Municipality/Organization: City of Beverly, MA

EPA NPDES Permit Number: MAR041181

MaDEP Transmittal Number: **W-040371**

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: Roland Adams Title: Engineering Dept.

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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

Date: 4/21/05

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 Plan Committee believes the BMP's remain appropriate for the community. In general, we believe we have made good progress relative to specific goals—refer to BMP summary for details.

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
1-1	Article/brochure about stormwater in the annual Consumer Confidence Report	Engineering Dept.	Article(s) published in the CCR annually for distribution to all residents	Article drafted and scheduled to be included in the report to be issued June 2005	Publish article annually in Salem Beverly Water Supply Board—Water Quality Report
Revised					
1-2	Stormwater education program for school children	Engineering Dept.	Integration of stormwater to school science, curriculum or ECO club	ECO club not active. Completed a program at Briscoe Middle School with 3 science classes.	Contact Glen Urquhart, Waldroft, Landmark, Shore Country Day in addition to public schools.
Revised					
1-3	Public Education and protection	Health Dept.	Beach sampling results available to public years 1-5	Beach test results for summer 2004 posted on www.state.ma.us/dph A link to this site exists from www.beverlyma.gov . Test results also posted at library	Continue practice
Revised					
1-4	Educate dog owners about picking up dog waste	Recreation Dept.	Fact sheet mailed with annual dog registration mailing	Fact sheet created, printed and mailed with dog registration mailing February 2005	Continue practice
Revised					
1-5	Install and maintain pet waste clean-up signs at parks	Recreation Dept.	Number of signs installed, number of signs inspected	Signs being inspected and inventoried April 2005.	Continue practice
Revised					
1-6	Annual update of SWMP at a televised City Council Meeting	Engineering Dept.	Annual update of SWMP given years 3-5	Overview of SWMP, accomplishments and goals at City Council Meeting May 2, 2004	Continue practice
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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
2-1	Form Stormwater Advisory Committee	Engineering Dept.	Committee formed first year meet at least once annually	Committee formed and met September 27, 2004, January 26, 2005 and March 29, 2005. Committee expanded to include citizen	Meet at least once per year.
Revised					
2-2	Comply with state public notification guidelines at MGL Ch.39s.23B	City Clerk	Notices posted City Hall and Library	Meetings posted 2004 and 2005	Continue practice
Revised		Planning Dept.			
2-3	Stencil up to 25 catch basins with don't dump message	Public Services	Up to 25 catch basins stenciled per year in years 2-5	More than 25 catch basins stenciled around Briscoe Middle Shoe, Goat Hill and Water Front	Continue practice
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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
3-1	Map Stormwater Outfalls	Engineering Dept.	GIS map of outfalls created in the first year	Outfalls mapped from record drawings and 85% field located. Outfalls have been inspected.	Certain outfalls to be GPS located and complete GIS Map.
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.	Review & amend existing ordinance in Year 1 and implement thereafter	The current ordinance was determined inadequate. A new ordinance is in draft form.	Present new ordinance to City Council for approval and implement.
Revised					
3-3	Conduct dry weather outfall screening	Public Services	Screen outfalls in Years 1 & 2, percent of outfalls screened	Outfalls mapped and 85% located and inspected. Those requiring sampling from inspection have been sampled.	Locate balance of outfalls—Refer to BMP 2-1. Sample as required.
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.	Although not a goal until year 3, investigation of illicit connections has begun.	Complete mapping (BMP 3-1&3-5) and sampling (BMP 3-3)
Revised					
3-5	Create a GIS for the stormwater collection system	Engineering Department	GIS stormwater collection system will be completed by the end of second year of permit period	GIS stormwater system about 90% mapped.	Complete GIS stormwater collection system.
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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
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.	Ordinance submitted for City council review and acceptance March 21, 2005.	Pursue acceptance by the City Council and implement ordinance.
Revised					
4-2	Require a waste management plan at construction sites greater than 1 acre in area	Planning & Engineering Dept.	Amend planning regulations to require a plan development for each construction site greater than 1 acre.	A component of ESC ordinance. Refer to BMP 4-1	Refer to BMP 4-1
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.	A component of ESC ordinance. Refer to BMP 4-1	Refer to BMP 4-1
Revised					
4-4	Inspect erosion and sediment controls on projects greater than 1 acre in area	Planning & Engineering Dept's.	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	Inspection of sites a component of ESC ordinance.	Refer to BMP 4-1. Develop procedures for monthly reports from site operators.

