

Planning & Economic Development

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April 29th, 2013

United States Environmental Protection Agency, Region 1
5 Post Office Square- OEP06-01
Boston, MA 02109-3912
ATTN: Ms. Glenda Velez

Re: **City of Springfield NPDES Phase II Annual Report
2012/2013- Permit Year**

Dear Ms. Velez,

The City of Springfield is pleased to submit the year 10 NPDES Small MS4 General Permit Annual Report to the Environmental Protection Agency (EPA) Region 1, with a copy to the Massachusetts Department of Environmental Protection (DEP).

As you are aware, Springfield is the third-largest city in Massachusetts, with a population of more than 150,000 residents. As discussed in previous reports, the City expends considerable resources aimed at preventing stormwater pollution within the constraints of tightened budgets and limited staff. As you will see in the following report, Springfield has completed the majority of its goals. In addition to the challenges faced with such a large land area and population it should be noted that the City continues its recovery from several devastating natural disasters that occurred in the previous reporting period.

Springfield continues to take steps forward as staffing and funding allow. Established pollution-control measures remain in effect and are improving with every year. Public education efforts have improved through both the City's membership in the Connecticut River Stormwater Committee and through specific efforts sponsored by the Mayor. Street sweeping and catch basin cleaning have been restored to regular and/or expanded schedules.

As the City anticipates the next round of new NPDES Permit requirements, we will continue to pursue the goals in the original MS4 General Permit in the remainder of 2013. Our in-house Stormwater Steering Committee has reviewed the 2013 NH draft permit and already have commenced items such as outfall monitoring and facilities drainage mapping. Present focus will give the incomplete goals from the 2003 permit the highest priority.

Noteworthy accomplishments in this report include the following:

- At the request of Mayor Sarno, a Stormwater Steering Committee continues to meet that comprises heads from every major City Department. The Committee focuses on stormwater pollution reduction and compliance with NPDES requirements.
- **\$9 Million** dollars devoted to Combine Sewer Overflow separation
- Earth Day Cleanup collected 23.6 tons of trash, 600 lbs. of recyclable metals, and 400lbs. of electronics.
- Annual refuse collection included:
 - Held 6 household hazardous waste collection days, collecting 6,000 gallons of hazardous materials.
 - Landfilled 476 tons of bulk material
 - Recycling 8,054 tons through curbside pickup
 - Composted 9,493 tons of yard waste
- Annual street cleaning included:
 - Collecting 1,443 tons of debris in first round of sweeping.
 - Collecting 325 tons over an additional three rounds of sweeping.
- School projects coordinated with Springfield Renaissance High School investigating various water quality measures.
- E. Coli testing performed weekly at Connecticut and Chicopee River sites throughout summer.
- Over **2,800 trees planted**.
- All new catch basins built with 4-foot sumps, with 83 repairs made to existing basins.
- Annual system maintenance included:
 - **2,681 catch basins cleaned**, removing 180 tons of debris.

Please feel free to contact me at (413) 787-6020 if you have any questions or require additional information.

Sincerely,



Kevin A. Chaffee
Natural Resources Manager
Office of Planning and Economic Development

