

**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. (9): March '11-March '12

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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:**  \_\_\_\_\_

**Printed Name:** Kevin Chaffee

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**Title:** Natural Resources Manager

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**Date:** April 30<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
3-2c	Illicit Discharge Ordinance Development — Passage Process	Attempt to pass ordinance, continue comment period and educate more if necessary.	Delayed pending scheduling before City Council
4-2c	Erosion and Sediment Control Ordinance — Passage Process	Attempt to pass ordinance, continue comment period and educate more if necessary.	Delayed pending scheduling before City Council
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 incorporated into a comprehensive bylaw including the erosion and sedimentation requirements by the In-house Stormwater Steering Committee.
5-3c	New Bylaw For Post-Construction Runoff — Passage Process	Attempt to pass bylaw, continue comment period and educate more if necessary.	Delayed pending scheduling before City Council

**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 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. 2) Door hangers, posters, Greenscapes Newsletters distributed via membership in the Connecticut River Stormwater Committee and the Think Blue Stormwater education campaign. Approximately 50 catch basin placards placed throughout city over past year.	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 Revised	Catch Basin Markers	Dept. of Public Works, Planning Dept.	One set of markers to be placed per year		Acquire funding to purchase and continue to place catch basin markers.
1-1c Revised	Stormwater Video	Dept. of Public Works, Planning Dept.	Show video on public access channel once per year.	"Think Blue" stormwater education video (30 second PSA) acquired from Pioneer Valley Planning Commission, submitted to run on public access.	2) Continue to run video on Public Access channel in accordance with requirements.
1-2 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, bill stuffers, emails and flyers. 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. 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 at Putnam and Renaissance High Schools about stormwater pollution and water/waste water/stormwater lessons given to all 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) LID trainings and workshops set up for municipal officials in June and September of 2011.</p> <p>5) Survey Monkey link distributed to municipal employees addressing stormwater matters.</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> <p>Continue to schedule stormwater talks with students.</p> <p>Continue with building inspector LID training program.</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 April 30<sup>th</sup>; 2011 included stormwater materials, tree planting, and trash cleanup. Earth Day cleanup collected 82.84 tons of trash and over 40 tons of recyclable materials kept out of landfill.</p>	<p>Continue stormwater and clean-up components of these events, Keep Springfield Beautiful will hold 2012 event on April 28<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 43,000 tons of waste collected through municipal pickup.</p> <p>4) Repair replace "No Dumping" signs as needed</p> <p>5) Parks Dept. replaced 2 "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.	1) Continued public awareness efforts for dog waste, including posters in DPW. 2) Maintained existing park dog waste collection systems. 3) Pet waste signs placed at parks, terraces and abandoned lots. 4.) Pet waste education flyers distributed to local animal shelters	1) Continue public awareness efforts on the effects of dog waste. 2) Assess need for additional dog waste collection stations within city parks. 3) Install additional signs as needed. 4) City will consider new signs when planning any work in parks.
Revised				Several placed throughout last year	1) Address any signage needs if funding allows. 2) Geese waste information is included in kiosk (1-4d). Kiosk installation planned pending funding. 3) City will consider new signs when planning any work in parks.
1-4c	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.	Geese waste information included on Kiosks. Maps can be found at Forest Parks entrance.	1) Address any signage needs if funding allows. 2) Geese waste information is included in kiosk (1-4d). Kiosk installation planned pending funding. 3) City will consider new signs when planning any work in parks.
Revised					Future kiosk installation planned pending funding.
1-4d	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. 2) 2 Kiosks installed by Parks Dept.	Future kiosk installation planned pending funding.
Revised					
1-5a	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. 2) Ran Think Blue campaign on PVRTA buses from the Springfield garage and throughout the pioneer valley. Billboards ran on the side and interior of buses from February of 2011 to January of 2012. 3) Stormwater pollution prevention posters placed at local malls. 4) BMP informational sheets distributed to businesses, automotive and food industry entities in the City. 5) 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 2011/12.
Revised					

