

Received  
9-7-05



THE CITY OF  
SPRINGFIELD, MASSACHUSETTS

August 31, 2005

Ms. Thelma Murphy  
U.S. Environmental Protection Agency – Region I  
JFK Federal Building  
One Congress Street  
Boston, MA 02203

RE: NPDES Phase II, Year 2 Annual Report

Dear Ms. Murphy:

Please find enclosed a copy of the City of Springfield's NPDES Phase II, Year 2 Annual Report that was submitted to Paul Hogan, Division of Watershed Management, Mass. Department of Environmental Protection, on May 23, 2005. It was our understanding, upon review of the City's records for the Year 1 submittal that the Report was to be filed with Mr. Hogan. We apologize for any inconvenience this may have caused.

Should you have any questions please do not hesitate to contact Jim Roberts or myself.

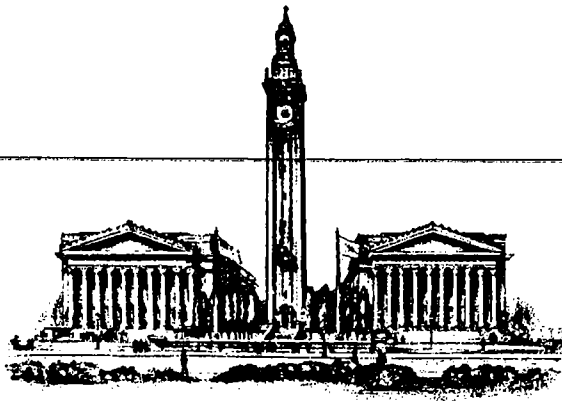
Yours truly,

*Stan Tenerowicz*

Stan Tenerowicz  
Wetland Scientist

Cc: Al Chwalek, Director, DPW  
Jim Roberts, Acting Deputy Director, DPW

Dept. Of  
Public Works



THE CITY OF  
SPRINGFIELD, MASSACHUSETTS

May 23, 2005

Mr. Paul Hogan  
Division of Watershed Management  
Department of Environmental Protection, Central Region  
627 Main Street  
Worcester, MA 01608

Re: City of Springfield  
NPDES Phase II Second Year Reporting Requirement  
Transmittal Number W 040908

Dear Mr. Hogan:

The City of Springfield submits the following information for your review and use:

- NPDES PII Small MS4 General Permit Annual Report.
- Copy of Letter to Thelma Murphy dated April 14, 2005 requesting filing extension.
- Copies of sample Stormwater System Maintenance Plans required as part of general site plan review.
- Copy of Stormwater Management System Maintenance Plan required for Wetlands Permit approval.

The above information is submitted as verification of the City's activities during 2004 towards satisfying the approved NPDES 5 Year Plan. As explained in the April extension request letter the City was delayed in preparing and filing this submittal due to numerous personnel and departmental issues experienced during 2004. We greatly appreciate your continued cooperation and understanding.

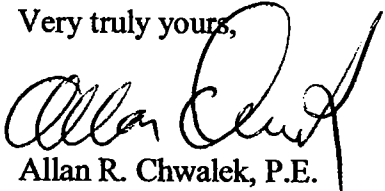
The City continues to make every effort possible to satisfy the 2004 goals listed in our General Permit Application, given the present budgetary constraints. As a result of these on going issues certain goals unfortunately were not achieved. These specific areas are identified in the Self-Assessment Section of the Annual Reporting Document. These packets of non-attainment are continually being reassessed with the intent of restoration when funding allows.

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Thank you for assistance in this matter. Please do not hesitate to call should you have questions or need additional information.

Very truly yours,



Allan R. Chwalek, P.E.  
Director, Public Works Department  
City of Springfield

Cc: Phil Dromey, Director Springfield Planning Department  
James Roberts, Springfield DPW  
Robert Stoops, Springfield Water & Sewer Commission  
Patrick Sullivan, Springfield Parks Department  
Stan Tenerowicz, Springfield Conservation Commission/DPW

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**Municipality/Organization:** City of Springfield

**EPA NPDES Permit Number:** MAR 041083

**MaDEP Transmittal Number:** W- 040908

**Annual Report Number**

**& Reporting Period:** No. 2: March 04-March 05

## NPDES PII Small MS4 General Permit Annual Report

### Part I. General Information

**Contact Person:** Allan Chwalek, P.E.

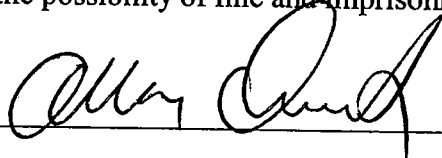
**Title:** Director, Public Works

**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:** May 23, 2005

## **Part II. Self-Assessment**

The City of Springfield has completed the required self assessment and has determined that the municipality is in compliance with all permit conditions expect for the following:

- 1.3a Budgetary constraints and temporary loss of key personnel did not allow for this activity to be implemented in Year 2.
- 1.4c Funding constraints did not allow for kiosk construction.
- 1.4d Funding constraints did not allow for kiosk construction.
- 2.1b Temporary loss of key personnel (sabbatical) did not allow for coordination of this activity.
- 6.1b Budgetary constraints provided for only a limited expansion of prior years street sweeping program and attainment of historical program efficiencies.
- 6.2b Budgetary constraints did not allow for implementation of this activity.
- 6.4b Personnel and budgetary constraints did not allow for implementation of this activity.

