P 5/1/08

Municipality/Organization: City of Beverly, MA

EPA NPDES Permit Number: MAR041181

MassDEP Transmittal Number: **W-040371**

Annual Report Number & Reporting Period: **April 1, 2007 – March 31, 2008**

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

Part I. General Information

Contact Person: Roland Adams Title: Stormwater Coordinator

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Mailing Address: 191 Cabot St Beverly MA. 01923

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: William F. Scanlon, Jr.

Title: Mayor

Part II. Self-Assessment

The City of Beverly has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions. The Stormwater Committee believes we have made good progress relative to specific BMP's. Refer to the report for details by BMP.

The Summary of Minimum Control Measures Tables that follow have as titles "Progress on Permit Year 4"—this should read and we are reporting on "Progress on Permit **Year 5**". "Planned Activities-Permit Year 5" is not valid as the permit expires. This item is not completed except when we have programs in place that have long lead times.

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	Article/brochure about stormwater in the annual Consumer Confidence Report	Engineering Dept	Article(s) published in the CCR annually distribution to all residents	Article in 2006 Water Quality Report distributed summer 2007	Article in 2007 Water Quality Report to be distributed Summer 2008
Revised					
1-2	Stormwater education program for school children	Engineering Dept.	Integration of stormwater program to school curriculum	No change from Year 4. No actual classroom discussions in Year 5.	
Revised					
1-3	Public Education and protection	Health Dept.		Beach test results for summer 2007 posted on www.state.maus/dph and a link on this site to Beverly site. Test results also posted at library	
Revised					
1-4	Educate dog owners about picking up dog waste	Recreation Dept	Revise Fact Sheet-Mail with dog license	New dog ordinance with pet waste information in a mailing to Beverly households	
Revised					
1-5	Install and maintain pet waste clean-up signs at parks	Recreation Dept		Signs ordered to be installed before summer 2008	
Revised					
1-6	Annual update of SWMP at a televised City Council Meeting	Engineering Dept	Annual update of SWMP given years 3-5	City Council adoption of new Ordinance—Stormwater—April 22, 2008	
Revised					

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	Engineering Dept	Committee formed first year and meet annually	Committee formed and met 3 times	
Revised					
2-2	Comply with State public notification guidelines at MGL Ch.39s.23B	Planning Dept	Notice posted City Hall & Library	Meetings posted	
Revised					
	Stencil up to 25 catch basin's with don't dump message	Public Services & Recreation	Up to 25 catch basins stenciled per year in years 2-5	150 Storm Drains cleaned and labeled- Eagle Scout Project	
Revised					
Revised					
Revised					
Revised					

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	Map Stoemwater Outfalls	Engineering Dept	GIS map of outfalls created in the first year	Completed	
Revised					
3-2	Review and amend City's ordinance to prohibit illicit discharges and connections, and to require inspection of new construction for correct connection	Planning Dept	Create an illicit discharge and connection ordinance for City Council adoption	Stormwater Ordinance including illicit discharge adopted by City Council April 22, 2008. City bylaws require 2 week period before Mayor can sign. Expected to be signed week of May 5.	
Revised					
3-2	Conduct dry weather outfall screening	Public Services	Screen outfalls in Years 1&2, percent of outfalls screened	Outfalls mapped and inspected. Those from observation requiring sampling have been sampled. Results have been coordinated with Salem Sound Data (public activist group) and Horslet Witten data (Regional consultant). Final report issued.	
Revised					
3-4	Develop and implement plan to identify and remove non-stormwater discharges	Public Services	Prioritize outfalls in Year 3. Number of illicit connections found and removed throughout Years 4 & 5.	None removed year 5.	
Revised					
3-5	Create a GIS for the stormwater collection system	Engineering Dept	GIS stormwater collection system will be completed by the end of second year of permit period	Completed	

Revised					
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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
4-1	Erosion Sediment Control (ESC) ordinance for construction sites greater than 1 acre in area	Planning Dept	Develop draft ordinance in Year 1. Present to City Council starting in Year 2, implement thereafter.	Completed	
Revised					
4-2	Require a waste management plan at construction sites greater than 1 acre in area	Planning & Engineering	Amend planning regulations to require a plan development for each construction site greater than 1 acre	Completed-Component ESC	
Revised					
4-3	Consider public input on project greater than 1 acre in area	Planning Dept	Public review and comment procedure; newspaper notification and signs posted at each construction site.	Completed-Component ESC	
Revised					
4-4	Inspect erosion and sediment controls on projects greater than 1 acre in area	Planning & Engineering	Develop a procedure for conducting inspections by end 2nd year. Begin inspections in 3rd year. Develop procedures for reviewing monthly reports from site operators by end of 3rd year. Require monthly inspections reports by end of 4th year	Completed-Component ESC	

Revised					
Revised					
Revised					

4a. Additions

4-5	Drainage Alteration Ordinance	Engineering Dept	Ordinance requiring permit if grade modified more than 2 feet	Completed	