cc: file, DPW, Massachusetts Department of Environmental Protection

Municipality/Organization: City of Springfield

EPA NPDES Permit Number: _____

MaDEP Transmittal Number: W- 040908

**Annual Report Number
& Reporting Period:** No. (10): March '12-March '13

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

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

Telephone #: 413-787-6020 **Email:** kchaffee@springfieldcityhall.com

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

Title: Natural Resources Manager

Date: April 29th, 2013

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. Several planned improvements are still in process and are scheduled to be completed this Spring/Summer. The Illicit Discharge and Erosion and Sedimentation Control Bylaws have been reviewed by the Stormwater Steering Committee and discussed with the Mayor of Springfield in March of 2013. Currently, these are items are undergoing final evaluation with the City of Springfield Law Department and ultimately will be presented before City Council this Spring or Summer. Beyond the bylaw component, the intent of the majority of goals has been accomplished wherever possible. 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
5-3a	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
2-1a	Place Catch Basin Markers	Continue ongoing placement of catch basin markers.	DPW understaffed and unable to devote time to new placement of placards. A template has been drafted and will be used in upcoming permit year to stencil near catch basins. A focus will be placed in TMDL watersheds.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year (10)	Planned Activities – Future Permit
1-1a Revised	Watershed Maps and Door Hangers, posters and Greenscapes publications 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 Handouts, including updated "Greenscapes Guide" 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 Revised	Catch Basin Markers	Dept. of Public Works, Planning Dept.	One set of markers to be placed per year	Budget constraints resulted in no new markers placed in permit period. A new template was developed for DPW employees to spray-paint catch basin areas in the coming summer.	Budget for employee time and continue to place/paint 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, ran on public access.	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) Hazardous waste collection days, bulk pickup days and Recycling events all promoted throughout 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 14 talks were given at local events throughout the year.</p> <p>2.) 3/14/13 talk given to 100 students at Renaissance High School about stormwater pollution. Continued water/waste water/stormwater lessons to all 5th and 7th 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.) Two (2) Building inspector trainings held in 2012 concerning BMP's and LID implementation</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 28th, 2012 included stormwater materials, tree planting, and trash cleanup. Earth Day cleanup collected 23.6 tons of trash and over 1 ton of recyclable materials kept out of landfill.</p>	<p>Continue stormwater and clean-up components of these events, Keep Springfield Beautiful will hold 2013 event on April 27th.</p>
Revised					
1-4a	No Dumping Signs	Dept. of Public Works	Place "No Dumping" signs as needed.	<p>1) Neighborhood councils alerted to report illegal dumping activities</p> <p>2) Police Dept. monitored target areas for dumping</p> <p>3) Nearly 41,000 tons of waste collected through municipal pickup.</p> <p>4) Repair replace "No Dumping" signs as needed</p> <p>5) Clean City responded to four (4) illegal dumping sites at conservation areas</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 Revised	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 and handouts in DPW/planning depts.</p> <p>2) Maintained existing park dog waste collection systems.</p> <p>3) Pet waste signs placed at parks, terraces and abandoned lots.</p> <p>4.) Pet waste education flyers distributed to local animal shelters for 2013.</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> <p>4) City will consider new signs when planning any work in parks.</p>
1-4c 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.	<p>Several damaged replaced throughout last year</p> <p>Geese waste information included on Kiosks. Maps can be found at Forest Park entrance.</p>	<p>1) Address any signage needs if funding allows.</p> <p>2) Geese waste information is included in kiosk (1-4d). New kiosk installations planned pending funding.</p> <p>3) City will consider new signs when planning any work in parks.</p>
1-4d Revised	Stormwater Kiosks	Dept. of Public Works, Planning Dept.	Place kiosks with information on water quality and pollution prevention.	<p>1) New sign at Riverfront Park addresses water quality and was installed last March.</p> <p>2) 2 Kiosks maintained by Parks Dept.</p>	<p>Future kiosk installation planned pending funding.</p>
1-5a Revised	Press Releases	Dept. of Public Works, Planning Dept.	Distribute at least one educational press release on BMPs per year.	<p>1) Television and radio spots provided through membership in Connecticut River Stormwater Committee.</p> <p>2) Ran Think Blue campaign on PVRTA buses from the Springfield garage and throughout the pioneer valley.</p> <p>Billboards ran on the side and interior of buses again this permit period.</p> <p>3) Stormwater pollution prevention posters placed at local malls.</p> <p>4) Continued BMP informational sheet distribution to businesses, automotive and food industry entities in the City.</p> <p>5) PVPC Stormwater Committee talks given at 14 events, many of which focused on BMP.</p>	<p>Continue press releases and advertisements, and promote any progress on BMPs listed above for 2013/14.</p>

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 and Planning Department 2) Continued participation with Pioneer Valley Planning Commission (PVPC) and Connecticut River Stormwater Committee, which develops stormwater education programs. Dues paid for 2012-2013 year.	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.
1-5c 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. Infiltration and level spreader BMP's implemented at two (2) sites subject to wetland jurisdiction. Implemented MA DEP's Stormwater Management policy 2) "Preventing Stormwater Pollution Fact Sheets" distributed to target Automotive, businesses and food industry.	1) Con Comm to continue holding pre-design meetings with development project proponents. 2) Continue to educate the public through multiple media.
1-5d Revised	Display Materials	Dept. of Public Works, Planning Dept.	Assess existing City events for opportunities to display stormwater materials.	1) Earth Day Cleanup 2012 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 PVT A buses in Pioneer Valley. 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.

