



Received
10-30-06

P

October 26, 2006

Vanasse Hangen Brustlin, Inc.

Ref: 09955.00

Ms. Thelma Murphy
United States Environmental Protection Agency, Region I
11 Congress Street, Suite 1100
Boston, MA 02109

Re: **City of Springfield NPDES Phase II Annual Report
2005/2006 - Permit Year 3**

Dear Ms. Murphy,

On behalf of the City of Springfield, Vanasse Hangen Brustlin, Inc. (VHB) is pleased to submit the enclosed 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). The City's ongoing financial and staffing difficulties resulted in the delay of this Annual Report. We thank you for your notification of August 18, 2006 and are pleased to submit the full Annual Report at this time.

Springfield is the third-largest city in Massachusetts, with a population of more than 150,000 residents. In recent history, the City has faced a significant financial crisis, resulting in drastic measures such as wage freezes, layoffs, and reduced City services. The Finance Control Board formed in July 2004 has only begun to resolve these outstanding issues. While the City's financial situation has improved, the recovery of personnel and services will not occur quickly.

Many of the goals set forth in the City's MS4 General Permit were explicitly contingent on budget and staff. As the budget has remained severely limited, many of the Permit's goals have not been met. The City was also relying on the DEP for the development of detailed ordinances that would be available for Springfield and other Massachusetts cities to adopt. At present, the Ordinance Templates provided by DEP are not in a format or style that lends them for adoption given the regulatory requirements of City Government as it relates to Ordinance language and corresponding regulation language.

However, the City of Springfield is committed to improving stormwater management along with all of its essential services however possible. The City continues to take steps forward as staffing and funding allow. Established pollution-control measures remain in effect and are improving with every year. Street sweeping and catch basin cleaning have been restored to regular schedules. The City will make every effort to achieve compliance with the MS4 General Permit by the expiration in 2008 and expects to be able to make more progress with each year. Noteworthy accomplishments in this report include the following:

- Earth Day cleanup collected 12.4 tons of trash, 1.5 tons of recyclable metals, and 4.6 tons of bulk materials.
- Six new dog waste signs were posted in City parks.

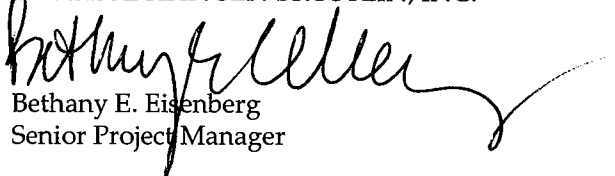
101 Walnut Street
Post Office Box 9151
Watertown, Massachusetts 02471-9151
617.924.1770 • FAX 617.924.2286
email: info@vhb.com
www.vhb.com

- A Conservation Commission staff position was advertised with the hope that additional personnel will be able to better manage and coordinate improvement efforts. Interviews for the position are currently underway.
- The Planning Department hired a wetlands consultant to assist with site plan reviews.
- A \$90,000 grant has been secured to revise the City's zoning ordinances, including the site review process.
- 5.8 additional acres of parkland were acquired along the Chicopee River.
- Four parks (totaling approximately 290 acres) were renovated.
- A total of 49 new trees were planted, using species approved by the City Forester.
- Any catch basins requiring maintenance were rebuilt with four-foot-deep sumps.
- Annual system maintenance included:
 - Repairing 119 catch basins; and
 - Cleaning 1,088 catch basins, removing 430 tons of debris.
- Annual refuse collection included:
 - Promoting six waste collection days, serving approximately 1,200 cars;
 - Landfilling 963 tons of bulk materials;
 - Recycling 5,283 tons through curbside recycling;
 - Composting 9,609 tons of yard waste; and
 - Collecting 426 tons of waste from litter barrels.
- Annual street cleaning included:
 - Collecting 2,957 tons of debris in first round (April—August); and
 - Collecting 1,316 tons of debris during August-November sweeping.

Please feel free to contact me at 617-924-1770 or Jim Roberts, Deputy Director of the Springfield Department of Public Works, at 413-787-6581 if you have any questions regarding this submittal.

Very truly yours,

VANASSE HANGEN BRUSTLIN, INC.


