Municipality/Organization: **Newburyport**

EPA NPDES Permit Number: MAR041213

MassDEP Transmittal Number: **W-040792**

Annual Report Number & Reporting Period: **No. 4: April 1, 2006 – March 31, 2007**

NPDES PII Small MS4 General Permit Annual Report
(Due: May 1, 2007)

Part I. General Information

Contact Person: Mr. Anthony Furnari

Title: Deputy Director/Director of Operations, Department of Public Services

Telephone #: 978-465-4464

Email: tfurnari@CityofNewburyport.com

Mailing Address: 16A Perry Way, Newburyport MA 01950

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: John Moak

Title: Mayor, City of Newburyport

Date: April 27, 2007

Part II. Self-Assessment

The City made progress on all the minimum control measures required in the permit.

The City completed a draft Stormwater Management Ordinance (Ordinance) and draft Stormwater Management Rules and Regulations (Rules and Regulations) which incorporate required new authority and jurisdiction items for the Illicit Discharge Detection and Elimination, Construction Site Stormwater Runoff Control, and Post-Construction Stormwater Management minimum control measures. The City held a workshop on November 2, 2006 to discuss ordinance language and roles and responsibilities for stormwater management. The draft Ordinance and Rules and Regulations are currently under review by the City Solicitor and Mayor's office. The City plans to finalize and adopt the Ordinance in Year 5.

The City has researched the procedure to modify the Sewer Commission's responsibilities to include a stormwater advisory committee role. Recommendations to modify the Commission's responsibilities are currently under review by the City Solicitor and the Mayor's office, however City officials may feel it necessary to develop a new committee. This will be resolved in Year 5.

The City developed a draft Stormwater Master Plan during Year 4, which documents drainage system inspections conducted in Year 3, mapping efforts throughout the permit term, and recommendations for maintaining permit compliance. The Master Plan includes priority lists for maintenance and repair of stormwater system structures. It also includes recommendations for completing GIS mapping efforts, continuing and improving pollution prevention efforts at municipal facilities, and identifies public awareness and possible illicit discharge issues.

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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
1-1	Newsletter/brochure about stormwater to be included in the sewer bill once annually	Department of Public Services and/or Conservation Commission	Newsletter/Brochure distributed to all households in Newburyport	An article on stormwater was developed further and approved. It will be distributed to the public in 2007.	Distribute article on stormwater management program annually by July.
1-2	Educate dog owners about picking up dog waste	Department of Public Services	Distribute Fact Sheet to Dog Owners	Fact sheet was reviewed, approved, and made available to all dog owners through various City departments including City Hall, the Health Department, and City schools.	Continue throughout permit term.
1-3	Stormwater education program for school children	Stormwater Advisory Committee	Inquire about presentation to Middle or Elementary School children	Program is pending advisory committee input.	Determine need for program.
1-4	Maintain pet waste clean-up signs at schools, parks, and beaches	Department of Public Services	Signs posted	Signs are posted and maintained.	Monitor throughout permit term.
1-5	Annual update of SWMP at a televised City Council Meeting	Dept. of Public Services and/or Conservation Commission	Update City Council on SWMP status.	The City Council was updated on progress at a public meeting in January 2007 and will receive a copy of this annual report.	Continue throughout permit term.

1a. Additions

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
2-1	Form Stormwater Advisory Committee	Department of Public Services	Form Committee during fourth permit year.	Mission statement and supporting information to modify the role of the Sewer Commission to incorporate Stormwater Advisory role were submitted to the Mayor for review.	Determine course of action and form committee.
2-2	Comply with state public notification guidelines at MGL Ch. 39 s. 23B.	City Clerk	Notices posted in library and current locations.	Notice posted prior to January 2007 meeting.	Continue throughout permit term.
2-3	Stencil catch basins with don't dump message	Department of Public Services	Identify and prioritize catch basins to be stenciled with "Don't Dump" message.	Maintained catch basin stenciling in regulated area.	Continue throughout permit term.