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 an ordinance to apply standards 2,3,4,7 and 9 of the Mass Stormwater Policy to the entire City	Planning Dept.	Develop draft ordinance by end year 2. Present to City Council.	Adopted by City Council April 22, 2008. City bylaws require 2 week period before Mayor can sign. Expected to be signed week of May 5.	
Revised					
5-2	Specify a stormwater BMP manual to be used for consistent design and performance standards	Planning & Engineering Depts.	BMP Manual selected by year 2	Included BMP 5-1	
Revised					
5-3	Develop an ordinance that ensures long-term maintenance of structural BMP's.	Planning, Health & Public Services	Develop draft ordinance by end year 2. Present to City Council	Included BMP 5-1	
Revised					
Revised					
Revised					
Revised					

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 City	Engineering & Public Services	Inventory created and staff notified in Year 2	Completed-Map created sensitive receptors	
Revised			Identify sensitive receptors and provide training to Public Service Employees		
6-2	In-house employee training program.	Public Services	Number/percent of employees who receive stormwater related training once every two years during permit period.	Continuing to train pesticide licensed employees annually.	
Revised					
6-3	Hazardous Materials Inventory & Training	Public Services	Number of employees trained every two years; inventory of hazardous materials updated annually	Motor pool employees trained for housekeeping measures relative to waste oils, etc and operation of fueling depot.	
Revised					
6-4	Street sweeping	Public Services	Percent of roads swept annually.	All streets swept 3 times per year with commercial areas getting swept as much as two times per week.	
Revised					
6-5	Storm drain maintenance	Public Services	Number of catch basins cleaned annually	Cleaned 828 Catch Basins.	
Revised					

6-6	Roadway deicing	Public Services	Investigate alternative deicers & spreaders every other winter starting Year 1. Year 2 maintain records on deicer dispensing & spreader calibration	Purchased new truck with computerized, ground-speed controlled sander. All trucks, as replaced, will be fitted with same unit.	
Revised					
6-7	Minimize impacts from vehicle washing	Public Services	Secure funding	Facility under consideration—dependent on funding.	
Revised					
6-8	Park and Landscape maintenance	Public Services	Number of employees trained in second year and records of herbicide/fertilizer used annually. Tear 3 initiate discussions with the School Dept. to reduce chemical application	Dispensers of herbicide/fertilizers are licensed. License requirement is continuing education. Total 5 employees. School Department does not dispense on their fields.	
Revised					
6-9	Hazardous Waste Day	Health Dept.	Investigate locations and cost alternatives for holding a household hazardous waste collection and develop a program in year 2. Present to council in Year 3.	Hazardous Waste Day April 28	
Revised					

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

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)	y
Annual program budget/expenditures **	($)	In Dept Budget
Total program expenditures since beginning of permit coverage	($)	In Dept Budget
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		General & Enterprise

Education, Involvement, and Training

Estimated number of property owners reached by education program(s)	(# or %)	Thru mailing 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.)	N
Shoreline cleaned since beginning of permit coverage	(mi.)	N
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	1
▪ community participation **	(# or %)	100%
▪ material collected **	(tons or gal)	30+ drums

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	(#)	522
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	100%
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	100%
Outfalls inspected/screened **	(# or %)	NA
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	38%
Illicit discharges identified **	(#)	0
Illicit discharges identified (Since beginning of permit coverage)	(#)	1
Illicit connections removed **	(#); and (est. gpd)	0

Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	1
% of population on sewer	(%)	92%
% of population on septic systems	(%)	8%

Construction

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

Post-Development Stormwater Management

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

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 **	(#)	828
Qty. of storm drain cleaned **	(%, LF or mi.)	N/A

Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	246.4 tons
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Landfill

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	($)	Est. $25,000
• Hourly or per basin contract rate **	($/hr or $ per basin)	$10.00
• Disposal cost**	($)	Est. $8,000
Cleaning Equipment		
• Clam shell truck(s) owned/leased	(#)	2
• Vacuum truck(s) owned/leased	(#)	1
• Vacuum trucks specified in contracts	(y/n)	N
• % Structures cleaned with clam shells **	(%)	99%
• % Structures cleaned with vactor **	(%)	1%

	(Preferred Units)	Response
Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	3
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	3 to 100
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	356.4 tons
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Landfill
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	($)	Est. $20,000
• Hourly or lane mile contract rate **	($/hr. or ln mi.)	N/A
• Disposal cost**	($)	Est. $4,000
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	1
• Vacuum street sweepers owned/leased	(#)	0
• Vacuum street sweepers specified in contracts	(y/n)	N
• % Roads swept with rotary brush sweepers **	%	100%
• % Roads swept with vacuum sweepers **	%	

Reduction (since beginning of permit coverage) in application on public land of: ("N/A" = never used; "100%" = elimination)