projects for permit issuance and compliance with wetland and SWM performance standards.<br>Encouraged Low Impact design of stormwater infrastructure in new projects.<br>Springfield Water and Sewer installed 8 leaching/ground water recharge basins as part of their projects.<br><br>Many parks projects completed to remedy erosion problems. | Continue discussion of Interdepartmental Site Plan Review Committee.   |
| Revised  |  |  |  |   |  |
| 5-2a     | Site Plan Review Process   | Conservation Commission, Dept. of Public Works, Planning Dept  | Require TSS removal for groundwater recharge. Attenuate peak flows.                                | 1) Continued requiring infiltration and TSS removal for new developments.<br>2) SWMS maintenance plan for non-wetland sites in ongoing development.<br>3) New public draft of zoning ordinances is available (funded by \$90,000 grant noted in previous permit years). Zoning ordinance controls site plan reviews.  | 1) Continue enforcing design requirements.<br>2) Establish SWMS maintenance plan for non-wetland sites.<br>3) Complete development of BMP implementation database.<br>4) Continue zoning ordinance revision process. |
| Revised  |  |  |  |   |  |
| 5-2b     | Evaluate for Changes and Improvements  | Conservation Commission, Dept. of Public Works, Planning Dept. | Assess existing procedures and make improvements to process.                                       | New public draft of zoning ordinances is available (funded by \$90,000 grant noted in previous permit years).   | Continue zoning ordinance revision process.  |
| Revised  |  |  |  |   |  |
| 5-3a     | New Bylaw For Post-Construction Runoff — Evaluate Existing Site Plan Process | Conservation Commission, Dept. of Public Works, Planning Dept. | Assess need for new bylaw/ordinance regarding maintenance of BMPs.                                 | 1) Site plan review committee to be established after citywide revision of review process is complete.<br>2) Sample ordinances reviewed for use in developing draft for Springfield.  | Continue discussion of Interdepartmental Site Plan Review Committee.   |



|         |  |  |   |   |  |  |
|---------|--|--|---|---|--|--|
| Revised |  |  |   |   |  |  |
| 5-3b    | New Bylaw For Post-Construction Runoff — Develop Draft Guidelines    | Conservation Commission, Dept. of Public Works, Planning Dept. | Draft new wording. Educate public, officials, and the private sector.         | Draft ordinance has been developed based on template from MA DEP and is undergoing further revision. Draft currently incorporated into sedimentation and erosion control ordinance. One ordinance will be created to control run off in general as well as in post-construction conditions. Formally approved by Stormwater Steering Committee. | Finish draft, select appropriate strategy and timing for submittal to City Council |  |
| Revised |  |  |   |   |  |  |
| 5-3c    | New Bylaw For Post-Construction Runoff — Draft Available For Comment | Conservation Commission, Dept. of Public Works, Planning Dept. | Float new bylaw for one-year comment period. Continue education.              | Delayed pending completion of items 5-3b.   | Float new ordinance for comment when 5-3a and 5-3b are completed.                  |  |
| Revised |  |  |   |   |  |  |
| 5-3d    | New Bylaw For Post-Construction Runoff — Passage Process             | Conservation Commission, Dept. of Public Works, Planning Dept. | Attempt to pass bylaw, continue comment period and educate more if necessary. | Delayed pending completion of items 5-3a, 5-3b, and 5-3c.   | Attempt to pass new ordinance when 5-3a, 5-3b, and 5-3c are completed.             |  |
| Revised |  |  |   |   |  |  |

6. Pollution Prevention and Good Housekeeping in Municipal Operations

| BMP ID #        | BMP Description                   | Responsible Dept./Person Name      | Measurable Goal(s)   | Progress on Goal(s) -- Permit Year 5  | Planned Activities -- Future Permit   |
|-----------------|-----------------------------------|------------------------------------|--|---|---|
| 6-1a<br>Revised | Street Sweeping -- Winter Cleanup | Dept. of Public Works              | Sweep streets a minimum of once per year.                                  | 1) Seasonal operation for calendar year 2010 began in March. First round for arterial and residential routes completed by the end of July.<br>2) 2,296.58 tons of debris collected during first round.  | Continue with established practices.  |
| 6-1b<br>Revised | Street Sweeping -- Ongoing        | Dept. of Public Works              | Re-establish normal sweeping program of 6-times per year as funding allows | 1) Seasonal operation from July to November covered the entire city, with arterial streets swept three additional times.<br>2) 1,393.42 tons of debris collected.   | Continue established schedule and increased sweeping frequency as funding allows. |
| 6-1c<br>Revised | TMDL Targeted Sweeping Areas      | Dept. of Public Works              | Loon Pond, Long Pond, and Mona Lake areas will receive additional sweeping | Areas swept 5 times annually, however no tonnage specific to the particular area was recorded.  | Implement enhanced sweeping program in 2010 if budget allows.                     |
| 6-1d<br>Revised | Catch Basin Cleaning              | Dept. of Public Works              | Re-establish catch basin cleaning program as budget allow.                 | 1,040 basins cleaned, removing 163 tons of debris from the system.  | Continue cleaning schedule as needed and as budget allows.                        |
| 6-1e<br>Revised | Tree Planting                     | Dept. of Public Works, Parks Dept. | Replace ailing trees and plant new trees in public areas.                  | 1) Total of 187 trees planted over the past year.<br>2) Groundwork Springfield, a volunteer urban improvement group, is working to improve urban environments throughout the City through landscaping and site improvements.<br>3) Keep Springfield Beautiful, a local non-profit, continues work to clean streets/parcels and beautify the City. | Continue tree planting program.   |