1-5b	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 2011-2012 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>
Revised					
1-5c	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 MA DEP's Stormwater Management policy</p> <p>2) "Preventing Stormwater Pollution Fact Sheets" distributed to target Automotive, businesses and food industry.</p> <p>3) LEED certifiable construction occurred at MassMutual, Western New England University and Putnam Vocational High School.</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>
Revised					
1-5d	Display Materials	Dept. of Public Works, Planning Dept.	Assess existing City events for opportunities to display stormwater materials.	<p>1) Earth Day Cleanup 2012 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 PVTAs buses through Pioneer Valley from Feb. '11 to Jan '12.</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 Revised	Catch Basin Markers	Dept. of Public Works, Planning Dept.	One set of markers to be placed per year.	Approximately 50 placards placed near catch basins	Acquire funding to purchase and continue to place catch basin markers.
2-1b 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 4)</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 (4 year ongoing project)</li> </ol>	Continue volunteer relationship with Springfield schools or identify new volunteer opportunities.
2-1c 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) public tree data collection and management completed using iTree asset management tool.</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 continue to perform ground cover assessment as staffing and funding allows.
2-1d	Earth Day clean-up	Museum Assoc., Dept. of Public Works, Planning Dept.	Plan and conduct Earth Day events.	Combined Earth Day/Keep Springfield Beautiful event on April 30 <sup>th</sup> , 2011 included stormwater materials, tree planting, and trash cleanup. Earth Day	Continue stormwater and clean-up components of these events

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. Stormwater management bylaw slated to be presented to City Council; summer of 2012.	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.
2-2					
Revised					
2-3a	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 5,000 gallons of hazardous materials collected	Continue to advertise and hold Hazardous Material Collection Event for households Citywide.
Revised					
2-3b	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 500 tons bulk material landfilled.	Continue to make program available to residents if funding allows.
Revised					
2-3c	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: 8,000 tons recycled.	Continue to make program available to residents.
Revised					
2-3d	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.
Revised					
2-3e	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. 10,000 tons of yard waste composted.	Continue to make program available to residents.



Revised

### 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 Revised	Sewer Book Maintained	Dept. of Public Works	Maintain existing drainage system map.	1) Existing infrastructure (sewer and drainage) book is updated annually. 2) Developers are aware that the City plans to require AutoCAD files of design plans, but these files are not yet required	1) Continue update on sewer and drainage system book as new system are constructed/upgraded. 2) Require all new developers to provide AutoCAD files of design plans to aid in update.
3-1b Revised	Sewer GIS Available	Dept. of Public Works, Water & Sewer Commission	GIS mapping of infrastructure.	1) On-going establishment/update of GIS system with new/replacement infrastructure. 2) Continued: GPS data point collection, field verification, geospatial adjustments, digital archive linkage, video inspection linkage, and condition assessment 3) Development of Risk Model for infrastructure completed. 4) implemented a GIS/asset management program to track current conditions and maintenance and repair activities. 5) water quality model updated to reflect CSO separation.	1) Continue update of GIS system as systems are constructed or upgraded. 2) Require all new developers to provide AutoCAD files of design plans to aid in update. 3) To implement standardized data collection methods and to develop a sewer atlas for operations crews.
3-2a Revised	Illicit Discharge Ordinance Development — 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	Illicit Discharge Ordinance Development — 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	Task completed

Revised									
3-2c	Illicit Discharge Ordinance Development — 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. Was delayed following several devastating storms hitting the City last year. Effort revived for summer of 2012.	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. ~\$7,000,000 spent on CSO separation Camp Angelina and Riverfront park removed buildings from septic system and connected to sanitary sewer.	1) Establish priorities for 2012-2013 as finances allow. 2) Establish and coordinate volunteer inspection programs as finances allow.				
Revised									
3-3b	Inspections	Dept. of Public Works	Visually screen outfalls.	- Inspections continued — eighteen (18) outfalls inspected by DPW staff. - Total of 43 outfalls inspected for dry weather flows through internship program - Water and Sewer commission mapped 673 manholes, assessed 416 manholes, CCTV camera inspected nearly 40,000 linear feet of pipe, over 40,000 linear feet of pipe cleaned, 656 tons of grit disposed of.	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	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. - Stormwater drainage at Forest park buildings removed from sanitary system.	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 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. 2) City construction site plan requirements are available on the web. 3) MA Wetland Protection Act stormwater management standards enforced by Conservation Commission. 4) two enforcement orders issued, restoration plans implemented following action. Sample ordinances reviewed.	On-going review of new projects.
4-2a 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	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. Currently reviewed and comments received.	Task completed.
4-2b 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.		Task completed.
4-2c 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.		Task completed

4-2d	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 scheduling before City Council in summer of 2012.	Attempt to pass new ordinance when 4-2c are completed.
Revised					