Bethany E. Eisenberg
Senior Project Manager

cc: Massachusetts Department of Environmental Protection
John Furman, VHB
File



Municipality/Organization: City of Springfield

EPA NPDES Permit Number:

MaDEP Transmittal Number: W- 040908

**Annual Report Number
& Reporting Period:** No. 3: March 05-March 06

NPDES PII Small MS4 General Permit Annual Report

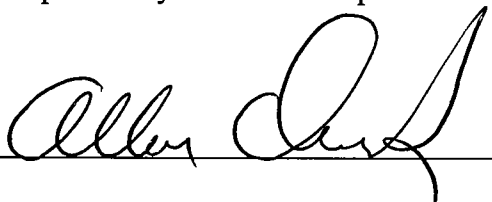
Part I. General Information

Contact Person: Allan Chwalek, P.E. **Title:** Director, Public Works

Telephone #: 413-787-6224 **Email:** N/A

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: Allan Chwalek, P.E.

Title: Director, Public Works

Date: October 23, 2006

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. In addition, many ordinance-related goals have been delayed as the ordinance templates provided by the DEP are not in a usable form. Items not completely fulfilled include the following:

BMP ID #	BMP Description	Measurable Goal(s)	Obstacle Encountered
1-1a	Watershed Maps and Door Hangers with Stormwater Pollution Prevention Tips	Make watershed maps and door hangers available at the DPW	Hangers not yet developed due to lack of staff and funds.
1-1b	Catch Basin Markers	One set of markers to be placed per year	No markers placed due to lack of staff and funds.
1-1c	Stormwater Video	Show video on public access channel once per year.	Stormwater video not yet located.
1-3a	Stormwater Matters Talk	Presentation on stormwater will be given once per year at public event or meeting	No neighborhood meetings attended this year due to lack of coordination.
1-3b	ECOS Springfield Event	Assess possibility of establishing stormwater event if resources allow.	Current fiscal situation of City of Springfield did not allow for establishment of dedicated event or Earth Day component
1-4c	Geese Wastes Signs	-Assess need for signage -Install one per year	No additional progress due to fiscal constraints.
1-4d	Stormwater Kiosks	Place kiosks at key locations at a number of water bodies with information on water quality and pollution prevention.	Kiosk available, but funding did not allow for installation.
2-1a	Catch Basin Markers	One set of markers to be placed per year	No markers placed due to lack of staff and funds (see 1-1b).
2-1b	Water Quality Monitoring	Coordinate Volunteer Water Quality Monitoring program	Volunteer monitoring not performed due to lack of staff to coordinate volunteer effort.
2-1c	Vegetative Cover Data Collection	Establish volunteer program to monitor ground cover at critical locations	1) GIS/GPS technology used to manage tree planting and staffing, 2) Ground cover assessment delayed due to lack of funding.
3-2a	Illicit Discharge Ordinance Development — Evaluate Existing Illicit Discharge Ordinances	Review current City ordinance. Obtain and review ordinances from other communities	DEP ordinance templates still not in usable form.

3-2b	Illicit Discharge Ordinance Development — Develop Draft Ordinance	Draft new wording. Educate public, officials, and the private sector.	Originally scheduled for Year 2. Delayed pending ordinance templates from DEP and completion of item 3-2a.
3-2c	Illicit Discharge Ordinance Development — Draft Available For Comment	Float new ordinance for one-year comment period. Continue education.	Originally scheduled for Year 3. Delayed pending ordinance templates from DEP and completion of items 3-2a and 3-2b.
4-2a	Erosion and Sediment Control Ordinance — Evaluate Existing Plans	Review sample regulations for other communities. Initiate discussions for ordinance establishment	DEP ordinance templates still not in usable form.
4-2b	Erosion and Sediment Control Ordinance — Develop Draft Ordinance	Draft new wording. Educate public, officials, and the private sector.	Originally scheduled for Year 2. Delayed pending ordinance templates from DEP and completion of item 4-2a.
4-2c	Erosion and Sediment Control Ordinance — Draft Available For Comment	Float new ordinance for one-year comment period. Continue education.	Originally scheduled for Year 3. Delayed pending ordinance templates from DEP and completion of items 4-2a and 4-2b.
5-2b	Evaluate for Changes and Improvements	Assess existing procedures and make improvements to process.	Personnel departures and budget constraints did not allow addressing of this goal.
5-3a	New Bylaw For Post-Construction Runoff — Evaluate Existing Site Plan Process	Assess need for new bylaw/ordinance regarding maintenance of BMPs.	DEP ordinance templates still not in usable form.
5-3b	New Bylaw For Post-Construction Runoff — Develop Draft Guidelines	Draft new wording. Educate public, officials, and the private sector.	Originally scheduled for Year 2. Delayed pending ordinance templates from DEP and completion of item 5-3a.
5-3c	New Bylaw For Post-Construction Runoff — Draft Available For Comment	Float new bylaw for one-year comment period. Continue education.	Originally scheduled for Year 3. Delayed pending ordinance templates from DEP and completion of items 5-3a and 5-3b.
6-1c	TMDL Targeted Sweeping Areas	Loon, Long and Mona areas will receive additional sweeping	Municipal budget and mechanical failures did not allow for enhancement of sweeping program.