2a. Additions

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
3-1	Conduct dry weather outfall screening	Department of Public Services	Locate Outfalls within regulated area during first year of permit term. All Outfalls screened during permit term.	All easily accessible outfalls have been screened.	Continue throughout permit term as budget allows.
3-2	Map stormwater outfalls	Department of Public Services	Locate outfalls on a map within regulated area.	Measure completed.	Measure completed.
3-3	Assess need for stormwater GIS layer	Department of Public Services	Decision on whether to go forward with a stormwater GIS within first two years of the permit.	Updated stormwater GIS layer to more accurately reflect City's existing system. A new version dated February 2007 serves as a significant enhanced tool for the City.	Continue to improve stormwater GIS layer as funding allows.
3-4	Develop and implement plan to identify and remove non-stormwater discharges	Department of Public Services	Number of illicit connections found and removed.	Four potential illicit discharges were identified and listed in the City's Stormwater Master Plan and authority to enforce removal of such discharges is included in draft Stormwater Management Ordinance.	Develop plan to further investigate/remove non-stormwater discharges once Stormwater Management Ordinance is in place.
3-5	Develop a bylaw to require inspection of construction for correct connection to a municipal sewer	Department of Public Services	Draft Ordinance for properties connected to a municipal sewer system by end of third permit year (May 2006)	Draft Stormwater Management Ordinance and Draft Rules and Regulations were developed and reviewed with City Staff at a workshop in November 2006.	Finalize Stormwater Management Ordinance and gain City Council approval. Finalize Stormwater Management Rules and Regulations.
Revised	Develop a bylaw to require inspection of construction sites.		Draft Ordinance		

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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
4-1	Construction site Erosion Sediment Control Ordinance for construction sites greater than 1 acre in area	Department of Public Services	Draft Ordinance by end of third permit year.	Draft Stormwater Management Ordinance and Draft Rules and Regulations were developed and reviewed with City Staff at a workshop in November 2006.	Finalize Stormwater Management Ordinance and gain City Council approval. Finalize Stormwater Management Rules and Regulations.
4-2	Require a waste management plan at construction sites larger than one acre.	Department of Public Services	Draft Ordinance by end of third permit year.	This BMP is incorporated in BMP 4-1.	This BMP is incorporated in BMP 4-1.
4-3	Review site plans for stormwater impacts.	Department of Public Services	Policies for Site Plan Review developed	Policies were discussed at a workshop in November 2006.	Continue discussion on site plan review policies during review of Stormwater Rules and Regulations.
4-4	Consider public input.	Department of Public Services	Number of Public Hearings held.	The Draft Ordinance has been provided to the City Solicitor. A public hearing on the stormwater program will be held by City Council once the review comments are provided from the City Solicitor.	Receive comments from City Solicitor. Hold public hearing with City Council.
4-5	Inspect erosion and sediment controls	Department of Public Services	Develop procedure, including inspection checklist, and commence reviews by end of third permit year.	This will be further developed as the Rules and Regulations are finalized. An initial meeting was held in November 2006.	Further work will commence once Ordinance is approved by City Council.

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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
5-1	Develop a draft ordinance to apply Standards 2, 3, 4, 7, and 9 of the Massachusetts Stormwater Policy to the entire municipality. Present to City Council.	Department of Public Services	Draft ordinance by end of third permit year.	The draft Ordinance is complete and under review with the City Solicitor.	Receive comments from City Solicitor.
5-2	Specify a stormwater BMP manual to be used for consistent design and performance standards	Department of Public Services	Select BMP Manual by end of third permit year.	Draft Stormwater Management Rules and Regulations lists Massachusetts DEP Stormwater Management Manual and BMP resource materials for use in design.	This BMP is incorporated in BMP 4-1.
5-3	Develop draft ordinance that ensures long-term maintenance of private Structural BMPs. Present to City Council.	Department of Public Services	Compliance with regulations, present to City Council by end of third permit year.	The draft Ordinance is complete and under review with the City Solicitor.	Incorporate comments from Solicitor and present ordinance at a City Council meeting.

5a. Additions

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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
6-1	Identify sensitive receptors within the City	Conservation Commission	List of sensitive receptors developed, staff notified by the end of first permit year.	Measure completed.	Measure completed.
6-2	Street Sweeping	Department of Public Services	Continue street sweeping procedures.	Street sweeping operations are continuous. 100% of streets are swept at least annually.	Continue throughout permit term.
6-3	Sidewalk Sweeping	Department of Public Services	Continue sidewalk sweeping procedures.	Sidewalk sweeping operations are continuous. 100% of streets are swept at least annually.	Continue throughout permit term.
6-4	Roadway deicing	Department of Public Services	Amounts of deicing compounds used.	Quantity of deicing compounds documented. The City used 734 tons of salt and 80 tons of sand in the winter of 2006/2007.	Continue throughout permit term.
6-5	Minimize impacts from vehicle washing	Department of Public Services	Minimize impacts from vehicle washing	Continued use of vehicle washing containment area and proper procedures for minimizing impacts from vehicle washing.	Continue throughout permit term.
6-6	Minimize impacts from vehicle maintenance	Department of Public Services	Amount of hazardous materials used.	Continued use of proper procedures for minimizing impacts from vehicle maintenance.	Continue throughout permit term.
6-7	Maintain storm drain system	Department of Public Services	Number of catch basins cleaned annually	100% of catch basins are cleaned annually (2787) catch basins. Cleaned all reachable outfalls.	Continue throughout permit term.
6-8	Minimize pesticide and fertilizer use for parks and other landscaped areas	Department of Public Services	Training conducted; amount of herbicides/fertilizers	Continued use of green landscaping procedures during fourth permit year.	Continue throughout permit term.
6-9	Control of illegal dumping	Department of Public Services	Number of signs posted; number of sites cleaned up.	Continued monitoring, cleaning-up dump sites, and posting signs.	Continue throughout permit term.