**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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
1-1a Revised	Map and door hangars	Department of Public Works Planning Department	On-going	1) Watersheds Maps available for public use. Distributed at Public Works & Planning Depts. 2) Funding constraints limited updating materials	1) Continue to make watershed maps available for public use. 2) If funding allows assess program and identify additional materials that can be created.
1-1b Revised	Catch basin markers	Department of Public Works Planning Department	One set of markers to be placed per year	1) Marking continued but was not completed for Watershop Pond due to personnel and budgetary constraints.	1) Work to complete Watershops Pond watershed marking. 2) Work to establish firm schedule for marking of next two watershed areas by year 2006.
1-1c Revised	Stormwater video	Department of Public Works Planning Department responsibility	Find video	1) Continued to search for quality stormwater video. None found. DPW entering into a Regional Cooperative Agreement with the Pioneer Valley Planning Commission to assist in preparation of SWMS educational materials including videos and radio and TV ads.	1) Continue development of quality stormwater video for 2005 and cooperative agreement with PVPC. 2) Run video & ads on Public Access & Commercial channels in accordance with requirements.
1-2 Revised	Promote Waste Disposal Programs	Department of Public Works	On-going	1) Advance notification of Special Waste Collection days refined and implemented. 2) DPW Solid Waste Divisions Recycling Coordinator promotes recycling and conservation of resources throughout year at dedicated civic events and functions.	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	Department of Public Works Planning Department	Presentation on stormwater will be given once per year at public event or meeting	1) Stormwater matters talk held with four (4) neighborhoods. Due to key employee sabbatical, scheduled updated volunteer effort unable to be coordinated.	1) Review scheduling of updated stormwater matters talk with each neighborhood council. Provide update on past year's efforts, confirm identity of next year's volunteers and establish schedule of tasks to be accomplished.
Revised		Planning Department responsibility			
1-3b	ECOS Springfield event	Department of Public Works Conservation Commission	Assess possibility of establishing stormwater event if resources allow	1) 2004 Funding did not allow for est. of dedicated event. 2) Continued participation with stormwater matters component 2004 Earth Day	1) City continues to be committed to the establishment of dedicated events as funding allows. 2) Planning for 2005 Earth Day Stormwater Matters component.
Revised					
1-4a	No Dumping	Department of Public Works	On-going	1) Neighborhood Councils encouraged to report illegal dumping activities when viewed. 2) "No Dumping" signage, when reported missing or vandalized were replaced as funding allowed. 3) Police Dept. installed hidden monitor in one area most frequented by illegal dumpers. 4) Litter barrels throughout City collected 590 tons of waste.	1) Continue efforts established in 2004. 2) As funding allows, order and install additional "No Dumping" signs in areas most frequented for dumping. Police Department to continue monitoring these target areas to catch and prosecute violators.
Revised					
1-4b	Dog Waste	Department of Public Works Parks Department	-Assess need for signage -Install one new park sign per year if funding allows	1) Continue to develop Public Awareness Program the proper treatment of dog waste. 2) Disposal "pooper-scoopers" to collect and properly dispose of their own dog's waste. Available but have not been distributed 3) Install dog waste station within limits of Forest Park and Visitors Information Center	1) Continue public awareness efforts on the effects of dog waste. 2) Assess need for additional dog waste collection stations within city parks. 3) Provide additional signage in needed areas.
Revised		Include Planning Department			

1-4c	Geese Wastes	Department of Public Works Parks Department	-Assess need for signage -Install one per year	1) Con Com worked with abutters to Mill Pond to develop environmentally friendly deterrents to geese control. i.e. Lawn reduction and planting of natural woody buffer along pond bank 2) Fiscal constraints have delayed City Wide implementation of this program.	1) Kiosk installation planned if funding allowed for 2005. 2) Con Com to continue to work with neighborhood groups & abutters to ponds to reduce goose friendly habitat (Lawns) 3) Seek alternative funding or volunteer resources for program implementation.
Revised		Include Planning Department, Conservation Commission			
1-4d	Stormwater Kiosk	Department of Public Works Planning Department	-Place Kiosks at key locations at a number of Water bodies	1) Funding did not allow for installation of Kiosk	1) Kiosk installation planned for 2005 if funding allows.
Revised					
1-5a	Press Releases	Department of Public Works Planning Department	On-going	1) Established news release program maintained.	1) Enhance and expand public education and news release program through participation in cooperative program with PVPC.
Revised					
1-5b	Stormwater Display	Department of Public Works Conservation Commission	Establish a stormwater display at DPW one month per year	1) Continued display of SW education material in lobby.	1) Continue display year 3. 2) Refine and improve as funding allows. 3) DPW to participate with PVPC in developing Stormwater Education Programs
Revised		Include Planning Department			



1-5c	Educate Local Business	Department of Public Works Conservation Commission Planning Department	Assess educational opportunities with Business and Industries	<p>1) Con Com and DPW participated in Greater Springfield Chamber of Commerce sponsored conference Spring 2004.</p> <p>2) Con Com through encouraging pre-design meetings, Educates Businesses to importance of proper Stormwater maintenance &amp; its cost effectiveness.</p>	<p>1) DPW to participate with PVPC in developing educational programs.</p> <p>2) Con Com to continue emphasizing pre-design meeting with project proponents.</p>
Revised					
1-5d	Display Materials	Department of Public Works Planning Department	-ongoing	<p>1) Display was continued of stormwater educational material established in lobby of DPW.</p> <p>2) Display of stormwater educational material was continued in foyer of City Hall and alternating month from DPW display.</p>	<p>1) Continue display effort for 2005.</p> <p>2) Refine and improve display as funding allows, and as developed and modified by cooperative venture with PVPC.</p>
Revised					