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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
1-1a	Watershed Maps and Door Hangers with Stormwater Pollution Prevention Tips	Dept. of Public Works, Planning Dept.	Make watershed maps and door hangers available at the DPW	1) Watershed maps distributed at DPW and Planning Dept. for public use. 2) Hangers not yet developed due to lack of staff and funds.	1) Continue to make watershed maps available for public use 2) If funding allows, assess program and identify additional materials that can be created (including door hangers)
Revised					
1-1b	Catch Basin Markers	Dept. of Public Works, Planning Dept.	One set of markers to be placed per year	No markers placed due to lack of staff and funds.	Coordinate volunteer effort to place catch basin markers.
Revised					
1-1c	Stormwater Video	Dept. of Public Works, Planning Dept.	Show video on public access channel once per year.	Stormwater video not yet located.	1) Locate stormwater video. 2) Run video on Public Access channel in accordance with requirements.
Revised			Find stormwater video		
1-2	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 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
Revised					
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	No neighborhood meetings attended this year due to lack of coordination.	Schedule stormwater matters talk with neighborhood councils. Provide update on past year's efforts, confirm identity of next year's volunteers, and establish schedule of tasks to be accomplished.
Revised					

1-3b	ECOS Springfield Event	Dept. of Public Works, Conservation Commission	Assess possibility of establishing stormwater event if resources allow	1) Current fiscal situation of City of Springfield did not allow for establishment of dedicated event or Earth Day component. 2) Earth Day event still included stormwater materials and tree planting.	1) Continue to assess if 2006 funding allows for establishment of dedicated event 2) Planning for stormwater matters component for Earth Day celebration
Revised					
1-4a	No Dumping Signs	Dept. of Public Works	Place "No Dumping" signs as needed.	1) Neighborhood councils were encouraged to report illegal dumping activities 2) "No dumping" signage replaced when reported missing or vandalized; three signs installed in 2005-2006. 3) Police Dept. monitored target areas for dumping 3) Litter barrels throughout City collected 426 tons of waste	1) Continue efforts established in 2005 2) If funding allows, order and install additional "No Dumping" signs and increase monitoring in areas most frequented for dumping.
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) Six dog waste signs installed in parks. 2) Continued to develop Public Awareness Program.	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.
Revised					
1-4c	Geese Wastes Signs	Dept. of Public Works, Parks Dept., Planning Dept., Conservation Commission	Assess need for signage. Install one new park sign per year if funding allows.	No additional progress due to fiscal constraints.	1) Address any signage needs if funding allows. 2) Geese waste information will be included in kiosk (1-4d). Kiosk installation planned for 2006 if funding allows.
Revised					
1-4d	Stormwater Kiosks	Dept. of Public Works, Planning Dept.	Place kiosks at key locations at a number of water bodies with information on water quality and pollution prevention.	Kiosk available, but funding did not allow for installation.	Kiosk installation planned for 2006 if funding allows.
Revised					