6a. Additions

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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

Part V. Program Outputs & Accomplishments (OPTIONAL)

(Since beginning of permit coverage unless specified otherwise by a **, which indicates response is for period covering April 1, 2006 through March 31, 2007)

Programmatic

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

Education, Involvement, and Training

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

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					
▪ Erosion & Sediment Control					
▪ Post-Development Stormwater Management					
Accompanying Regulation Status (indicate with "**X**")					
▪ Illicit Discharge Detection & Elimination					
▪ Erosion & Sediment Control					
▪ Post-Development Stormwater Management					

Mapping and Illicit Discharges

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

Construction

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

Post-Development Stormwater Management

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

Operations and Maintenance

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

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

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

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)	% NaCl % $CaCl_2$ % $MgCl_2$ % CMA % Kac % KCl % Sand	
Pre-wetting techniques utilized **	(y/n or %)	
Manual control spreaders used **	(y/n or %)	
Zero-velocity spreaders used **	(y/n or %)	
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/ln mi. or %)	
Estimated net reduction or increase in typical year sand application rate **	(±lbs/ln mi. or %)	
% of salt/chemical pile(s) covered in storage shed(s)	(%)	
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)	

Water Supply Protection

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

Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Watershed Management

BRP WM 08A NPDES Stormwater General Permit Notice of Intent
for Discharges from Small Municipal Separate Storm Sewer Systems (MS4s)
F. Newburyport Storm Water Management Program TIME FRAMES

Transmittal Number W 040792
Facility ID (if known)

	PERMIT YEAR ONE				PERMIT YEAR TWO				PERMIT YEAR THREE				PERMIT YEAR FOUR				PERMIT YEAR FIVE			
BMP ID #	Summer 03	Fall 03	Winter 03-04	Spring 04	Summer 04	Fall 04	Winter 04-05	Spring 05	Summer 05	Fall 05	Winter 05-06	Spring 06	Summer 06	Fall 06	Winter 06-07	Spring 07	Summer 07	Fall 07	Winter 07-08	Spring 08
1-1				X				X				X				X				X
1-2				X				X				X				X				X
1-3	Inquire about presentation																		X	
1-4	Signs Posted				Inspect & Maintain throughout permit term															
1-5		X				X				X				X				X		
2-1																		X		X
2-2																				
2-3	Identify High Priority Basins							Completed	Maintain Stenciled Basins throughout permit term											
3-1	Outfalls Identified				Completed		Screen Annually			X								X		
3-2	Completed																			
3-3										Improve Stormwater GIS layer throughout permit term										
3-4													Finalize & Implement throughout remainder of permit term							
3-5									Reviewed existing requirements				Drafted Ordinance & Rules and Regulations				Finalize Ordinance & Rules and Regulations			
4-1									Reviewed existing requirements				Drafted Ordinance & Rules and Regulations				Finalize Ordinance & Rules and Regulations			
4-2									Reviewed existing requirements				Drafted Ordinance & Rules and Regulations				Finalize Ordinance & Rules and Regulations			
4-3	Completed																			
4-4									Reviewed existing requirements				Drafted Ordinance & Rules and Regulations				Finalize Ordinance & Rules and Regulations			
4-5									Reviewed existing requirements				Drafted Ordinance & Rules and Regulations				Finalize Ordinance & Rules and Regulations			
5-1									Reviewed existing requirements				Drafted Ordinance & Rules and Regulations				Finalize Ordinance & Rules and Regulations			
5-2									Reviewed existing requirements				Drafted Ordinance & Rules and Regulations				Finalize Ordinance & Rules and Regulations			
5-3									Reviewed existing requirements				Drafted Ordinance & Rules and Regulations				Finalize Ordinance & Rules and Regulations			
6-1					Completed				Reviewed list with City Staff											
6-2																				
6-3																				
6-4																				
6-5																				
6-6																				
6-7																				
6-8																				
6-9																				