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 Revised	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. Encouraged Low Impact design of stormwater infrastructure in new projects. Springfield Water and Sewer installed 8 leaching/ground water recharge basins as part of their projects.  Many parks projects completed to remedy erosion problems.	Continue discussion of Interdepartmental Site Plan Review Committee.
5-2a Revised	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. 2) SWMS maintenance plan for non-wetland sites in ongoing development. 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. 2) Establish SWMS maintenance plan for non-wetland sites. 3) Complete development of BMP implementation database. 4) Continue zoning ordinance revision process.
5-2b Revised	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.
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. 2) Sample ordinances reviewed	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.	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.	Comments received.	Schedule before City Council, summer of 2012.		
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 5-3c.	Attempt to pass new ordinance when 5-3c is 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 Revised	Street Sweeping — Winter Cleanup	Dept. of Public Works	Sweep streets a minimum of once per year.	1) Seasonal operation for calendar year 2011 began in March. First round for arterial and residential routes completed by the end of August. 2) 2,949 tons of debris collected during first round.	Continue with established practices.
6-1b Revised	Street Sweeping — Ongoing	Dept. of Public Works	Re-establish normal sweeping program of 6-times per year as funding allows	1) The tornado and October snowstorms of last year hindered the continued program. 2) approximately 600 tons of debris collected.	Continue established schedule and increased sweeping frequency as funding allows.
6-1c 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 2012 if budget allows.
6-1d Revised	Catch Basin Cleaning	Dept. of Public Works	Re-establish catch basin cleaning program as budget allow.	1,243 basins cleaned, removing 180 tons of debris from the system.	Continue cleaning schedule as needed and as budget allows.
6-1e Revised	Tree Planting	Dept. of Public Works, Parks Dept.	Replace ailing trees and plant new trees in public areas.	1) Following the devastation of the tornado and October snowstorm, an extensive tree planting effort is underway. \$175,000 have been budgeted for tree planting and \$120,000 raised in private funds for planting. 2) Groundwork Springfield, a volunteer urban improvement group, is working to improve urban environments throughout the City through landscaping and site improvements. 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. 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					

6-2a	Existing Practices	Dept. of Public Works	Continue existing housekeeping practices to minimize stormwater pollution.	Practices continued. Examples include: - Recycling and reduction of hazardous materials - Salt storage within salt shed - Maintenance of drainage system BMPs - Spill prevention and cleanup procedures - Oil/water separators at all fire stations, police department and facilities parking areas. - Stormwater reclamation system installed at new Putnum High School	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. 2) Parks Dept. continued on-site leaf/debris composting and leaf mulching to reduce waste. 3) 10,000 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 2) "No Dumping" signage replaced when reported missing or vandalized 3) Police Dept. monitored target areas for dumping. 4) Over 43, 000 tons of wasted collected through municipal pickup program. 5) Utilized Clean City reporting forms to report, document, and monitor illegal dumping sites	1) Install more signs as funding allows. 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. 2) deep sump catch basins installed by Water and Sewer. 3) 90 catch basins were repaired/improved	Continue existing program.
Revised					

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. 2) City of Springfield Stormwater Steering Committee created and meets monthly. 3) Water and Sewer holds extensive trainings for all employees. 4) Facilities employees trained to use non-toxic cleaning supplies and have an integrated pest management program to reduce toxics at fields and playgrounds	Conduct a training session on stormwater protection for DPW staff.
	Revised			Repairs made to 90 catch basins.	On-going program to be maintained.
6-4a	Catch Basin Improvements	Dept. of Public Works	Maintain and upgrade catch basins as needed.		
	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. Eighteen (18) specific outlets inspected by DPW. 2) a total of 43 outfalls have been inspected via internship program in planning dept. 3.) ~\$7 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. 2) Briarwood improvement construction completed with funding from Water & Sewer Commission.	Complete St. James Ave. design and put construction program to bid in 2012-2013 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 17 conservation parcels. 8 parcels targeted for upcoming Earth Day Cleanup 2) ATV enforcement program (to reduce harmful use of ATVs) pending staffing.	1) Implement ATV enforcement program if funds allow. 2) Identify possible improvements to

Revised						
6-5a	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. 2) ~114 acres acquired through tax title takings in the City. 3) 18 acres of parkland gifted to city by Solutia, Inc.	Continue to acquire land through donations and grants.	
Revised						
6-5b	Park Improvements	Conservation Commission, Parks Dept.	Improve park lands, especially improvements to stormwater collection system and BMPs.	1) Improvement projects occurred at Johnny Appleseed Playground (heavy LID focus in design), Walsh Playground, \$1,000,000 awarded for improvements at Hubbard Park, most park improvement projects utilize BMPs. 2) A contaminated sediment removal project was completed successfully at Porter Lake in Forest Park.	Continue improving parks as necessary as budget allows.	
Revised						