1-5a	Press Releases	Dept. of Public Works, Planning Dept.	Distribute at least one educational press release on BMPs per year.	1) Maintained established news release program. 2) No significant progress on BMPs above to publicize.	Promote any progress on BMPs listed above for 2006.
Revised					
1-5b	Stormwater Display	Dept. of Public Works, Conservation Commission, Planning Dept.	Establish a stormwater display at DPW one month per year.	Continued display of stormwater education materials in lobby of DPW	1) Continue display effort 2) Refine and improve display as funding allows. 3) DPW to participate with PVPC where possible in developing Stormwater Education Programs.
Revised					
1-5c	Educate Local Business	Dept. of Public Works, Conservation Commission, Planning Dept.	Assess stormwater educational opportunities with Business and Industries.	Con Comm encouraged pre-design meetings to educate developers on the importance and cost-effectiveness of proper stormwater maintenance	1) DPW to participate with PVPC in developing Stormwater Education Programs 2) Con Comm to continue emphasizing pre-design meetings with development project proponents
Revised					
1-5d	Display Materials	Dept. of Public Works, Planning Dept.	Assess existing City events for opportunities to display stormwater materials.	1) No new events identified. 2) Stormwater educational material displayed continued in lobby of DPW (see 1-5b).	1) Continue display effort 2) Reintroduce display at City Hall 3) Refine and improve display as funding allows.
Revised					

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
2-1a	Catch Basin Markers	Dept. of Public Works, Planning Dept.	One set of markers to be placed per year.	No markers placed due to lack of staff and funds (see 1-1b).	Contact local citizen groups to coordinate volunteer effort to place catch basin markers
Revised					
2-1b	Water Quality Monitoring	Planning Dept.	Coordinate Volunteer Water Quality Monitoring program.	1) Volunteer monitoring not performed due to lack of staff to coordinate volunteer effort. 2) Staff position on ConComm advertised; interviews ongoing.	1) Select and hire ConComm staff. 2) Coordinate volunteer monitoring where possible and as funding allows.
Revised					
2-1c	Vegetative Cover Data Collection	Planning Dept., Parks Dept.	Establish volunteer program to monitor ground cover at critical locations.	1) GIS/GPS technology used to manage tree planting and staffing, 2) Ground cover assessment delayed due to lack of funding.	Perform ground cover assessment if funding allows
Revised					
2-1d	Earth Day clean-up	Museum Assoc., Dept. of Public Works, Planning Dept.	Plan and conduct Earth Day events.	1) City-wide 2005 Earth Day event (May 2, 2005). Included distribution of Stormwater Management educational information and tree planting activities. 2) 12.4 tons of trash collected, 1.5 tons of metals recycled, and 4.6 tons of bulk materials landfilled.	Continue Earth Day planned event. If funding allows, expand program to include clean-up activities and re-foresting/tree planting
Revised					
2-2	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.	Continue to provide update information on 2003 Summary Report to public.
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. Served approximately 1,200 cars.	Continue to advertise and hold Hazardous Material Collection Event for households’ city wide.
Revised					

2-3b	Bulk Item Collection	Dept. of Public Works	Residents can call to schedule Bulk Material Collection Day of up to 5-items.	1) Bulk Collection Program on-going. Residents can also drop bulk items off at landfill directly. 2) 963 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.	Recycling Collection Program on-going, 5,283 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.	1) Collection and composting program on-going at DPW yard and landfill. Residents can also drop off brush waste directly at the landfill. 2) 9,609 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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
3-1a	Sewer Book Maintained	Dept. of Public Works	Maintain existing drainage system map.	1) On-going update of existing infrastructure book 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.
Revised					
3-1b	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) Work towards final establishment of GIS mapping as funding permits	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.
Revised					
3-2a	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.	1) DEP ordinance templates still not in usable form. 2) Review of sample ordinances continuing.	1) Continue review of sample ordinances. 2) Continue discussions for improvement of existing ordinance
Revised					
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.	Originally scheduled for Year 2. Delayed pending ordinance templates from DEP and completion of item 3-2a.	Draft new ordinance when/if 3-2a is 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.	Originally scheduled for Year 3. Delayed pending ordinance templates from DEP and completion of items 3-2a and 3-2b.	Float new ordinance for comment when/if 3-2a and 3-2b are completed.
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.	None — task originally scheduled for Year 4.	Attempt to pass new ordinance when/if 3-2a, 3-2b, and 3-2c are completed.
Revised					
3-3a	Determine Priority Areas	Dept. of Public Works, Water & Sewer Commission	Determine priority areas. Inspect outlets at two water bodies per year.	Outlets checked as necessary. Seven specific outlets inspected by DPW.	1) Establish priorities for 2006 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 — seven outfalls inspected. No illicit discharges observed or reported during 2005 calendar year.	Establish inspection criteria and program for implementation.
Revised					
3-3c	Investigation	Dept. of Public Works	Trace the source of illicit discharges.	Formal investigation program in place. No illicit discharges noted during 2005 calendar year that required investigation.	Continue program.
Revised					
3-3d	Correct any problems found	Dept. of Public Works, Water & Sewer Commission	Remove source of illicit discharges.	No illicit discharges noted during 2005 calendar year that required repair.	Establish formal program for correction of illicit discharges as budgets allow.
Revised					