Revised					
Revised					
Revised					

4a. Additions

4-5	Drainage Alteration Ordinamce	Engineering Dept.	Ordinance requiring permit if grade modified more than 2 feet	Projects reviewed	Continue to review grade alteration projects grater than 2 feet

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	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.	Ordinance in process-Draft to be completed Spring 2005.	Complete draft ordinance and present to City Council for acceptance.
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.	Include in ordinance—BMP5-1	Refer to 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	Include in ordinance—BMP5.1	Refer to 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 2 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 3
6-1	Identify sensitive receptors within City	Engineering & Public Services	Inventory created and staff notified in Year 2	Outfall and drainage system about 90% mapped. Complete mapping and define criteria to identify sensitive receptors.	Identify sensitive receptors and create inventory.
Revised					
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.	No goal Year 2—per plan.	In-house training—stormwater system, street cleaning, vehicle maintenance and washing, snow dumping or similar activity related to stormwater.
Revised					
6-3	Hazardous Materials Inventory & Training	Public Services	Number of employees trained every two years; inventory of hazardous materials updated annually	No goal Year 2—per plan.	In-house training—hazardous materials and practices. Can be component of BMP 6-2.
Revised					
6-4	Street sweeping	Public Services	Percent of roads swept annually.	Entire City swept one time—high traffic streets two times per year.	Continue practice
Revised					
6-5	Storm drain maintenance	Public Services	Number of catch basins cleaned annually	Started cleaning Fall 2003 and completed Spring 2004—all catch basins cleaned	Continue practice
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.	Records of road deicer for the winter 2004/2005 have been maintained.	Continue practice

Revised					
6-7	Minimize impacts from vehicle washing	Public Services	Determine car wash facility by end Year 2. Prepare a plan for construction of a car wash facility by the end of Year 3. Begin implementation years 4 &5	Car Wash facility determined to be located at DPS site on Park Street.	Prepare a preliminary plan for construction.
Revised					
6-8	Park and landscape maintenance	Public Services	Number of employees trained in second year and records of herbicide/fertilizer used annually. Year 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	Continue maintaining records of herbicide/fertilizer used. Initiate discussions with School Department to reduce chemical application.
Revised					
6-9	Hazardous Waste Collection	Public Services	Investgate locations and cost alternatives for holding a household hazardous waste collection and develp a program in year 2. Present to council in Year 3	Hazardous waste day was held April 24, 2004.	Plan hazardous waste day 2005.
Revised		Health Dept.			

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 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
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)

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 %)	
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.)	
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	
▪ community participation	(%)	
▪ material collected	(tons or gal)	
School curricula implemented	(y/n)	

Legal/Regulatory

	In Place Prior to Phase II	Under Review	Drafted	Adopted
Regulatory Mechanism Status (indicate with "**X**")				
▪ Illicit Discharge Detection & Elimination				
▪ 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

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

Construction

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 completed	(# or %)	
Estimated volume of stormwater recharged	(gpy)	

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)	
Total number of structures cleaned	(#)	
Storm drain cleaned	(LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		
Cost of screenings disposal	($)	

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)	
Cost of sweepings disposal	($)	
Vacuum street sweepers purchased/leased	(#)	
Vacuum street sweepers specified in contracts	(y/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 % $CaCl_2$ % $MgCl_2$ % CMA % Kac % KCl % Sand	
Pre-wetting techniques utilized	(y/n)	
Manual control spreaders used	(y/n)	
Automatic or Zero-velocity spreaders used	(y/n)	
Estimated net reduction in typical year salt application	(lbs. or %)	
Salt pile(s) covered in storage shed(s)	(y/n)	
Storage shed(s) in design or under construction	(y/n)	