Municipality/Organization:	**City of Northampton, MA**
EPA NPDES Permit Number:	**MA041016**
MassDEP Transmittal Number:	**W-035904**
Annual Report Number & Reporting Period:	**No. 5: April 1, 2007 – March 31, 2008**

P 5/1/08

NPDES PII Small MS4 General Permit Annual Report
(Due: May 1, 2008)

Part I. General Information

Contact Person: Edward S. Huntley Title: Director of Public Works

Telephone #: 413-587-1570 Email: dpw@nohodpw.org

Mailing Address: 125 Locust Street, Northampton, MA 01060

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: Mary Clare Higgins

Title: Mayor

Date: April 30, 2008

Part II. Self-Assessment

The City of Northampton has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions.

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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
1.1	Stormwater Educational Brochure	DPW	General educational brochure developed and distributed by Fall 2004.	General educational brochure distributed to 15,090 households, businesses and other mail recipients in Northampton in Spring of 2007.	The educational brochure will be printed and distributed again in the Spring of 2008.
Revised			General educational brochure developed by Spring 2004 and distributed by Fall 2007.		
1.2	Stormwater Educational Information on DPW Website	DPW	Information on the Stormwater Management Program and other public educational material on DPW website.	New information and links continually put on the DPW web site.	New information will continue to be put on the DPW web site.
Revised					
1.3	Stormwater Educational Outreach to Community School Groups	DPW	Educational Materials Available for use in schools and community groups by Fall 2004	Educational material available. Ongoing curriculum in the High on water and watersheds that includes stormwater. Students conducted some limited sampling.	Continue to work in stormwater information into curriculums of Middle and Elementary Schools.
Revised			Stormwater information used in classrooms as determined by interest.		
1.4	Tributary Signage	DPW	Tributary signage on five bridges in 2005 and 2007	Worked with the Conservation Commission to designated 10 locations for tributary signs and finalize design. Signs to be fabricated and installed in 2008.	Install signs by Fall of 2008.
Revised			Tributary signage completed at ten brook or river crossings in 2008.		

1.5	Targeted Educational Material	DPW	Additional Educational Outreach as necessary.	Planned and scheduled outreach event on Rain Gardens, Rain Barrels, and Pervious Driveways for Homeowners. Press release on event. Continued program to sell Rain Barrels to Homeowners. 114 Rain Barrels sold in 2007. Individual outreach to property owners, engineers, and developers on rain garden design and other LID techniques.	Continue to increase awareness and use of LID practices for new developments and small scale improvements (i.e. rain gardens & rain barrels)
Revised					

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
2.1	Public Advisory Committee	DPW	Regular Advisory Committee meetings.	The Board of Public Works (BPW) has served as the public advisory committee for the Stormwater Management Program.	Continue to utilize the Board of Public Works as a means for public participation.
Revised					
2.2	Volunteer Water Quality Monitoring	DPW	Water quality monitoring and inspections throughout the City by volunteers.	Visual inspections of priority outfalls completed by DPW staff. Worked with the Broad Brook Coalition, the Conservation Commission, and others to monitor outfalls. Broad Brook Coalition completed sampling of Fitzgerald Lake and Broad Brook. Higher than normal nitrate levels were found and custom storm drain labels and door hangers were developed to educated residents in this watershed area about fertilizer use and maintaining septic systems.	Continue water quality visual assessments at priority outfalls throughout the City.
Revised			Water quality visual inspections by DPW employees and volunteers.		
2.3	Storm Drain Labels	DPW	Storm Drain labels on 20% of Catch Basins by Spring 2008	Volunteers labeled 150 (5%) catch basins throughout the City in 2004. 500 labels (15%) started being installed in the Fall of 2007 to be completed by Spring of 2008.	Continue to work with volunteers and students to label another 5% of the catch basins by Spring of 2009.
Revised					
2.4	Community Clean-Ups	DPW	Community Clean-Ups publicized and completed by Spring 2008.	Multiple downtown cleanups completed. Other neighborhood cleanups completed throughout the City and in the Meadows section of the City as part of the Connecticut River Cleanup.	Continue to expand the number of neighborhood cleanups.
Revised					