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 10	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.	No new placards placed during permit period due to budget constraints. However a new template was created for spray painting 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.	<p>1) Ammonia, Nitrogen, Phosphorus, E.Coli, pH, Dissolved Oxygen, Macroinvertebrates, Flow, Temperature, and Chlorine level testing performed at Abbey Brook through a Renaissance school Student project (year 5)</p> <p>2) Monitoring is performed at all swimming locations by the Board of Health.</p> <p>4) Pioneer Valley Planning Commission continued E. coli monitoring of multiple points on CT river (5 year ongoing project)</p>	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.	<p>1) GIS/GPS technology used to manage tree planting and staffing.</p> <p>2) public tree data collection and management completed using iTree asset management tool.</p> <p>3) Volunteer flower organizations at Five Mile and Loon Pond have reported on species variety.</p> <p>4) Groundwork Springfield, a volunteer urban improvement group, is working to improve urban environments throughout the City through landscaping and site improvements.</p>	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 28 th , 2012 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.	1) "2003 Summary Report on Water Quality for Springfield's Lakes and Ponds" available to public. 2) City-wide Stormwater Management plan drafted by the In-house Stormwater Steering Committee. Stormwater management bylaws revived, reviewed by committee/Mayor and awaiting scheduling for City Council, Spring/Summer 2013.	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	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 bill stuffers, newspaper and flyer distribution. 2) Held six collection events to limit possibility of illegal dumping of hazardous material. Approximately 6,000 gallons of hazardous materials collected	Continue to advertise and hold Hazardous Material Collection Event for households Citywide.
2-3a					
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 476 tons bulk material landfilled.	Continue to make program available to residents if funding allows.
2-3b					
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 continued. Program on-going: 8,054 tons recycled.	Continue to make program available to residents.
2-3c					
Revised	Rechargeable Battery Recycling	Dept. of Public Works	Maintain residential drop-off of rechargeable batteries at DPW.	Continued collection program on-going.	Continue to make program available to residents.
2-3d					
Revised					

2-3e 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. 9,493 tons of yard waste composted. ~600 tons of free compost available for public in Spring 2013.	Continue to make program available to residents.
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3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 10	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. 2,586 manholes mapped. 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 and stormwater models.	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 Revised	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 Committee and supported by Mayor.	Task completed
3-2c Revised	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.	Illicit Discharge and Post-Construction SW Management Ordinances currently slated to be presented to City Council for formal approval. In Law Department for final review. Spring/Summer 2013 expected approval.	Educate stakeholders with concerns/questions about ordinance.
3-2d Revised	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
3-3a Revised	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. ~\$9,000,000 spent on CSO separation: assessment of 2,850 manholes, 643,000ft of CCTV investigation, 758,000 ft of Sewer Commission cleaning, 651,000 ft of contract cleaning, 1,327 tons of grit removal. 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.