## 2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
2-1a Revised	Catch basin markers	Department of Public Works Planning Department	One set of markers to be placed per year	1) Work continued completing Watersheds Pond watershed markings	1) Completion of Watersheds Pond watershed mapping. 2) Schedule marking for next two watersheds by year 2006.
2-1b Revised	Water Quality Monitoring	Planning Department	Volunteer Water Quality Monitoring program o-going	1) Web site done but available data not posted due to personnel limitations. 2) Budgetary constraints did not allow for lab work to be done.	1) Will continue to try to install prepared web site to post available results. 2) Will continue to attempt to procure funds through grants, donation, etc. for lab testing.
2-1c Revised	Vegetative Cover Data Collection	Planning Department	Establish volunteer program to monitor ground cover at critical locations	1) Tree planting program continued, 40+ trees planted, over 300 to date. 2) Ground cover assessment delayed due to funding. 3) GPS technology used to located potential planting sites. 4) Distributed tree maintenance staff efficiently by strategically planning job sites through use of GPS and GIS software.	1) Continue and expand tree planting program through the use of volunteers. 2) Raise public awareness of urban eco-systems through out outreach programs.
2-1d Revised	Earth Day clean-up	Museum Assoc. Department of Public Works Planning Dept.	Earth Day planned events	1) City-Wide 2004 Earth Day event from April 17 to May 1. Included distribution of Stormwater Management education information, tree planting activities and clean-up of Open Space in coordination with Springfield Science Museum's Earth Day Committee. 2) 11.4 tons of trash collected, 1.5 tons of metals recycled and 4.6 ton of bulk materials land filled.	1) Continue Earth Day planned event. If funding allows, expand program to include reforesting/tree planting. 2) Park and Conservation Commission to continue coordinating Open Space clean-ups with volunteers.

2-2 Revised	Stormwater Management Plan Public Participation	Department of Public Works	DPW will make stormwater plan available to public	1) Continue to provide update information on 2003 report to public.	1) Update 2003 report for distribution to public.
2-3a Revised	Household Hazardous Waste Collection	Department of Public Works	Hold Haz. Collection Day for residents to drop off materials for disposal	1) DPW advertised Hazardous Collection Day in regional newspaper and flyer distribution. 2) Organized and held six (6) collection events to limit possibility of illegal dumping of hazardous material, 2610 gals. Collected. 3) Throughout year residents can schedule individual collections	Continue to advertise and hold Hazardous Material Collection Events for households' city wide.
2-3b Revised	Bulk Item Collection	Department 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) Bulk material collected 680 tons, bulk material landfilled 1230 tons.	Continue to make program available to residents if funding allows.
2-3c Revised	Curbside Collection	Department of Public Works	Residential recycling are to be picked-up every other week year round. Recycling is required per Springfield ordinance	Recycling Collection Program on-going, 5410 tons recycled.	Continue to make program available to residents.
2-3d Revised	Rechargeable Battery Recycling	Department of Public Works	Maintain residential drop-off of rechargeable batteries at DPW	Collection program on-going.	Continue to make program available to residents.
2-3e Revised	Leaf and yard waste collection	Department 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) 10,290 tons of yard waste recycled and composted.	Continue to make program available to residents.

### 3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
3-1a Revised	Sewer Book Maintained	Department of Public Works	Maintain existing drainage system map	On-going update of existing infrastructure book.	<ol style="list-style-type: none"> <li>Continue update on sewer and drainage system book as new system are constructed/updated.</li> <li>Require all new developers to provide AutoCAD files of design plans to aid in update.</li> </ol>
3-1b Revised	Sewer GIS Available	Department of Public Works Water and Sewer Commission	GIS mapping of infrastructure	<ol style="list-style-type: none"> <li>On-going establishment/update of GIS system with new/replacement infrastructure.</li> <li>Work towards final establishment of GIS mapping as funding permits.</li> </ol>	<ol style="list-style-type: none"> <li>Continue update of GIS system as new systems are constructed/upgraded.</li> <li>Require all new developers to provide AutoCAD files of design plans to aid in update.</li> </ol>
3-2a Revised	Evaluate existing Illicit discharge ordinances	Department of Public Works	Review current City ordinance. Obtain and review ordinances from other communities	Review of sample ordinances continuing.	<ol style="list-style-type: none"> <li>Continue review of sample ordinances.</li> <li>Continue discussions for improvement of existing ordinance.</li> </ol>
3-3a Revised	Determine Priorities	Department of Public Works	Determine priority areas, Inspect outlets at two water bodies per year	Budget not established for 2004 goals.	<ol style="list-style-type: none"> <li>Establish priorities for 2006 as finances allow.</li> <li>As financing allows establish coordinate volunteer inspection programs.</li> </ol>
3-3b Revised	Inspections	Department of Public Works	Visually screen outfalls	Inspection for illicit discharges continued, none found during calendar year 2004.	Establish inspection criteria and program for implementation in 2006.
3-3c Revised	Investigation	Department of Public Works	Trace the source of illicit discharges	Formal investigation program for identification and tracing of illicit discharges implemented. None found during calendar year 2004.	Continue program.

