Municipality/Organization: City of Beverly, MA

EPA NPDES Permit Number: MAR041181

2004 APR 27 P 9:30

MaDEP Transmittal Number: W-040371

Annual Report Number & Reporting Period: **No. 1: March 03-March 04**

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: April 26, 2004

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.

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 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
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 published in February 2004 Salem Beverly Water Board Report	Publish article annually in Salem Beverly Water Report
Revised					
1-2	Stormwater education program for school children	Engineering Dept	Integration of stormwater to school science, curriculum or ECO club	Met with School Administration and Rob Gough (Salem Sound). ECO Club inactive, but School Administration suggested inclusion in an Earth Science Program	Meet with Earth Science faculty and discuss material. To incorporate into Spring 2005 program.
Revised					
1-3	Public education and protection	Health Department	Beach sampling results available to the public, years 1-5	Beach test results for summer 2003 posted on www.state.ma.us/dph web site and beach closures were provided to Salem News (local daily newspaper)	Continue practices and add www.beverlyma.gov web site.
Revised					
1-4	Educate dog owners about picking up dog waste	Recreational Department	Fact sheet mailed in annual dog registration mailing	Draft fact sheet developed. Beverly Animal Resource Coalition (BARC) web site article-"Picking up dog waste"	Finalize fact sheet and mail with dog registration 2005.
Revised					
1-5	Install and maintain pet waste clean-up signs at parks	Recreational Department	New signs at parks by end of Year 2, all signs maintained	Sign messaged developed and signs posted at major parks	Continue sign postage and maintenance
Revised					
1-6	Annual update of SWMP at a televised City Council's meeting	Engineering Department	Annual update of SWMP given years 2-5	Develop plan to present update to Council Spring 2004	Present SWMP update.
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 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
2-1	Form Stormwater Advisory Committee	Engineering Department	Committee formed first year meet at least once annually thereafter	Committee formed of City Employees and met April 2004	Expand committee to include citizens and continue to hold at least one meeting annually.
Revised					
2-2	Comply with state public notification guidelines at MGL Ch. 39s.23B	City Clerk	Notices poster City Hall and Library	Meeting 2004 posted	Continue practice of posting meetings
Revised		Planning Department			
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	Identify and prioritize the locations of catch basins is on-going and contingent upon completion of Stormwater Mapping.	Complete mapping, identify and prioritize and stencil up to 25 catch basins.
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 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
3-1	Map stormwater outfalls	Engineering Department	Map created in the first year	Under development-all "street" stormwater assets inspected. Progress map of stormwater outfalls attached.	Complete mapping
Revised					
3-2	Review and amend City's ordinance to prohibit existing illicit discharges and connections, and to require inspection of new construction for correct connection	Planning Department	Review & amend existing ordinance in Year 1. Implement thereafter	Current ordinance's not adequate-new ordinance draft completed.	Complete draft and submit to City Council for approval.
Revised					
3-3	Conduct dry weather outfall screening	Public Services	Screen outfalls in Years 1 & 2	Under development—outfalls to be located and mapped. Health Dept. coastal sampling project to be integrated.	Complete mapping and complete dry weather screening
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 dry weather screening 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 term	Under development	Continue development
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 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
4-1	Erosion Sediment Control (ESC) ordinance for construction sites greater than 1 acre in area.	Planning Department	Develop draft ordinance in Year 1. Present to City Council starting in Year 2, implement thereafter	Draft ordinance completed-under review by Planning, Engineering Departments and Public Services.	Submit to City Council.
Revised					
4-2	Require a waste management plan a construction sites greater than 1 acre in area.	Planning & Engineering Department	Amend planning regulations to require a plan development for each construction site greater than 1 acre.	A component of ESC ordinance. Second draft completed. 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 Department	Establish procedures for handling public comments by the end of Year 1; begin notifications in Year 2; post signs at construction site by Year 3 and thereafter.	Procedure drafted	Procedure to be implemented after City Council adoption of BMP 4-1.
Revised					
4-4	Inspect erosion and sediment controls on projects greater than 1 acre in area.	Planning & Engineering Departments	Develop procedure during year 1 and 2. Begin inspections year 3; develop procedures for review of mo. Insp. Rpts in year3; require mo. Insp. Rpts years 4-5	Procedures to be developed after implementation of ESC Ordinance	Develop procedure.