|         |                                      |                       |   |   |   |
|---------|--------------------------------------|-----------------------|---|---|---|
| 6-1f    | Assess Drainage System in TMDL Areas | Dept. of Public Works | Assess condition of catch basins and outfalls at Long Pond, Loon Pond, and Mona Lake, and consider possible improvements. | 1) Continued catch basin inspection conducted near Mona Lake.<br>2) Catch Basin stenciling performed in TMDL areas last reporting period. | Consider further improvements to drainage systems at Long Pond, Loon Pond, and Mona Lake as feasible. |
| Revised |                                      |                       |   |   |   |

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|---------|----------------------|---|---|--|--|
| 6-2a    | Existing Practices   | Dept. of Public Works                                       | Continue existing housekeeping practices to minimize stormwater pollution.              | Practices continued. Examples include:<br>- Recycling and reduction of hazardous materials<br>- Salt storage within salt shed<br>- Maintenance of drainage system BMPs<br>- Spill prevention and cleanup procedures  | Continue existing practices.   |
| Revised |                      |   |   |  |  |
| 6-2b    | Leaf Disposal        | Dept. of Public Works, Parks Dept., School Dept.            | Leaf disposal by on-site composting.  | 1) Composting program on-going at DPW yard and landfill. Residents can also drop off yard waste directly at the landfill.<br>2) Parks Dept. continued on-site leaf/debris composting and leaf mulching to reduce waste.<br>3) 9, 079 tons of yard waste collected.   | Continue to make program available to residents.                             |
| Revised |                      |   |   |  |  |
| 6-2c    | Litter Reduction     | Dept. of Public Works, Conservation Commission              | Reduce litter by installing "No Dumping" signs, make public waste containers available. | 1) Neighborhood councils encouraged to report illegal dumping activities<br>2) "No Dumping" signage replaced when reported missing or vandalized<br>3) Police Dept. monitored target areas for dumping.<br>4) Over 42, 000 tons of wasted collected through municipal pickup program.<br>5) Utilized Clean City reporting forms to report, document, and monitor illegal dumping sites | 1) Install more signs as funding allows.<br>2) Continue enforcement efforts. |
| Revised |                      |   |   |  |  |
| 6-2d    | Roadway Improvements | Dept. of Public Works, Conservation Commission, Parks Dept. | Include stormwater BMPs in any improvement projects in sensitive areas.                 | Continued existing program, including 4-foot sumps in catch basins and requiring infiltration from new subdivisions prior to discharge into city systems.<br>2.) 80 deep sump catch basins installed by Water and Sewer.   | Continue existing program.   |
| Revised |                      |   |   |  |  |