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 Revised	Stormwater Matters Talk	Dept. of Public Works, Planning Dept.	Presentation on stormwater will be given once per year at public event or meeting.	1.) As part of CT Stormwater Committee, stormwater pollution prevention talks were given at local events throughout the year. 2.) Talks given at Putnam and Renaissance High Schools about stormwater pollution and water/waste water/stormwater lessons given to all 5 <sup>th</sup> and 7 <sup>th</sup> graders at the Bondi's Island Treatment facility 3.) Water and Sewer implemented Rain Barrel distribution in partner with EPA Watersense Program 4) LID trainings and workshops set up for municipal officials in June and September of 2011. 5) Survey Monkey link distributed to municipal employees addressing stormwater matters.	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 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 2) Continued participation with Pioneer Valley Planning Commission (PVPC) and Connecticut River Stormwater Committee, which develops stormwater education programs. Dues paid for 2011-2012 year. 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 2) "Preventing Stormwater Pollution	1) Continue display effort. 2) Refine and improve display as funding allows. 3) Continue participation with PVPC and Connecticut River Stormwater Committee in developing stormwater education programs. 1) Con Comm to continue holding pre-design meetings with development project proponents. 2) Continue to educate the public through multiple media.
1-5c	Educate Local Business	Dept. of Public Works, Conservation Commission, Planning Dept.	Assess stormwater educational opportunities with Business and Industries.		

Revised					
1-5d	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. 2) Stormwater educational material display continued in lobby of DPW (see 1-5b) and City Hall. 3) Stormwater web materials created on DPW-Engineering and Conservation Commission website 4) PSA's run on PVTAs buses through Pioneer Valley from Feb. '11 to January '12. 5) PSA's placed in local malls as part of media campaign for Think Blue.	1) Continue display effort. 2) Refine and improve display as funding allows.
Revised					

2-3a	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 5,000 gallons hazardous materials collected for the six events combined.	Continue to advertise and hold Hazardous Material Collection Event for households' city wide.
Revised					
2-3e	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. 10,000 tons of yard waste composted.	Continue to make program available to residents.
Revised					
4-1	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. 2) City construction site plan requirements are available on the web.	On-going review of new projects.
Revised					
4-2a	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.

Revised							
4-2b	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. This is combined with post-construction requirements in one comprehensive ordinance.	Task completed		
Revised							
4-2c	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.	Drafted and comments received	Task completed		
Revised							

4-2d	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 scheduling with City Council, summer 2012.	Attempt to pass new ordinance when scheduled before council.		
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. 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. Further action pending finalization of updated site plan review process.	Select appropriate strategy for Springfield and create draft ordinance.		
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.	Combined ordinance completed and comments received	Schedule before city council, summer 2012		



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.	Attempt to pass new ordinance when 5-3c is completed.	Delayed pending completion of item 5-3c.				
Revised									
6-1a	Street Sweeping — Winter Cleanup	Dept. of Public Works	Sweep streets a minimum of once per year.	Continue with established practices.	1) Seasonal operation for calendar year 2011 began in March. First round for arterial and residential routes completed by August. 2) 2,949 tons of debris collected during first round.				
Revised									
6-1b	Street Sweeping — Ongoing	Dept. of Public Works	Re-establish normal sweeping program of 6-times per year as funding allows	Continue established schedule and increased sweeping frequency as funding allows.	1) Seasonal operation severely delayed to tornado and October snowstorm. 2) approximately 600 additional tons collected				
Revised									
6-1c	TMDL Targeted Sweeping Areas	Dept. of Public Works	Loon, Long and Mona areas will receive additional sweeping	Implement enhanced sweeping program in 2012 if budget allows.	Municipal budget allowed for a 5 <sup>th</sup> sweeping of these areas. No tonnage specific to these areas recorded.				
Revised									
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.	Consider further improvements to drainage systems at Long, Loon, and Mona as feasible.	1) continued catch basin inspection conducted near Mona Lake. 2) Catch Basin stenciling performed in TMDL areas				
Revised									

6-2a	Existing Practices	Dept. of Public Works	Continue existing housekeeping practices to minimize stormwater pollution.	Practices continued. Examples include: - Recycling and reduction of hazardous materials - Salt storage within salt shed - Maintenance of drainage system BMPs - 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**

As with the last reporting period, 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 2011 permit year coincided once again with continued city wide cuts in both staffing and resources. However, this year had additional challenges following a devastating tornado, a freak October noreaster and a tropical storm. City resources and foci prioritized cleanup and recovery. We were still able to complete many goals and actually expanded certain programs from the past. Our Stormwater Steering Committee has continued to meet with regularity. 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 drafted as one over arching document and will be presented to City council as soon as the

schedule allows. The illicit discharge ordinance is drafted and will be scheduled before City Council for the summer of 2012.

Actions of particular importance over the recent permitting period were the \$7 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.