3-3b Revised	Inspections	Dept. of Public Works	Visually screen outfalls.	<p>- Inspections continued — eighteen (30) outfalls inspected by DPW staff.</p> <p>- Water and Sewer commission inspected all CSO's twice per week, assessed 2,850 manholes, 643,000ft of CCTV investigation, 758,000 ft of Sewer Commission cleaning, 651,000 ft of contract cleaning, 1,327 tons of grit removal.</p>	Establish inspection criteria and program for implementation.
3-3c Revised	Investigation	Dept. of Public Works, Water and Sewer Commission	Trace the source of illicit discharges.	<p>Ongoing formal investigation program in place. 1 Illicit service connections identified and removed by Water and Sewer Commission.</p>	Continue program.
3-3d Revised	Correct any problems found	Dept. of Public Works, Water & Sewer Commission	Remove source of illicit discharges.	<p>0 Illicit service connections located.</p> <ul style="list-style-type: none"> - Stormwater drainage at Forest park buildings removed from sanitary system. - Failed septic system taken off line at North Riverfront Park Facility and connected to sanitary system. 	Continue program of inspection, investigation, and correction.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 10	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. Two (2) projects implemented BMP in wetland jurisdictional areas. 2) City construction site plan requirements are available on the web. DPW requiring, to maximum extent practicable, infiltration on all new projects. No net increase in runoff post construction. 3) MA Wetland Protection Act stormwater management standards enforced by Conservation Commission. 4) 3 enforcement actions taken, restoration plans implemented following action.	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	Sample ordinances reviewed.	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.	Draft ordinance has been developed based on template template from MA DEP and ordinances/bylaws adopted by other municipalities and was reviewed by Stormwater Steering Committee. This will be incorporated into one overarching ordinance that includes post-construction runoff requirements.	Task completed.

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.	Currently reviewed 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 before City Council in spring/summer of 2013.	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 10	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.	1) Ongoing pre-construction review of new projects for permit issuance and compliance with wetland and SWM performance standards. 2) Encouraged Low Impact design of stormwater infrastructure in new projects. Two (2) new projects completed using LID techniques. Putnum High school project completed using rain water reclamation system. 3) All new projects reviewed by DPW required to implement infiltration BMPs to maximum extent practicable. No net increase in runoff, post construction.	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 developed. 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. 4) Scheduled for City Council vote 5/28/13.	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 passage 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.

<p>5-3a</p> <p>Revised</p>	<p>New Bylaw For Post-Construction Runoff — Evaluate Existing Site Plan Process</p>	<p>Conservation Commission, Dept. of Public Works, Planning Dept.</p>	<p>Assess need for new bylaw/ordinance regarding maintenance of BMPs.</p>	<p>1) Site plan review committee to be established after citywide revision of review process is complete. 2) Sample ordinances reviewed</p>	<p>Continue discussion of Interdepartmental Site Plan Review Committee.</p>
<p>5-3b</p> <p>Revised</p>	<p>New Bylaw For Post-Construction Runoff — Develop Draft Guidelines</p>	<p>Conservation Commission, Dept. of Public Works, Planning Dept.</p>	<p>Draft new wording. Educate public, officials, and the private sector.</p>	<p>Draft ordinance has been developed based on template from MA DEP and ordinances/bylaws adopted by other municipalities and is undergoing final review. 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.</p>	<p>Awaiting scheduling before City Council spring/summer 2013.</p>
<p>5-3c</p> <p>Revised</p>	<p>New Bylaw For Post-Construction Runoff — Draft Available For Comment</p>	<p>Conservation Commission, Dept. of Public Works, Planning Dept.</p>	<p>Float new bylaw for one-year comment period. Continue education.</p>	<p>Comments received.</p>	<p>Schedule before City Council, summer of 2012.</p>
<p>5-3d</p> <p>Revised</p>	<p>New Bylaw For Post-Construction Runoff — Passage Process</p>	<p>Conservation Commission, Dept. of Public Works, Planning Dept.</p>	<p>Attempt to pass bylaw, continue comment period and educate more if necessary.</p>	<p>Delayed pending completion of items 5-3c.</p>	<p>Attempt to pass new ordinance when 5-3c is completed.</p>

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 10	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 2012 began in March. First round for arterial and residential routes completed by the end of August. 2) 1,443 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.	approximately 325 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 as part of regular maintenance. 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.	2,681 basins cleaned, removing 290 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 June 2011 tornado and October 2011 snowstorm, an extensive tree planting effort continues: over 2,800 trees planted. 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 and outfall inspection conducted near Mona Lake.	Consider further improvements to drainage systems at Long Pond, Loon Pond, and Mona Lake as budget priorities allow.
Revised					