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
3.1	Storm Sewer System Map	DPW	Complete storm sewer map and field verify by Spring 2005.	Storm sewer map completed on GIS. Updates to the storm sewer map added as necessary.	Continue to make updates to storm sewer map.
Revised					
3.2	Legal Prohibition and Enforcement	DPW	Illicit Connections and Discharges to the Municipal Storm Drain System Ordinance adopted by City Council.	Previously completed. (Illicit Connections and Discharge to the Municipal Storm Drain System Ordinance adopted by the City Council and signed by the Mayor June 17, 2004.)	Continue to enforce the Illicit Connections and Discharge to the Municipal Storm Drain System Ordinance.
Revised					
3.3	Illicit Discharge Detection and Elimination	DPW	Priority screening areas identified and targeted for inspections. Investigation and enforcement of illicit discharges and connections	Continued conducting visual inspections of priority outfalls. Investigated various public complaints. No Enforcement actions necessary in last year.	Continue to conduct visual inspections at priority outfalls. Investigation and enforcement of illicit discharges and connections as they are discovered.
Revised					
3.4	Targeted Educational Outreach	DPW	Conduct annual household hazardous waste collection. Outreach to the public on reporting illicit discharges.	Household Hazardous Waste Collection publicized and completed in May 2007. 150 Northampton residents or businesses participated and a total of 1,620 gallons was collected. Information about reporting illicit discharges discussed in Stormwater Brochure distributed to all residents of the City.	Continue Household Hazardous Waste Collection. Continue educational outreach to the public for reporting illicit discharge to the storm drain system to the DPW.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
4.1	Erosion and Sediment Control Ordinance	DPW	Erosion & Sediment Control and Post Construction Stormwater Management Ordinance adopted by City Council.	Completed. (Erosion & Sediment Control and Post-Construction Stormwater Management Ordinance adopted by the City Council and signed by the Mayor June 17, 2004.)	Implement and Revise Erosion & Sediment Control and Post-Construction Stormwater Management Ordinance as necessary. Revisions to Ordinance to encourage Low Impact Development (LID) in draft to be adopted in 2008.
Revised					
4.2	Stormwater Site Plan Reviews	DPW	Procedures for site plan review implemented following adoption of Ordinance.	Reviewed all proposed development projects disturbing over 1 acre for compliance with the Erosion & Sediment Control and Post Construction Stormwater Management Ordinance. Issued stormwater management permits for 14 construction projects and reviewed all smaller projects applying for planning board permits.	Continue to review all development projects for compliance with the Erosion & Sediment Control and Post Construction Stormwater Management Ordinance.
Revised					
4.3	Stormwater Site Inspections	DPW	Procedures for site inspections implemented following adoption of Ordinance.	Conducted site inspections and responded to public complaints regarding construction sites. Issued 2 Notices of Violation for problems at construction sites.	Continue inspections as required for compliance with the Erosion & Sediment Control and Post Construction Stormwater Management Ordinance.
Revised					
4.4	Construction Site Public Participation	DPW	Procedures for receiving information submitted by the public in place following adoption of Ordinance.	Stormwater Management Permit application process coincides with Planning Board review so that the Planning Board meeting serves as the Public hearing for each project.	Conduct further outreach to the public on how to identify and report stormwater runoff problems at construction sites.
Revised					

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

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
5.1	BMP Strategies	DPW	Adopt or change City regulations to create a consistent post-construction runoff control strategy.	Completed. Post-construction runoff control strategy defined and adopted as part of Erosion and Sediment Control and Post-Construction Stormwater Management Ordinance adopted June 2004. Revisions to all relevant municipal ordinances pending to add specific LID requirements.	Adopt consistent LID requirements in all relevant municipal ordinances in 2008. Continue to maintain a consistent post-construction runoff control strategy. Conduct outreach to developers to educate about LID and preferred runoff control BMPs.
Revised					
5.2	Runoff Control Performance Standards	DPW	Post-Construction runoff control performance standards incorporated into an Ordinance.	Completed. Performance standards developed and incorporated into the Erosion and Sediment Control and Post-Construction Stormwater Management Ordinance, which was adopted in June 2004. Working with the Office of Planning and Development, initiated draft revisions to all relevant municipal ordinances to implement consistent new requirements and performance standards to use (LID) approaches for stormwater management.	Enforce compliance with post-construction runoff control performance standards through site plan review and site inspections. Continue to define the preferred structural and non-structural BMPs.
Revised					

5.3	Structural BMP Inspection and Maintenance	DPW	Develop inspection schedules and a maintenance enforcement mechanism for structural stormwater controls throughout the city.	All development projects over 1 acre since 2004 with approved Stormwater Management Permits have been required to complete a legally binding Stormwater Operation, Maintenance, and Inspection agreements as a condition of the permits. Structural BMP database completed and ongoing inspections of BMP structures. For projects permitted prior to the adoption of the Stomwater Management Ordinance, continued to research existing Planning Board and Conservation Commission permit conditions to enforce maintenance of private stormwater BMPs as necessary.	
Revised					

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
6.1	Drainage System Operation & Maintenance Program	DPW	Operation and maintenance (O&M) program implemented.	Implemented O&M activities and set up a procedure to track maintenance.	Continue to implement O&M activities and identify ways to further reduce pollutant runoff through the storm drain system.
Revised					
6.2	Employee Training	DPW	Employee training completed	Completed in 2004	
Revised					
6.3	Pollution Prevention BMPs	DPW	Pollution prevention BMPs identified and prioritized.	All salt/sand road de-icing mixture stored under storage structures at the DPW yard thereby eliminating all exposure of salt to the elements.	Identify additional pollution prevention BMPs for DPW properties and activities as well as other Municipal properties and parking lots.
Revised					