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
4-1	Wetland Protection	Conservation Commission	Review existing regulations which require compliance with stormwater policy within wetland buffer.	On-going pre-construction review of new projects for permit issuance and compliance with wetland and SWM performance standards.	On-going establishment of review program for 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	1) DEP ordinance templates still not in usable form. 2) Continued discussion on development of ordinance. 3) SWPPP still required for projects for in-house review.	1) Continue development of ordinance. 2) DPW and ConComm to develop standards for erosion and sedimentation controls at non-wetlands sites.
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.	Originally scheduled for Year 2. Delayed pending ordinance templates from DEP and completion of item 4-2a.	Draft new ordinance when/if 4-2a is 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.	Originally scheduled for Year 3. Delayed pending ordinance templates from DEP and completion of items 4-2a and 4-2b.	Float new ordinance for comment when/if 4-2a and 4-2b are 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.	None — task originally scheduled for Year 4.	Attempt to pass new ordinance when/if 4-2a, 4-2b, and 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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
5-1	Wetland Protection	Conservation Commission, Dept. of Public Works	Review existing regulations which require compliance with stormwater policy within wetland buffer.	Ongoing pre-construction review of new projects for permit issuance and compliance with wetland and SWM performance standards.	Continue discussion of Interdepartmental Site Plan Review Committee.
Revised					
5-2a	Site Plan Review Process	Conservation Commission, Dept. of Public Works, Planning Dept	Require TSS removal for groundwater recharge. Attenuate peak flows.	1) Continued requiring infiltration and TSS removal for new developments. 2) Planning Department has hired a wetland consultant to help with site plan reviews. 3) SWMS maintenance plan for non-wetland sites in ongoing development. 4) \$90,000 grant secured to revise zoning ordinances, including the site plan review process.	1) Continue enforcing design requirements. 2) Establish SWMS maintenance plan for non-wetland sites. 3) Complete development of BMP implementation database. 4) Evaluate site plan review process and suggest improvements for 2006.
Revised					
5-2b	Evaluate for Changes and Improvements	Conservation Commission, Dept. of Public Works, Planning Dept.	Assess existing procedures and make improvements to process.	1) Personnel departures and budget constraints did not allow addressing of this goal. 2) \$90,000 grant secured to revise zoning ordinances, including the site plan review process.	Evaluate site plan review process and suggest improvements for 2006.
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) DEP ordinance templates still not in usable form. 2) \$90,000 grant secured to revise zoning ordinances, including the site plan review process. 3) Site plan review committee to be established after citywide revision of review process is complete.	1) Continue discussion of Interdepartmental Site Plan Review Committee 2) Determine best use of funds to improve process.
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.	Originally scheduled for Year 2. Delayed pending ordinance templates from DEP and completion of item 5-3a.	Draft new ordinance when/if 5-3a is completed.
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.	Originally scheduled for Year 3. Delayed pending ordinance templates from DEP and completion of items 5-3a and 5-3b.	Float new ordinance for comment when/if 5-3a and 5-3b are completed.
Revised					
5-3d	New Bylaw For Post-Construction Runoff — Passage Process	Conservation Commission, Dept. of Public Works, Planning Dept.	Attempt to pass bylaw, continue comment period and educate more if necessary.	None — task originally scheduled for Year 4.	Attempt to pass new ordinance when/if 5-3a, 5-3b, and 5-3c are completed.
Revised					