6-2a	Existing Practices	Dept. of Public Works	Continue existing housekeeping practices to minimize stormwater pollution.	Practices continued. Examples include: <ul style="list-style-type: none"> - 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.	<ol style="list-style-type: none"> 1) Composting program on-going at DPW yard and landfill. Residents can also drop off yard waste directly at the landfill. ~600 Tons of compost available for public through program. 2) Parks Dept. continued on-site leaf/debris composting and leaf mulching to reduce waste. 3) 9,493 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.	<ol style="list-style-type: none"> 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. Four (4) conservation sites cleaned. 	<ol style="list-style-type: none"> 1) Install more signs as funding allows. 2) Continue enforcement efforts.
Revised					

6-2d Revised	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) 83 catch basins were repaired/improved	Continue existing program.
6-3 Revised	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 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 Repairs made to 83 catch basins.	Conduct a training session on stormwater protection for DPW staff.
6-4a Revised	Catch Basin Improvements	Dept. of Public Works	Maintain and upgrade catch basins as needed.		On-going program to be maintained.
6-4b Revised	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 (30) specific outlets inspected by DPW. 2) a total of 43 outfalls have been inspected via internship program in planning dept. 3.) ~\$9 million spent in CSO separation projects over last year.	On-going program to be maintained.

6-4c Revised	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 2013-2014 if budget and timing allow.
6-4d Revised	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. 5 parcels targeted for upcoming Earth Day Cleanup 3) Trail system for white cedar bog still in design process. 4.) Logs placed at two (2) trail heads after documented ATV access. 5) Signs installed or replaced at six (6) sites.	Identify possible improvements to conservation land and complete as budget allows.
6-5a Revised	Acquisition of Open Space	Conservation Commission, Parks Dept.	Acquire open space through grants and donations.	1) No new conservation areas acquired during permitting period. 2) No New park properties acquired during permitting period.	Continue to acquire land through donations and grants.
6-5b Revised	Park Improvements	Conservation Commission, Parks Dept.	Improve park lands, especially improvements to stormwater collection system and BMPs.	1) Improvement projects occurred at Hubbard Park, Jaime Ulloa park, Calhoun Park, and Camp Wilder. Tornado damage repairs conducted at Ruth Elizabeth park, Court Square, Johnny Applesseed Park, Leonardo da Vinci Park, Nathan Bill Park and Riverfront Park. 2) A contaminated sediment removal project was completed successfully at Riverfront Park. Significant stormwater infrastructure improvements installed at Forest Park Property (Dickinson Street)	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 10	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	<p>1.) As part of CT Stormwater Committee, stormwater pollution prevention 14 talks were given at local events throughout the year.</p> <p>2.) 3/14/13 talk given to 100 students at Renaissance High School about stormwater pollution. Continued water/waste water/stormwater lessons to all 5th and 7th 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.) Two (2) Building inspector trainings held in 2012 concerning BMP's and LID implementation</p>	<p>Schedule stormwater matters talk with neighborhood councils.</p> <p>Provide update on past year's efforts, identify new volunteers, and establish schedule of tasks to be accomplished.</p>
1-3b 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 and Planning Department</p> <p>2) Continued participation with Pioneer Valley Planning Commission (PVPC) and Connecticut River Stormwater Committee, which develops stormwater education programs. Dues paid for 2012-2013 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 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. Infiltration and level spreader BMP's implemented at two (2) sites subject to wetland jurisdiction. 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>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>
1-5d Revised	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 in Pioneer Valley.</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>
2-3a Revised	Household Hazardous Waste Collection	Dept. of Public Works	Hold Haz. Collection Day for residents to drop off materials for disposal.	<p>1) Advertised collection day through bill stuffers, newspaper and flyer distribution.</p> <p>2) Held six collection events to limit possibility of illegal dumping of hazardous material. Approximately 6,000 gallons hazardous materials collected for the six events combined.</p>	<p>Continue to advertise and hold Hazardous Material Collection Event for households' city wide.</p>
2-3e Revised	Leaf and Yard Waste Collection	Dept. of Public Works	Maintain current leaf and brush collection program. Compost material is made available to residents.	<p>Collection and composting program ongoing at DPW yard and landfill. Residents can also drop off brush waste directly at the landfill. 9,493 tons of yard waste composted.</p>	<p>Continue to make program available to residents.</p>