3-3d	Correct Problems found	Department of Public Works Sewer and Water Commission	Remove Source of illicit discharges.	All illicit discharges/connections are corrected as they are found	Continue program for correction of illicit discharges as budget allow.
Revised					

**3a. Additions**


#### 4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
4-1	Wetland Protection	Conservation Commission	Review existing regulations which require compliance with stormwater policy within wetland buffer	1) On going pre-construction review of new projects for permit issuance & compliance with wetland and SWM performance standards. 2) Permit review fee schedule implemented under Wetlands Ordinance.	1) On-going Review. 2) Continuing discussion on formation of Interdepartmental Site Plan Review Committee.
Revised					
4-2a	Erosion and sediment control ordinance	Conservation Commission, Law Dept., Department of Public Works	Review sample regulations for other communities. Initiate discussions for ordinance establishment	1) Continued discussions on development of Ordinance. 2) Conservation Commission assisted DPW in development SWM & Maintenance Plans for Non-Wetland site plan approvals. Sample attached.	1) Continue development of Ordinance. 2) DPW and Conservation Commission to develop standards for erosion & sedimentation control plan for non-wetland site development.
Revised					
Revised					
Revised					
Revised					
Revised					

#### 4a. Additions


**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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
5-1	Wetland Protection	Conservation Commission	Review existing regulations which require compliance with stormwater policy within wetland buffer.	1) On going pre-construction review of new projects for permit issuance & compliance with wetland and SWM performance standards. 2) Permit review fee schedule implemented under Wetlands Ordinance.	1) On-going Review. 2) Continuing discussion on formation of Interdepartmental Site Plan Review Committee.
Revised					
5-2a	Site Plan Review Process	Conservation Commission Department of Public Works Planning Dept.	Require TSS removal for groundwater recharge. Attenuate peak flows.	1) Infiltration BMP's and TSS removal for new site development required. 2) Conservation Commission coordinating with DPW to develop SWMS maintenance plans for non-wetland projects. 3) DPW initiated development of Data base for BMP implementation required as part of non-wetland site plan review	1) Continue enforcing existing policies for SWMS design. 2) Implement standards for SWMS maintenance plans for non-wetland sites. 3) Complete development of BMP implementation data base.
Revised					
5-2b	Evaluate for changes and improvements	Conservation Commission Department of Public Works Planning Dept.	Assess existing procedures and make improvements to process	1) Citywide Department re-organization did not allow addressing of this goal.	1) Develop Site Plan Review Committee. 2) Initiate assessment and development of Stormwater Utility and fees.
Revised					
5-3a	Evaluate existing site plan process	Conservation Commission Department of Public Works Planning Dept.	Assess existing procedures and make improvements to process	1) Conservation Commission coordinating with DPW to develop SWMS maintenance plans for non-wetland projects	1) Develop Site Plan Review Committee
Revised					
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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
6-1a Revised	Street sweeping winter cleanup	Department of Public Works	Sweep streets a minimum once per year	1) Street sweeping began seasonal operation for calendar year 2004 during month of March. Arterial and residential routes 1 <sup>st</sup> round of cleaning completed July 31. 2) 2882 tons of debris collected during first sweeping round.	Continue with established practices.
6-1b Revised	Street Sweeping on-going.	Department of Public Works	Re-establish normal sweeping program on 6-times per year as funding allows	1) Normal street sweeping schedule re-implemented. 2) 999 tons of debris collected August to November.	Continue established schedule.
6-1c Revised	TMDL Targeted sweeping areas	Department of Public Works	Loon, Long and Mona areas will receive additional sweeping	Municipal budget did not allow for enhancement of sweeping program in 2004.	Implement enhanced sweeping program in 2005.
6-1d Revised	Catch basin cleaning	Department of Public Works	Re-establish catchbasin cleaning program as budget allow	1) Municipal budget allowed for re-establishment of cleaning program. 2) 462 basins cleaned removing 294 tons of debris from basins.	Evaluate re-establishment of full cleaning program in 2006 if budget allows
6-2a Revised	Existing Practices	Department of Public Works	Existing practices for recycling and reduction of haz. materials	On-going programs for employees awareness and reduction of use.	Continue with current program.
6-2b	Leaf Disposal	Parks Department School Department	Leaf disposal by on-site composting	Collection and composting program ongoing at DPW yard and landfill. Residents can also drop off brush waste directly at the landfill.	Continue to make program available to residents.



Revised		Add Department of Public Works					
6-2c	Litter reduction	Department of Public Works Conservation Commission	Reduce litter by installing "No Dumping" signs, make public waste containers available		1) Financial constraints limited posting of signage. Outreach program designed to educate public. 2) Police Dept. assisted as personnel were available in enforcement and prosecution of violators. 3) Inter-department enforcement effort initiated between Code Enforcement Dept. and Conservation Commission to identify, cite and prosecute violators. 4) Chronic illegal dumping sites flagged for regular inspection.	1) As funding allows signage will be installed in problem and priority areas. 2) Conservation Commission to pursue utilization work-fare personnel to install signage 3) Continue enforcement efforts.	
Revised							
6-3	Employee Education	Department of Public Works	Provide training once per year in haz. Mat. Spill prevention, stormwater quality practices, illicit discharge elimination		1) On-going program for inter- department training to be maintained. 2) Conservation Commission staff assisted in training DPW construction crews to establish standard stormwater quality protocols.	On-going program for inter- department training to be maintained.	
Revised							
6-4a	Catch Basin Improvements	Department of Public Works	Improve existing catchbasins to comply with BMP requirements		1) 25 typical catch basins replaced with 4' sump catch basins in Water- Shops Pond watershed. 2) Repairs to 98 other catch basins throughout city completed.	On-going program to be maintained.	
Revised							
6-4b	Outlet Inspections	Department of Public Works	Inspect system outfalls		1) U.S. Waters inspects and monitors City CSO outfalls on a regular basis. 2) No Stormwater outfall inspected due to budgetary limitations during 2004.	1) On going CSO program to be maintained. 2) Re-implement stormwater outfall inspections as finances allow.	
Revised							
6-4c	Design/construction of BMP's	Department of Public Works Water and sewer commission, Conservation commission, parks dept.	Sediment and detention areas at Briarwood and Middlesex outfalls		1) Briarwood Stormwater Outlet completed, including Hudson St. Wetland Restoration. 2) Gabion wall filtration berm cleaned Magawiska Rd., Forest Park.	Breckwood Pond and Carlisle Brook dredging design is on-going.	
Revised							