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| 6-3     | Employee Education              | Dept. of Public Works   | Develop training on spill prevention, recycling, hazardous waste storage, site maintenance, and illicit discharges. Perform training annually, and provide training materials to Parks Dept., School Dept., Police Dept., and Fire Dept. | 1) Water and Sewer established Resource Conservation Committee that meets quarterly to train staff and hand out informational materials.<br>2) City of Springfield Stormwater Steering Committee created and meets monthly.  | Conduct a training session on stormwater protection for DPW staff.  |
| Revised |                                 |   |  |  |   |
| 6-4a    | Catch Basin Improvements        | Dept. of Public Works   | Maintain and upgrade catch basins as needed.   | Repairs made to 115 catch basins.  | On-going program to be maintained.  |
| Revised |                                 |   |  |  |   |
| 6-4b    | Outlet Inspections              | Dept. of Public Works   | Inspect system outfalls of sewers and CSOs.  | 1.) Outlets inspected as part of survey efforts. U.S. Waters inspects and monitors City combined sewer overflows (CSOs) twice per week. Thirteen (13) specific outlets inspected by DPW.<br>2.) ~\$12 million spent in CSO separation projects over last year.   | On-going program to be maintained.  |
| Revised |                                 |   |  |  |   |
| 6-4c    | Design and Construction of BMPs | Dept. of Public Works, Water & Sewer Commission, Conservation Commission, Parks Dept. | Control sediment and improve detention areas at Briarwood and Middlesex outfalls   | 1) Saint James Ave. outfall area has been topographically surveyed and submitted for design of improvements. Project awaiting funding.<br>2) Briarwood improvement construction completed with funding from Water & Sewer Commission.  | Complete St. James Ave. design and put construction program to bid in 2009-2010 if budget and timing allow.                                   |
| Revised |                                 |   |  |  |   |
| 6-4d    | Conservation Land Improvements  | Dept. of Public Works, Water & Sewer Commission, Conservation Commission              | Gather data for possible improvements to drainage or pollution prevention on conservation land.  | 1) Cleanups were conducted at 8 conservation parcels. 6 parcels targeted for upcoming Earth Day Cleanup<br>2) ATV enforcement program (to reduce harmful use of ATVs) pending staffing.<br>3) Trail system for white cedar bog still in design process.<br>4.) Logs placed at trail heads after documented ATV access. | 1) Implement ATV enforcement program if funds allow.<br>2) Identify possible improvements to conservation land and complete as budget allows. |
| Revised |                                 |   |  |  |   |

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| 6-5a<br>Revised | Acquisition of Open Space | Conservation Commission, Parks Dept. | Acquire open space through grants and donations.                                      | 1) 2 new parcels acquired by Conservation Commission through gift of land.<br>2) ~114 acres acquired through tax title takings in the City.  | Continue to acquire land through donations and grants.  |
| 6-5b<br>Revised | Park Improvements         | Conservation Commission, Parks Dept. | Improve park lands, especially improvements to stormwater collection system and BMPs. | 1) Improvement projects occurred at Johnny Applesseed Playground (heavy LID focus in design), Walsh Playground<br>2) A contaminated sediment removal project was completed successfully at Porter Lake in Forest Park.<br>3) Forest park paving programs, Organic gardening project with local Middle school | Continue improving parks as necessary as budget allows. |

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

| BMP ID #        | BMP Description         | Responsible Dept./Person Name                                  | Measurable Goal(s)   | Progress on Goal(s) - Permit Year 5   | Planned Activities - Future Permit  |
|-----------------|-------------------------|--|--|---|---|
| 1-3a<br>Revised | Stormwater Matters Talk | Dept. of Public Works, Planning Dept.                          | Presentation on stormwater will be given once per year at public event or meeting. | <p>1.) As part of CT Stormwater Committee, stormwater pollution prevention talks were given at local events throughout the year.</p> <p>2.) Talks given to several local classrooms about stormwater pollution and to water/waste water/stormwater lessons given to 5<sup>th</sup> and 7<sup>th</sup> graders at the Bondi's Island Treatment facility</p> <p>3.) Water and Sewer implemented Rain Barrel distribution in partner with EPA Watersense Program</p> <p>4) Stormwater education curriculum created and submitted to Springfield elementary and middle schools.</p> | Schedule stormwater matters talk with neighborhood councils. Provide update on past year's efforts, identify new volunteers, and establish schedule of tasks to be accomplished.  |
| 1-5b<br>Revised | Stormwater Display      | Dept. of Public Works, Conservation Commission, Planning Dept. | Establish a stormwater display at DPW one month per year.                          | <p>1) Continued display of stormwater education materials in lobby of DPW</p> <p>2) Continued participation with Pioneer Valley Planning Commission (PVPC) and Connecticut River Stormwater Committee, which develops stormwater education programs. Dues paid for 2010-2011 year.</p>  | <p>1) Continue display effort.</p> <p>2) Refine and improve display as funding allows.</p> <p>3) Continue participation with PVPC and Connecticut River Stormwater Committee in developing stormwater education programs.</p> |
| 1-5c<br>Revised | Educate Local Business  | Dept. of Public Works, Conservation Commission, Planning Dept. | Assess stormwater educational opportunities with Business and Industries.          | <p>1) Conservation Commission held pre-design meetings to educate developers on the importance and cost-effectiveness of proper stormwater maintenance. Implemented DEP's Stormwater Management</p> <p>2) "Preventing Stormwater Pollution Fact Sheets" distributed to target: Automotive, businesses and food industry.</p>  | <p>1) Con Comm to continue holding pre-design meetings with development project proponents.</p> <p>2) Continue to educate the public through multiple media.</p>  |