4-1 Revised	Wetland Protection	Conservation Commission	Review existing regulations which require compliance with stormwater policy within wetland buffer.	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	1) On-going pre-construction review of new projects for permit issuance and compliance with wetland and SWM performance standards. Two (2) projects implemented BMP in wetland jurisdictional areas. 2) City construction site plan requirements are available on the web. DPW requiring, to maximum extent practicable, infiltration on all new projects. Minimum measures include no net increase in site runoff, post construction. 3) MA Wetland Protection Act stormwater management standards enforced by Conservation Commission. 4) 3 enforcement actions taken, restoration plans implemented following action. Sample ordinances reviewed. 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.	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
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.	Drafted and comments received Task completed

4-2d 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 scheduling with City Council, summer 2013.	Pass new ordinance when scheduled before council.
5-3a 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. 2) Sample ordinances reviewed for use in developing draft for Springfield.	Continue discussion of Interdepartmental Site Plan Review Committee.
5-3b 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. 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 for Springfield and create draft ordinance.
5-3c 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.	Combined ordinance completed and comments received	Schedule before city council, summer 2012
5-3d 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 item 5-3c.	Attempt to pass new ordinance when 5-3c is completed.

6-1a	Street Sweeping — Winter Cleanup	Dept. of Public Works	Sweep streets a minimum of once per year.	1) Seasonal operation for calendar year 2012 began in March. First round for arterial and residential routes completed by the end of August. 2) 1,443 tons of debris collected during first round.	Continue with established practices.
Revised					
6-1b	Street Sweeping — Ongoing	Dept. of Public Works	Re-establish normal sweeping program of 6-times per year as funding allows	1) approximately 325 tons of debris collected.	Continue established schedule and increased sweeping frequency as funding allows.
Revised					
6-1c	TMDL Targeted Sweeping Areas	Dept. of Public Works	Loon, Long and Mona areas will receive additional sweeping	Areas swept as part of regular maintenance schedule. No tonnage specific to the particular area was recorded.	Implement enhanced sweeping program in 2012 if budget allows.
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.	1) continued catch basin inspection conducted near Mona Lake.	Consider further improvements to drainage systems at Long, Loon, and Mona 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	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. Seasonal street sweeping has reached its scheduled levels for Springfield in general, seeing an overall drop in tonnage collected this year most likely from a mild winter. Improvements to the drainage system at Loon Pond should improve the pond's overall health and will be implemented when budget constraints allow.

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 most years of reporting, volunteer efforts continue to be completed from a variety of organizers including the Springfield Renaissance School, Groundwork Springfield, Keep Springfield Beautiful and local flower and bird watching enthusiasts. Although considerable effort was expended last year focusing on stormwater pollution prevention, work remains challenging due to limited staff and budget resources. However, we were still able to complete many goals and were able to expand certain programs. Last year's additional burdens of devastating storms lead to increased focus on stormwater and cleanup this year. Highlights including nearly 3,000 trees planted and 23 tons of trash/debris picked up on the annual Earth Day cleanup. Our Stormwater Steering Committee has continued to meet with regularity and in conjunction with the mayor's office. All new construction projects, whether in wetland jurisdiction or not, are required to incorporate infiltration BMPs and result in no net increase in runoff post construction. The City of Springfield is still devoted to completing the goals highlighted in the beginning of this report that have yet to be accomplished. The Steering Committee met with the Mayor in March and intends to pass the stormwater bylaws by summer of 2013. A template has been created for future catch basin stenciling.

Actions of particular importance over the recent permitting period were: **\$9 million** dollars devoted to CSO separation projects, improving park land along the Connecticut River among elsewhere within the city, comprehensive street sweeping, over **2,600 catch basin cleaned**, 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 including educating the public and local businesses about stormwater pollution at various events in the region. Please feel free to contact our office with additional questions or requests for copies of materials.