6-4d Revised	Conservation Land Improvements	Department of Public Works Water and Sewer Commission, Conservation Commission	Gather data for possible improvements	1) Goal not achieved due to budget constraints. 2) Conservation Commission received donations from private citizens to implement enforcement program with Police Dept. for unauthorized ATV use.	1) Implement ATV enforcement program. 2) Assess feasibility to establish program for year 4 as financial conditions allow.
6-5a Revised	Acquisition of open space	Conservation Commission, Parks Dept.	Acquisition of open space through grants and donations	1) 22 Additional acres of Conservation Commission land acquired. 2) 12 ± Acres protected through Conservation restrictions.	1) Continue to acquire land through donation and grants. 2) Conservation Commission and Park Dept. to continue to implement 5 yr. Open Space Plan.
6-5b Revised	Park Improvements	Conservation Commission, Parks Dept.	Efforts of improve park lands through improvements to stormwater collection system and BMPs		

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

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
1-3a Revised	Stormwater Matters Talk	Department of Public Works Planning Department Planning Department responsibility	Presentation on stormwater will be given once per year at public event or meeting	1) Stormwater Matters talk held with four (4) neighborhoods. Due to key employee sabbatical, scheduled updated volunteer effort unable to be coordinated	1) Review scheduling of updated stormwater matters talk with each neighborhood council. Provide update on past year's efforts, confirm identity of next year's volunteers and establish schedule of tasks to be accomplished.
1-5a Revised	Press Releases	Department of Public Works Planning Department	On-going	1) Established news release program maintained.	1) Enhance and expand public education and news release program through participation in cooperative program with PVPC.
1-5b Revised	Stormwater Display	Department of Public Works Conservation Commission Include Planning Department	Establish a stormwater display at DPW one month per year	1) Continued display of SW education material in lobby.	1) Continue display year 3. 2) Refine and improve as funding allows. 3) DPW to participate with PVPC's in developing Stormwater Education Programs
1-5c Revised	Educate Local Business	Department of Public Works Conservation Commission Planning Department	Assess educational opportunities with Business and Industries	1) Con Com and DPW participated in Greater Springfield Chamber of Commerce sponsored conference Spring 2004. 2) Con Com through encouraging pre-design meetings, Educates Businesses to importance of proper Stormwater maintenance & its cost effectiveness.	1) DPW to participate with PVPC in developing educational programs. 2) Con Com to continue emphasizing pre-design meeting with project proponents.
1-5d	Display Materials	Department of Public Works Planning Department	On-going	1) Display was continued of stormwater educational material established in lobby of DPW. 2) Display of stormwater educational	1) Continue display effort for 2005. 2) Refine and improve display as funding allows, and as developed and modified by cooperative venture with

Revised	Household Hazardous Waste Collection	Department of Public Works	Hold Haz. Collection Day for residents to drop off materials for disposal	1) DPW advertised Hazardous Collection Day in regional newspaper and flyer distribution. 2) Organized and held six (6) collection events to limit possibility of illegal dumping of hazardous material, 2610 gals. Collected. 3) Throughout year residents can schedule individual collections	Continue to advertise and hold Hazardous Material Collection Events for households' city wide.
Revised					

**7b. WLA Assessment**

Priority has been given to implementing SWMS BMP's as part of site plan review for wetland and non-wetland area that are effective in reducing phosphorus loading (i.e infiltration systems).

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) - Permit Year 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities - Permit Year 3
2-3e Revised	Leaf and yard waste collection	Department 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) 10,290 tons of yard waste recycled and composted	Continue to make program available to residents.
4-1 Revised	Wetland Protection	Conservation Commission	Review existing regulations which require compliance with stormwater policy within wetland buffer.	Permit review fee schedule implemented under Wetlands Ordinance.	1) On-going Review. 2) Continuing discussion on formation of Interdepartmental Site Plan Review Committee.
4-2a Revised	Erosion and sediment control ordinance	Conservation Commission, Law Dept., Department of Public Works	Review sample regulations for other communities. Initiate discussions for ordinance establishment	1) Continued discussions on development of Ordinance. 2) Conservation Commission assisted DPW in development SWM & Maintenance Plans for Non-Wetland site plan approvals. Sample attached.	1) Continue development of Ordinance. 2) DPW and Conservation Commission to develop standards for erosion & sedimentation control plan for non-wetland site development.
5-2a Revised	Site Plan Review Process	Conservation Commission Department of Public Works Planning Dept.	Require TSS removal for groundwater recharge. Attenuate peak flows.	1) Infiltration BMP's and TSS removal for new site development required. 2) Conservation Commission coordinating with DPW to develop SWMS maintenance plans for non-wetland projects. 3) DPW initiated development of Data base for BMP implementation required as part of non-wetland site plan review	1) Continue enforcing existing policies for SWMS design. 2) Implement standards for SWMS maintenance plans for non-wetland sites. 3) Complete development of BMP implementation data base.