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) *Not Applicable*

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 6
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

none

Part V. Program Outputs & Accomplishments

(Since beginning of permit coverage unless specified otherwise by a **, which indicates response is for period covering April 1, 2007 through March 31, 2008)

Programmatic

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	Y
Annual program budget/expenditures **	($)	$24,000
Total program expenditures since beginning of permit coverage	($)	$104,000
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		Revolving Fund and General Fund

Education, Involvement, and Training

Estimated number of property owners reached by education program(s)	(# or %)	100%
Stormwater management committee established	(y/n)	y
Stream teams established or supported	(# or y/n)	n
Shoreline clean-up participation or quantity of shoreline miles cleaned **	(y/n or mi.)	y
Shoreline cleaned since beginning of permit coverage	(mi.)	-
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	1
▪ community participation **	(# or %)	150
▪ material collected **	(tons or gal)	1,620 gal.
School curricula implemented	(y/n)	y

Legal/Regulatory

	In Place Prior to Phase II	Reviewing Existing Authorities	Drafted	Draft in Review	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					X
▪ Erosion & Sediment Control					X
▪ Post-Development Stormwater Management					X

Mapping and Illicit Discharges	**(Preferred Units)**	**Response**
Outfall mapping complete	(%)	100%
Estimated or actual number of outfalls	(#)	232
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	100%
Mapping method(s)		
▪ Paper/Mylar	(%)	-
▪ CADD	(%)	-
▪ GIS	(%)	100%
Outfalls inspected/screened **	(# or %)	10%
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	65%
Illicit discharges identified **	(#)	0
Illicit discharges identified (Since beginning of permit coverage)	(#)	5
Illicit connections removed **	(#); and (est. gpd)	0
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	1
% of population on sewer	(%)	55%
% of population on septic systems	(%)	45%

Construction

	(Preferred Units)	Response
Number of construction starts (>1-acre) **	(#)	14
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)	100%
Site inspections completed **	(# or %)	60
Tickets/Stop work orders issued **	(# or %)	2
Fines collected **	(# and $)	0
Complaints/concerns received from public **	(#)	2

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	70%
Site inspections (for proper BMP installation & operation) completed **	(# or %)	90%
BMP maintenance required through covenants, escrow, deed restrictions, etc.	(y/n)	Y
Low-impact development (LID) practices permitted and encouraged	(y/n)	Y

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets) **	(times/yr)	1
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	1
Qty of structures cleaned **	(#)	3000
Qty. of storm drain cleaned **	(%, LF or mi.)	1%
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	645 tons
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Landfill

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	($)	$20,000
• Hourly or per basin contract rate **	($/hr or $ per basin)	-
• Disposal cost**	($)	0
Cleaning Equipment		
• Clam shell truck(s) owned/leased	(#)	1
• Vacuum truck(s) owned/leased	(#)	0
• Vacuum trucks specified in contracts	(y/n)	n
• % Structures cleaned with clam shells **	(%)	100%
• % Structures cleaned with vactor **	(%)	0

	(Preferred Units)	Response
Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	1
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	2
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	1,642 tons
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Landfill
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	($)	$33,000
• Hourly or lane mile contract rate **	($/hr. or ln mi.)	-
• Disposal cost**	($)	0
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	2
• Vacuum street sweepers owned/leased	(#)	1
• Vacuum street sweepers specified in contracts	(y/n)	0
• % Roads swept with rotary brush sweepers **	%	100%
• % Roads swept with vacuum sweepers **	%	0

Reduction (since beginning of permit coverage) in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	
Integrated Pest Management (IPM) Practices Implemented	(y/n)	

	(Preferred Units)	Response
Average Ratio of Anti-/De-Icing products used ** (also identify chemicals and ratios used in specific areas, e.g., water supply protection areas) Agriculturally Based Enhancer (Ice B'Gone)	% NaCl % $CaCl_2$ % $MgCl_2$ % CMA % Kac % KCl % Sand	0.3% 4.2% 13.9% 0.1% 54.6%
Pre-wetting techniques utilized **	(y/n or %)	y
Manual control spreaders used **	(y/n or %)	y
Zero-velocity spreaders used **	(y/n or %)	n
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/ln mi. or %)	0
Estimated net reduction or increase in typical year sand application rate **	(±lbs/ln mi. or %)	0
% of salt/chemical pile(s) covered in storage shed(s)	(%)	100%
Storage shed(s) in design or under construction	(y/n or #)	
100% of salt/chemical pile(s) covered in storage shed(s) by May 2008	(y/n)	Y

Water Supply Protection

Storm water outfalls to public water supplies eliminated or relocated	# or y/n	n
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	n
• Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	0