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| 1-5d<br>Revised | Display Materials | Dept. of Public Works, Planning Dept. | Assess existing City events for opportunities to display stormwater materials. | 1) Earth Day Cleanup 2011 identified as event for Stormwater Display.<br>2) Stormwater educational material display continued in lobby of DPW (see 1-5b) and City Hall.<br>3) Stormwater web materials created on DPW-Engineering and Conservation Commission website<br>4) PSA's run on PVTAs buses through Pioneer Valley from Feb. '11 to July '11.<br>5) PSA's placed in local malls as part of media campaign for Think Blue. | 1) Continue display effort.<br>2) Refine and improve display as funding allows. |
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| 2-3a<br>Revised | Household Hazardous Waste Collection                             | Dept. of Public Works   | Hold Haz. Collection Day for residents to drop off materials for disposal.                           | 1) Advertised collection day through newspaper and flyer distribution.<br>2) Held six collection events to limit possibility of illegal dumping of hazardous material. Approximately 950 cars came to drop off hazardous materials for the six events combined. | Continue to advertise and hold Hazardous Material Collection Event for households' city wide. |
| 2-3e<br>Revised | Leaf and Yard Waste Collection                                   | Dept. of Public Works   | Maintain current leaf and brush collection program. Compost material is made available to residents. | Collection and composting program on-going at DPW yard and landfill. Residents can also drop off brush waste directly at the landfill. 9,079 tons of yard waste composted.  | Continue to make program available to residents.  |
| 4-1<br>Revised  | Wetland Protection   | Conservation Commission   | Review existing regulations which require compliance with stormwater policy within wetland buffer.   | 1) On-going pre-construction review of new projects for permit issuance and compliance with wetland and SWM performance standards.<br>2) City construction site plan requirements are available on the web.   | On-going review of new projects.  |
| 4-2a<br>Revised | Erosion and Sediment Control Ordinance — Evaluate Existing Plans | Conservation Commission, Law Dept., Dept. of Public Works, Planning Dept. | Review sample regulations for other communities. Initiate discussions for ordinance establishment    | Sample ordinances reviewed.   | Task completed.   |



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| 4-2b<br>Revised | Erosion and Sediment Control Ordinance — Develop Draft Ordinance             | Conservation Commission, Law Dept., Dept. of Public Works, Planning Dept. | Draft new wording. Educate public, officials, and the private sector.             | Draft ordinance has been developed based on template from MA DEP and is undergoing further revision. Will be combined with post-construction requirements in one comprehensive ordinance. | Select appropriate strategy for Springfield implementation and complete draft ordinance. Select time to present to City council |
| 4-2c<br>Revised | Erosion and Sediment Control Ordinance — Draft Available For Comment         | Conservation Commission, Law Dept., Dept. of Public Works, Planning Dept. | Float new ordinance for one-year comment period. Continue education.              | Delayed pending completion of item 4-2b.  | Float new ordinance for comment when 4-2b is completed.   |
| 4-2d<br>Revised | Erosion and Sediment Control Ordinance — Passage Process                     | Conservation Commission, Law Dept., Dept. of Public Works, Planning Dept. | Attempt to pass ordinance, continue comment period and educate more if necessary. | Delayed pending completion of items 4-2b and 4-2c.  | Attempt to pass new ordinance when 4-2b and 4-2c are completed.   |
| 5-3a<br>Revised | New Bylaw For Post-Construction Runoff — Evaluate Existing Site Plan Process | Conservation Commission, Dept. of Public Works, Planning Dept.            | Assess need for new bylaw/ordinance regarding maintenance of BMPs.                | 1) Site plan review committee to be established after citywide revision of review process is complete.<br>2) Sample ordinances reviewed for use in developing draft for Springfield.      | Continue discussion of Interdepartmental Site Plan Review Committee.  |
| 5-3b<br>Revised | New Bylaw For Post-Construction Runoff — Develop Draft Guidelines            | Conservation Commission, Dept. of Public Works, Planning Dept.            | Draft new wording. Educate public, officials, and the private sector.             | Draft ordinance has been developed based on template from MA DEP and is undergoing further revision. Further action pending finalization of updated site plan review process.             | Select appropriate strategy for Springfield and create draft ordinance.   |
| 5-3c<br>Revised | New Bylaw For Post-Construction Runoff — Draft Available For Comment         | Conservation Commission, Dept. of Public Works, Planning Dept.            | Float new bylaw for one-year comment period. Continue education.                  | Delayed pending completion of items 5-3a and 5-3b.  | Float new ordinance for comment when 5-3a and 5-3b are completed.   |