5-3a	Evaluate existing site plan process	Conservation Commission Department of Public Works Planning Dept.	Assess existing procedures and make improvements to process	1) Conservation Commission coordinating with DPW to develop SWMS maintenance plans for non-wetland projects	1) Develop Site Plan Review Committee
Revised					
6-1a	Street sweeping winter cleanup	Department of Public Works	Sweep streets a minimum once per year	1) Street sweeping began seasonal operation for calendar year 2004 during month of March. Arterial and residential routes 1 <sup>st</sup> round of cleaning completed July 31. 2) 2882 tons of debris collected during first sweeping round.	Continue with established practices
Revised					
6-1b	Street Sweeping on-going.	Department of Public Works	Re-establish normal sweeping program on 6-times per year as funding allows	1) Normal street sweeping schedule re-implemented. 2) 999 tons of debris collected August to November.	Continue established schedule
Revised					
6-2b	Existing Practices	Department of Public Works	Existing practices for recycling and reduction of haz. materials	On-going programs for employees awareness and reduction of use.	Continue with current program.
Revised					

**7a. Additions**


**7b. WLA Assessment**

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

Due to budget limitations and the sabbatical leave of a key employee there is no data to report this year.  
**Do we have any volunteer collected data to include?**

**Part V. Program Outputs & Accomplishments (OPTIONAL)**

**Programmatic**

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

**Education, Involvement, and Training**

Estimated number of residents reached by education program(s)	(# or %)	600
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)	2610 gal.
School curricula implemented	(y/n)	

**Legal/Regulatory**

In Place  
Prior to  
Phase II

Under  
Review

Drafted

Adopted

Regulatory Mechanism Status (indicate with "X")	In Place Prior to Phase II	Under Review	Drafted	Adopted
▪ 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	(%)			90%
Estimated or actual number of outfalls	(#)			235
System-Wide mapping complete	(%)			50%
Mapping method(s)				
▪ Paper/Mylar	(%)			
▪ CADD	(%)			
▪ GIS	(%)			100%
Outfalls inspected/screened	(# or %)			20%
Illicit discharges identified	(#)			1
Illicit connections removed	(#)			1
	(est. gpd)			
% of population on sewer	(%)			99%
% of population on septic systems	(%)			1%



**Construction**

Number of construction starts (>1-acre)	(#)	8
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 %)	4
Fines collected	(# and \$)	N/A
Complaints/concerns received from public	(#)	3

**Post-Development Stormwater Management**

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	50%
Site inspections completed	(# or %)	Not Available
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	(#)	462
Storm drain cleaned	(LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	294 Tons
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)	
Qty. of sand/debris collected by sweeping - Total for the Year:	(lbs. or tons)	999 tons
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Landfill
Cost of sweepings disposal	(\$)	
Vacuum street sweepers purchased/leased	(#)	0
Vacuum street sweepers specified in contracts	(y/n)	N

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)	
▪ Fertilizers	(lbs. or %)
▪ Herbicides	(lbs. or %)
▪ Pesticides	(lbs. or %)

Anti-/De-Icing products and ratios	% NaCl	0
	% CaCl <sub>2</sub>	80%
	% MgCl <sub>2</sub>	1%
	% CMA	
	% Kac	
	% KCl	
	% Sand	19%
Pre-wetting techniques utilized	(y/n)	N
Manual control spreaders used	(y/n)	N
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

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**Standard Operation/Maintenance Plan for  
Stormwater Management System w/o Detention Basins**

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**Construction Phase:**

The BMP's associated with this project will be owned by \_\_\_\_\_, who will be responsible for construction, inspection, operation and maintenance.

- 1) The contractor is to install and maintain drainage facilities as shown on plan dated
  - 2) Prior to construction, all erosion control devices shown on the approved plan are to be installed. To prevent silt intrusion into the recharge/infiltration system during construction, the contractor is to install and maintain inlet protection at all catch basins, and set hay bales and silt fencing at all slopes which may erode in the direction of any open drainage facilities or wetlands. Such preventive measures are to be maintained throughout the construction process.
  - 3) All construction of drainage facilities are to be inspected by inspectors from the City of Springfield and design engineer to verify conformance to the design plan.
  - 4) The sequence of drainage construction shall be as follows:
    - a) Provide inlet protection for all nearby grates which may be impacted.
    - b) Clear, grub, excavate areas for infiltration and detention systems.
    - c) Install infiltration and detention systems.
    - d) Trench and install pipes, catch basins, manholes and *Stormceptor* unit.
  - 5) Erosion controls are to be inspected and maintained on a daily basis. Upon discovery of silt build-up in any catch basin sumps, *Stormceptor* unit, infiltration trenches or any other structures, they are to be cleaned.
  - 6) All exposed soils shall be immediately stabilized with a layer of mulch hay.
  - 7) Upon installation of catch basins, inlet protection – as described on record site plan-shall be installed and maintained until ready for paving.
  - 8) Prior to construction of impervious areas, all drainage structures and pipes shall be installed and inspected for proper function. During construction of other site features, all drainage facilities shall be inspected on a daily basis and cleaned/repared immediately upon discovery of sediment build-up or damage.
  - 9) After paving is installed, it shall be swept clean on a monthly basis.
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## **Post-Development Phase**

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The owner/occupant is to be responsible for maintenance of all drainage structures in the project – including roof drains, drain pipes, *Stormceptor* and detention system. The future owner is expected to be \_\_\_\_\_, who will be responsible for compliance with the Plan.