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
6-1a	Street Sweeping — Winter Cleanup	Dept. of Public Works	Sweep streets a minimum once per year.	1) Seasonal operation for calendar year 2005 began in April. First round for arterial and residential routes completed by the middle of August. 2) 2,957 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) Seasonal operation from August to November covered the entire city. 2) 1,316 tons of debris collected.	Continue established schedule.
Revised					
6-1c	TMDL Targeted Sweeping Areas	Dept. of Public Works	Loon, Long and Mona areas will receive additional sweeping	Municipal budget and mechanical failures did not allow for enhancement of sweeping program. Areas swept twice as part of regular sweeping program.	Implement enhanced sweeping program in 2006 if budget allows.
Revised					
6-1d	Catch Basin Cleaning	Dept. of Public Works	Re-establish catch basin cleaning program as budget allow.	1,088 basins cleaned, removing 430 tons of debris from the system.	Continue cleaning schedule as needed and as budget allows.
Revised					
6-1e	Tree Planting	Dept. of Public Works, Parks Dept.	Replace ailing trees and plant new trees in public areas.	1) Tree planting program continued and coordinated with sidewalk work. 2). Total of 36 trees planted in 2005 and 13 in 2006 (species approved by City Forester).	Continue tree planting program.
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					
6-2b	Leaf Disposal	Dept. of Public Works, Parks Dept., School Dept.,	Leaf disposal by on-site composting.	Composting program on-going at DPW yard and landfill. Residents could also drop off yard waste directly at the landfill.	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; three signs installed in 2005-2006. 3) Police Dept. monitored target areas for dumping. 3) Litter barrels throughout City collected 426 tons of waste.	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' sumps in catch basins and requiring infiltration from new subdivisions prior to discharge into city systems.	Continue existing program.
Revised					
6-4a	Catch Basin Improvements	Dept. of Public Works	Improve existing catchbasins to comply with BMP requirements	1) Catch basins that require maintenance are re-built with 4-foot sump areas. 2) Hooded outlets are required from all new developers. 3) 119 catch basins repaired.	On-going program to be maintained.
Revised					

6-4b	Outlet Inspections	Dept. of Public Works	Inspect system outfalls of sewers and CSOs.	Outlets inspected as part of survey efforts. U.S. Waters inspects and monitors city outfalls on regular basis. Seven specific outlets inspected by DPW.	On-going program to be maintained.
Revised					
6-4c	Design/Construction of BMP's	Dept. of Public Works, Water & Sewer Commission, Conservation Commission, Parks Dept.	Control sediment and improve detention areas at Briarwood and Middlesex outfalls	Briarwood outfall improvements completed in early 2005; Breckwood Pond and Carlisle Brook dredging design is ongoing.	Complete design and put construction program to bid in 2006-2007 if budget allows.
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) No improvements to conservation land. 2) ATV enforcement program (to reduce harmful use of ATVs) pending.	1) Implement ATV enforcement program if funds allow. 2) Identify possible improvements to conservation land and complete as budget allows.
Revised					
6-5a	Acquisition of Open Space	Conservation Commission, Parks Dept.	Acquire open space through grants and donations.	5.8 acres of woodland acquired along the Chicopee River.	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.	Four parks — Blunt Park, Kenefick Park, Harriet Tubman Park, and Van Horn Park (~290 acres total) — renovated. Work included landscaping, paving, reorganizing access and facilities, adding trash receptacles, and upgrading site amenities.	Continue improving parks as necessary as budget allows.
Revised					

6a. Additions

6-1e	Tree Planting	Dept. of Public Works, Parks Dept.	Replace ailing trees and plant new trees in public areas.	1) Tree planting program continued and coordinated with sidewalk work. 2). Total of 36 trees planted in 2005 and 13 in 2006 (species approved by City Forester).	Continue tree planting program.
------	---------------	------------------------------------	---	---	---------------------------------