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| 5-3d<br>Revised | New Bylaw For Post-Construction Runoff — Passage Process | Conservation Commission, Dept. of Public Works, Planning Dept. | Attempt to pass bylaw, continue comment period and educate more if necessary.   | Delayed pending completion of items 5-3a, 5-3b, and 5-3c.  | Attempt to pass new ordinance when 5-3a, 5-3b, and 5-3c are completed.                 |
| 6-1a<br>Revised | Street Sweeping — Winter Cleanup                         | Dept. of Public Works  | Sweep streets a minimum of once per year.   | 1) Seasonal operation for calendar year 2010 began in March. First round for arterial and residential routes completed by the end of July.<br>2) 2,296.58 tons of debris collected during first round. | Continue with established practices.   |
| 6-1b<br>Revised | Street Sweeping — Ongoing                                | Dept. of Public Works  | Re-establish normal sweeping program of 6-times per year as funding allows  | 1) Seasonal operation from July to November covered the entire city, with arterial streets swept an additional 3 times.<br>2) 1,393.42 tons collected  | Continue established schedule and increased sweeping frequency as funding allows.      |
| 6-1c<br>Revised | TMDL Targeted Sweeping Areas                             | Dept. of Public Works  | Loon, Long and Mona areas will receive additional sweeping  | Municipal budget allowed for a 5 <sup>th</sup> sweeping of these areas. No tonnage specific to these areas recorded.   | Implement enhanced sweeping program in 2010 if budget allows.                          |
| 6-1f<br>Revised | Assess Drainage System in TMDL Areas                     | Dept. of Public Works  | Assess condition of catch basins and outfalls at Long Pond, Loon Pond, and Mona Lake, and consider possible improvements. | 1) continued catch basin inspection conducted near Mona Lake.<br>2) Catch Basin stenciling performed in TMDL areas   | Consider further improvements to drainage systems at Long, Loon, and Mona as feasible. |

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|---------|--------------------|-----------------------|--|---|------------------------------|
| 6-2a    | Existing Practices | Dept. of Public Works | Continue existing housekeeping practices to minimize stormwater pollution. | Practices continued. Examples include:<br>- Recycling and reduction of hazardous materials<br>- Salt storage within salt shed<br>- Maintenance of drainage system BMPs<br>- Spill prevention and cleanup procedures | Continue existing practices. |
| Revised |                    |                       |  |   |                              |

**7b. WLA Assessment**

Ongoing stormwater management requirements such as deep sumps in catch basins and infiltration practices for new developments have helped reduce stormwater and contaminant inputs to the priority areas of Loon Pond, Long Pond, and Mona Lake. This year these areas were swept 5 separate times. Seasonal street sweeping has reached its scheduled levels for Springfield in general. Improvements to the drainage system at Loon Pond should improve the pond's overall health.

Increasing street sweeping around Loon Pond, Long Pond, and Mona Lake (as required by item 6-1c) as the City's budgetary constraints ease will be a high priority.

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

Volunteer efforts continue to be completed from a variety of organizers, including the Springfield Expeditionary School, Groundwork Springfield, Keep Springfield Beautiful and local flower and birdwatching enthusiasts. The 2010 permit year coincided once again with continued city wide cuts in both staffing and resources. Additional City staff members and more importantly funding are needed to coordinate not only volunteer efforts but structural and best practices to maximize their potential benefits. One very important development over the past year was the creation of the in-house Stormwater Steering Committee. This includes department heads from 8 different departments within the City. The City of Springfield is still devoted to completing the goals highlighted in the beginning of this report that have yet to be accomplished. Although much progress was made in the last year, a strong focus will be given to the final steps required for the passage of ordinances related to post-construction run-off, illicit discharge and erosion and sediment control. The post construction and erosion control ordinances are currently being drafted as one over arching document and will be presented to City council as soon as the schedule allows. Several of the uncompleted goals of the previous permitting period

have been accomplished over the past year including catch basin markers and additional pet waste signs.

Actions of particular importance over the recent permitting period were the \$12 million dollars the City devoted to CSO separation projects, acquiring and improving park land along the Chicopee and Connecticut Rivers, comprehensive street sweeping and catch basin cleaning, continued participation in the Pioneer Valley Planning Commission Regional Stormwater Committee, and the actions of volunteers cleaning up our streets and open space. Many additional actions were taken over the past year in terms of educating the public and local businesses about stormwater pollution. Please feel free to contact our office with additional questions or requests for copies of materials.