Regular maintenance is to include the following:

- 1) Inspection of all drainage facilities (catch basins, detention system, *Stormceptor*) every three months. During these inspections, the inspector shall look for evidence of the following: structural damage, silt accumulation (near inlet inverts on catch basins and *Stormceptor*), and improper function.
  - 2) After inspection, if any of the above conditions exist, the inspector shall notify the owner who shall immediately arrange for all necessary repairs and sediment removal.
  - 3) The parking area is to be swept clean once monthly from May through October and otherwise as needed (ie. visually noticeable debris build-up).
  - 4) *Stormceptor* unit is to be inspected and maintained as required by the manufacturer (see details on record plan): Inspection every three months. Removal of oil, debris and sediment is to be done after all inspections when such is noticed.
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- 5) All graded slopes shall be inspected every spring for erosion. Upon discovery of any failure (ie. erosion) loam and see shall be put in place and nurtured.
  - 6) During the winter months, all snow is to be stored such that snowmelt is controlled within the paved area and enters the stormwater treatment system. When snow accumulation is such that it may migrate toward the wetland, it is to be removed from the site by truck.
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*Standard-Maintenance Plan*

*For*

*Stormwater Management System with Detention Basins*

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1. To avoid the unnecessary introduction of sediment into the infiltration component of the system, all catch basins will be covered with geo-textile fabric until the pavement binder coat is applied to the road surface.
  2. Subsequent to the system's installation and until all construction activity is completed; the paved surfaces will be cleaned of debris on a weekly or as needed basis by the developer.
  3. During the active construction period, all catch basins and the existing detention basin will be monitored on a weekly basis for the accumulation of sediment or debris with may interfere with their design function ability. Catch basin shall be cleaned when a maximum of 6 inches of sediment has accumulated within the basin sumps. Any debris, i.e. boards, branches, floatables or other paper products will be removed immediately when drainage orifices are threatened by blockage. Accumulated sediment within the detention basin will be removed when visible deposits exceed four (4) inches.
  4. Upon completion of all construction activity, each catch basin and the detention basin will be monitored and/or cleaned of any accumulated street debris or sediment under the following maintenance schedule:
    - a. For the first two (2) years following completion of the construction, inspections of the basins will be undertaken in January, March, and September. Records will be maintained and submitted to the Conservation Commission on a yearly basis. Sediment will be removed from a basin when a maximum of six (6) inches of accumulated sediment is noted.
    - b. At the end the two (2) year monitoring period, a determination will be made regarding modifications to the frequency of inspections to reflect sediment accumulation rates. At a minimum, the components of the storm drainage system will be monitored and maintained on an annual basis.
    - c. Material to be removed as part of the post-construction maintenance plan includes deposited sediment, paper, plastics, branches, metals and other refuse which might impair the system's function ability.
  5. The access roads and parking areas will be swept on an annual basis. If the monitoring program described un Item 4 above indicates that sediment
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accumulation rates are excessive, the street sweeping schedule will be modified accordingly to reflect accumulation rates.

6. The owner will be responsible for the proper maintenance and function ability of all components of the stormwater management system (SMS) not contained within the public street right of way.
  7. A Maintenance Agreement referencing Item #4 above will be placed in the deed advising each subsequent owner of their individual and collective responsibilities regarding the maintenance and function ability of the components of the SMS which occur outside of the public street line right of way.
  8. Anticipated maintenance of the pertinent portions of the SMS may include but not be limited to annual or as needed mowing or de-brushing of the detention basin's inlet and outlet area, removal or collected debris and sediment and cleaning of the sumps of each catch basin.
  9. The use of organic fertilizers and pesticides will be encouraged for lawn and landscaping maintenance.
  10. If the owner is derelict in their maintenance responsibilities identified under Item #5 the City of Springfield or its agent may clean or repair the SMS and bill the homeowners individually.
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Page 1 of 2

Revised: January 21, 2005

Revised: January 20, 2005

December 23, 2004

HSI Job #5277-040203

The Village at Loon Pond  
419 Pasco Road  
Springfield, MA

## STORMWATER SYSTEM OPERATION AND MAINTENANCE PLAN

### Schedule for Inspection and Maintenance of the Stormwater System:

Biannual inspections of the stormwater management system (SMS) shall be performed by the Homeowner's Association between April 15 & May 1 and October 15 & October 30. After the biannual inspections are performed if any maintenance is required, the Homeowner's Association shall contact a licensed contractor qualified to perform the necessary maintenance. The contractor shall perform the necessary maintenance to remove sediment and debris from the site and properly dispose of the material at the end of the snow season but no later than May 15.

The Homeowner's Association shall inspect the system after major storm events and contact a licensed contractor as outlined above, sediment and debris shall be properly disposed of off the site.

The Homeowner's Association established for The Village at Loon Pond Condominiums will be responsible for the proper maintenance and functionality of all components of the SMS not contained within the public street right of way.

A Homeowner's Agreement will be placed in the deed to each condominium advising each subsequent owner of their individual and collective responsibilities regarding the maintenance and functionality of the components of the SMS, which occur outside of the public street line right of way.

Anticipated maintenance of the pertinent portion of the SMS may include but not be limited to annual or as needed, removal of collected debris and sediment and cleaning of the sumps of each catch basin.