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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
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	No neighborhood meetings attended this year due to lack of coordination.	Schedule stormwater matters talk with neighborhood councils. Provide update on past year's efforts, confirm identity of next year's volunteers, and establish schedule of tasks to be accomplished.
Revised					
1-5b	Stormwater Display	Dept. of Public Works, Conservation Commission, Planning Dept.	Establish a stormwater display at DPW one month per year	Continued display of stormwater education materials in lobby of DPW	1) Continue display effort 2) Refine and improve display as funding allows. 3) DPW to participate with PVPC where possible in developing Stormwater Education Programs.
Revised					
1-5c	Educate Local Business	Dept. of Public Works, Conservation Commission, Planning Dept.	Assess stormwater educational opportunities with Business and Industries	Con Comm encouraged pre-design meetings to educate developers on the importance and cost-effectiveness of proper stormwater maintenance	1) DPW to participate with PVPC in developing Stormwater Education Programs 2) Con Comm to continue emphasizing pre-design meetings with development project proponents
Revised					
1-5d	Display Materials	Dept. of Public Works, Planning Dept.	Assess existing City events for opportunities to display stormwater materials.	1) No new events identified. 2) Stormwater educational material displayed continued in lobby of DPW (see 1-5b).	1) Continue display effort 2) Reintroduce display at City Hall 3) 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. Served approximately 1,200 cars.	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.	1) Collection and composting program on-going at DPW yard and landfill. Residents can also drop off brush waste directly at the landfill. 2) 9,609 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	On-going pre-construction review of new projects for permit issuance and compliance with wetland and SWM performance standards.	On-going establishment of review program for 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	1) DEP ordinance templates still not in usable form. 2) Continued discussion on development of ordinance. 3) SWPPP still required for projects for in-house review.	1) Continue development of ordinance. 2) DPW and ConComm to develop standards for erosion and sedimentation controls at non-wetlands sites.
Revised					
4-2b	Erosion and Sediment Control Ordinance — Evaluate Existing Plans	Conservation Commission, Law Dept., Dept. of Public Works, Planning Dept.	Draft new wording. Educate public, officials, and the private sector.	Originally scheduled for Year 2. Delayed pending ordinance templates from DEP and completion of item 4-2a.	Draft new ordinance when/if 4-2a is 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.	Originally scheduled for Year 3. Delayed pending ordinance templates from DEP and completion of items 4-2a and 4-2b.	Float new ordinance for comment when/if 4-2a and 4-2b are 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.	None — task originally scheduled for Year 4.	Attempt to pass new ordinance when/if 4-2a, 4-2b, and 4-2c are completed.
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) DEP ordinance templates still not in usable form. 2) \$90,000 grant secured to revise zoning ordinances, including the site plan review process. 3) Site plan review committee to be established after citywide revision of review process is complete.	1) Continue discussion of Interdepartmental Site Plan Review Committee 2) Determine best use of funds to improve process.
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.	Originally scheduled for Year 2. Delayed pending ordinance templates from DEP and completion of item 5-3a.	Draft new ordinance when/if 5-3a is completed.
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.	Originally scheduled for Year 3. Delayed pending ordinance templates from DEP and completion of items 5-3a and 5-3b.	Float new ordinance for comment when/if 5-3a and 5-3b are completed.
Revised					

5-3d	New Bylaw For Post-Construction Runoff — Passage Process	Conservation Commission, Dept. of Public Works, Planning Dept.	Attempt to pass bylaw, continue comment period and educate more if necessary.	None — task originally scheduled for Year 4.	Attempt to pass new ordinance when/if 5-3a, 5-3b, and 5-3c are completed.
Revised					
6-1a	Street Sweeping — Winter Cleanup	Dept. of Public Works	Sweep streets a minimum once per year.	1) Seasonal operation for calendar year 2005 began in April. First round for arterial and residential routes completed by the middle of August. 2) 2,957 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) Seasonal operation from August to November covered the entire city. 2) 1,316 tons of debris collected.	Continue established schedule.
Revised					
6-1c	TMDL Targeted Sweeping Areas	Dept. of Public Works	Loon, Long and Mona areas will receive additional sweeping	Municipal budget and mechanical failures did not allow for enhancement of sweeping program. Areas swept twice as part of regular sweeping program.	Implement enhanced sweeping program in 2006 if budget allows.
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					