The use of organic fertilizers and pesticides shall be used for lawn and landscaping maintenance.

If the Association or an individual homeowner is derelict in their maintenance responsibilities filed with the Conservation Commission, the City of Springfield or other agent may clean or repair the SMS and bill the Homeowner's Association or homeowners individually.

The Conservation Commission will be provided with the name, address and telephone number of a contact person for the Homeowner's Association.

The Conservation Commission will be provided with an affidavit allowing members of the Commission with the right of entrance for the purposes of inspecting the SMS for its design functionality.

~~Records will be maintained and submitted to the Conservation Commission on a yearly basis.~~

**Routine and Non-Routine Maintenance Tasks:**

The Homeowner's Association shall keep the stormwater system in working condition at all times. These tasks shall be performed daily and any material shall be disposed of properly.

During the biannual inspections of the stormwater system the pavement areas and travel ways shall be swept and the debris and sediment shall be properly disposed of off site. It is also recommended that sweeping be performed after fall leaf debris has ceased.

**Plan for Sediment, Debris, and Oil Disposal:**

The Homeowner's Association shall obtain the services of licensed contractor to perform this operation and maintenance plan. These contractors shall provide to the Homeowner's Association records of the approved sites for disposal of sediment, debris and oil. Copies of these records will be available upon request.

**Maintenance of Stormwater Controls:**

The proposed drainage system is designed to minimize and simplify maintenance requirements. Until construction is completed and all tributary areas are stabilized, frequent inspections and maintenance of the drainage system will be required by the Homeowner's Association. After construction a minimum of two annual inspection and maintenance of all system components is required by the Homeowner's Association. The drainage system shall be inspected and maintenance, by the Homeowner's Association, after major storm events.

Biannual maintenance of the catch basins is required to remove accumulated sediment and floating materials as protection to the pond. The catch basins shall be cleaned at such time as the accumulation of sediment deposited fills the sump by 50% (2). The Homeowner's Association shall contact a licensed contractor qualified to perform the necessary maintenance

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**Construction Related Controls:**

Prior to construction a synthetic filter and/or straw bale barriers shall be installed, as shown on the accompanying plans and as detailed in the Notice of Intent for this project.

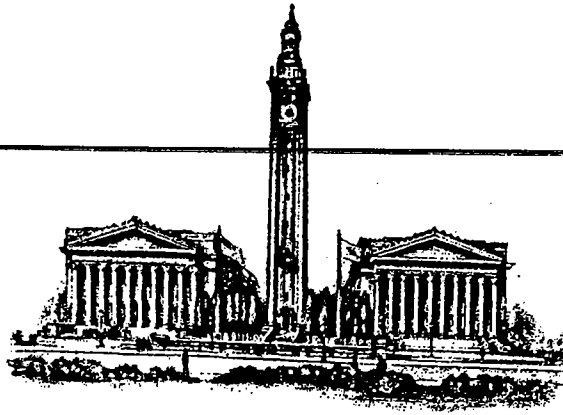
All erosion and sediment control measured shall be inspected daily during grading and after all rain storms by the contractor and shall be kept in functioning condition until tributary areas are stabilized. Sediment shall be removed from silt fences, check dams, and filter dams when it reaches a depth of six inches. Filters shall be cleaned or replaced when water continuously ponds over six inches deep. Poned water shall be discharged to an upland area with sediment controls, as required.

To avoid unnecessary introduction of sediment into the infiltration component of the stormwater management system, all catch basins will be covered with a geotextile filter fabric until the site is permanently stabilized.

If necessary, a stone tracking mat shall be installed and maintained at any point where construction traffic from an unpaved road enters into the paved portion of the site or street.

If any questions arise regarding erosion and sedimentation control measures the Environmental Professional and/or Project Engineer shall be consulted immediately.





THE CITY OF  
SPRINGFIELD, MASSACHUSETTS

April 14, 2005

Ms. Thelma Murphy  
U.S. Environmental Protection Agency – Region 1  
JFK Federal Building  
One Congress Street  
Boston, MA 02203

RE: Extension Request – NPDES Phase II, Year 2 Annual Report

Dear Ms. Murphy:

Due to the transitioning within the past year of multiple key employees within all of the Departments responsible for implementing the City's NPDES Phase II 5 Year Plan, and the untimely death recently of its Planning Director, we are respectively requesting an extension of the May 1 filing date for the Year 2 Annual Report.

As a result of the departmental consolidations, I have recently been assigned the responsibility of overseeing the preparation of the report and have initiated immediately the collection of inputs from each of the responsible departments. Our goal initially was to have the Annual Report completed by May 1, however I have been advised that the Planning Department's Senior Planner, who was a primary contributor in the preparation of the Year 1 Report, is not anticipated to be returning from maternity leave until that date. Subsequently, that portion of the Year 2 Assessment update will not be available until May 15<sup>th</sup>, at the earliest.

Consequently, on behalf of the Department of Public Works, I am respectively requesting a thirty (30) day extension for the submittal of the Year 2 Annual Report. Should other unanticipated issues arise which have the potential to result in the need for additional preparation time, we will contact your office immediately.

~~We greatly appreciate your attention to this request and should you have any questions please do not hesitate to contact me.~~

Yours truly,  
*Stan Tenerowicz*  
Stan Tenerowicz  
Wetland Scientist

Cc: Paul Hogan, DEP- Central Region  
Allan Chwalek, Director, DPW  
Phil Dromey, Acting Director, Planning