7a. Additions

4-2b	Erosion and Sediment Control Ordinance — Evaluate Existing Plans	Conservation Commission, Law Dept., Dept. of Public Works, Planning Dept.	Draft new wording. Educate public, officials, and the private sector.	Originally scheduled for Year 2. Delayed pending ordinance templates from DEP and completion of item 4-2a.	Draft new ordinance when/if 4-2a is 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.	Originally scheduled for Year 3. Delayed pending ordinance templates from DEP and completion of items 4-2a and 4-2b.	Float new ordinance for comment when/if 4-2a and 4-2b are 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.	None — task originally scheduled for Year 4.	Attempt to pass new ordinance when/if 4-2a, 4-2b, and 4-2c are completed.
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.	Originally scheduled for Year 2. Delayed pending ordinance templates from DEP and completion of item 5-3a.	Draft new ordinance when/if 5-3a is completed.
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.	Originally scheduled for Year 3. Delayed pending ordinance templates from DEP and completion of items 5-3a and 5-3b.	Float new ordinance for comment when/if 5-3a and 5-3b are completed.
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.	None — task originally scheduled for Year 4.	Attempt to pass new ordinance when/if 5-3a, 5-3b, and 5-3c are completed.
Revised					

6-1c	TMDL Targeted Sweeping Areas	Dept. of Public Works	Loon, Long and Mona areas will receive additional sweeping	Municipal budget and mechanical failures did not allow for enhancement of sweeping program. Areas swept twice as part of regular sweeping program.	Implement enhanced sweeping program in 2006 if budget allows.
------	------------------------------	-----------------------	--	--	---

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

Part IV. Summary of Information Collected and Analyzed

No new water quality data was collected in the 2005 permit year. Volunteer water quality monitoring requires a staff coordinator to resume.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	N
Annual program budget/expenditures	(\$)	

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	~80
Stormwater management committee established	(y/n)	Y
Stream teams established or supported	(# or y/n)	13
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	Y
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	6
▪ community participation	(%)	N/A
▪ material collected	(tons or gal)	1,200 cars
School curricula implemented	(y/n)	

Legal/Regulatory

	In Place Prior to Phase II	Under Review	Drafted	Adopted
Regulatory Mechanism Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination	X*			
▪ Erosion & Sediment Control	X*			
▪ Post-Development Stormwater Management	X*			
Accompanying Regulation Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination				
▪ Erosion & Sediment Control	X*			
▪ Post-Development Stormwater Management	X*			

* Wetlands Protection Act and Wetlands Ordinance only

Mapping and Illicit Discharges

Outfall mapping complete	(%)	95%
Estimated or actual number of outfalls	(#)	~235
System-Wide mapping complete	(%)	50%
Mapping method(s)		
▪ Paper/Mylar	(%)	20%
▪ CADD	(%)	
▪ GIS	(%)	80%
Outfalls inspected/screened	(# or %)	10
Illicit discharges identified	(#)	0
Illicit connections removed	(#) (est. gpd)	0
% of population on sewer	(%)	99%
% of population on septic systems	(%)	1%

Construction

Number of construction starts (>1-acre)	(#)	25
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	100
Site inspections completed	(# or %)	As required
Tickets/Stop work orders issued	(# or %)	None
Fines collected	(# and \$)	N/A
Complaints/concerns received from public	(#)	Hundreds

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	90%
Site inspections completed	(# or %)	100%
Estimated volume of stormwater recharged	(gpy)	Not Determined

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	As needed
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	As needed
Total number of structures cleaned	(#)	1,088
Storm drain cleaned	(LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	430
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		landfill
Cost of screenings disposal	(\$)	0
Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	2 in 9 months
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	8-9
Qty. of sand/debris collected by sweeping	(lbs. or tons)	4,273 tons
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Landfill
Cost of sweepings disposal	(\$)	0
Vacuum street sweepers purchased/leased	(#)	0
Vacuum street sweepers specified in contracts	(y/n)	N

Operations and Maintenance (continued)

Reduction in application on public land of: (“N/A” = never used; “100%” = elimination)		
▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	N/A
▪ Pesticides	(Lbs. or %)	N/A
Anti-/De-Icing products and ratios: Depends greatly upon storm type and weather conditions	% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand	80% 1% 19%
Pre-wetting techniques utilized	(y/n)	Y
Manual control spreaders used	(y/n)	Y
Automatic or Zero-velocity spreaders used	(y/n)	N
Estimated net reduction in typical year salt application	(lbs. or %)	
Salt pile(s) covered in storage shed(s)	Yes	Y
Storage shed(s) in design or under construction	N/A	N/A