Revised					
Revised					
Revised					

4a. Additions

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
4-5	Drainage Alteration Ordinance	Engineering Department	Ordinance adopted requiring permit if grade modified by more than 2 feet.	Ordinance adopted by City Council in Year 1	Issue permits.

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 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
5-1	Develop an ordinance to apply Standards 2,3,4,7 and 9 of the Mass Stormwater policy to the entire City	Planning Department	Develop draft ordinance to City Council in Year 2, implement thereafter	Year 2 goal	Develop draft ordinance and present to City Council.
Revised					
5-2	Specify a stormwater BMP manual to be used for consistent design and performance standards	Planning & Engineering Departments	BMP Manual selected by end of Year 2	Year 2 goal	BMP Manual to be selected.
Revised					
5-3	Develop an ordinance that ensures long-term maintenance of structural BMP's. Present at the City Council's Meeting.	Planning, Health Departments & Public Services	Develop draft ordinance in Year 2. Present to City Council starting in Year 3.	Year 2 goal.	Develop draft ordinance in Year 2.
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 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
6-1	Identify sensitive receptors within City.	Engineering Department & Public Services	Inventory created and staff notified in Year 2.	Year 2 Goal	Develop list of sensitive receptors and give appropriate Public Services staff a 30-minute training session.
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.	Overview of upland snow dumping developed—15 employees (52%) Vehicle washing—Provided instructions on modified vehicle washing procedures at controlled washing facility—25 employees (86%)	Next goal in Year 3.
Revised					
6-3	Hazardous Materials Inventory & Training	Public Services	Number of employees trained every two years; inventory of hazardous materials updated annually.	Motor pool trained on general housekeeping and various fluids labeled and proper storage—5 employees(20%) Park employees have Pesticide Applicator License—2 employees (7%)	Next goal in Year 3
Revised					
6-4	Street sweeping	Public Services	Percent of roads swept annually	100% of streets swept with priority streets swept 3 to 5 times per year and Rantoul and Cabot swept more frequently. Estimated 500 tons of material collected in Spring sweep.	Continue sweeping 100% of streets.
Revised					
6-5	Storm drain maintenance	Public Services	Number of catch basins cleaned annually.	100% of catch basins cleaned—estimated 600-700 tons of material collected.	Continue storm drain cleaning.
Revised					

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
6-6	Roadway deicing	Public Services	Investigate alternative deicers & spreaders every other winter starting in Year 1. Equipment calibration & deicer quantity records by end of Year 2 & thereafter.	Investigated and switched deicer to a non toxic and non corrosive liquid deicer—ICEB'GONE.	Establish procedure to maintain records on deicer dispensing and spreader calibration.
Revised					
6-7	Minimize impacts from vehicle washing	Public Services	Determine car wash facility location by the end of Year 2. Evaluate vehicle washing by schools & fire depts.. during Year 1. If improvements required at schools and fire depts.., recommend design improvements in Year 2. Begin improvements implementation and prepare final design plans for car wash facility in Years 4 & 5.	School Department does not wash vehicles. Fire Department washes Engine 2 & 5 in place—floor drain that connects to sanitary sewer. Other vehicles washed outside with low phosphorus/biodegradable detergents.	Determine location for construction of a car wash facility.
Revised					
6-8	Park and landscape maintenance	Public Services	Number of employees trained in second year and records of herbicide/fertilizer used annually at recreational areas maintained by Public Services.	Year 2 Goal	Conduct training and then practice green landscaping continually throughout permit period.
Revised					

MP 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
6-9	Hazardous Waste Collection	Public Services	Investigate locations and cost alternatives for holding a household hazardous waste collection in Year 1. Develop a program in Year 2. Present for City council approval in Year 3. If approved implement in Years 4 & 5	Household hazardous waste day to be held April 24, 2004. Flyer created and distributed to all school age children, posted at selected sites and distributed to local newspaper and local cable TV station	Depending on funding evaluate hazardous waste day or develop a plan for year 3 of plan.
Revised					

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

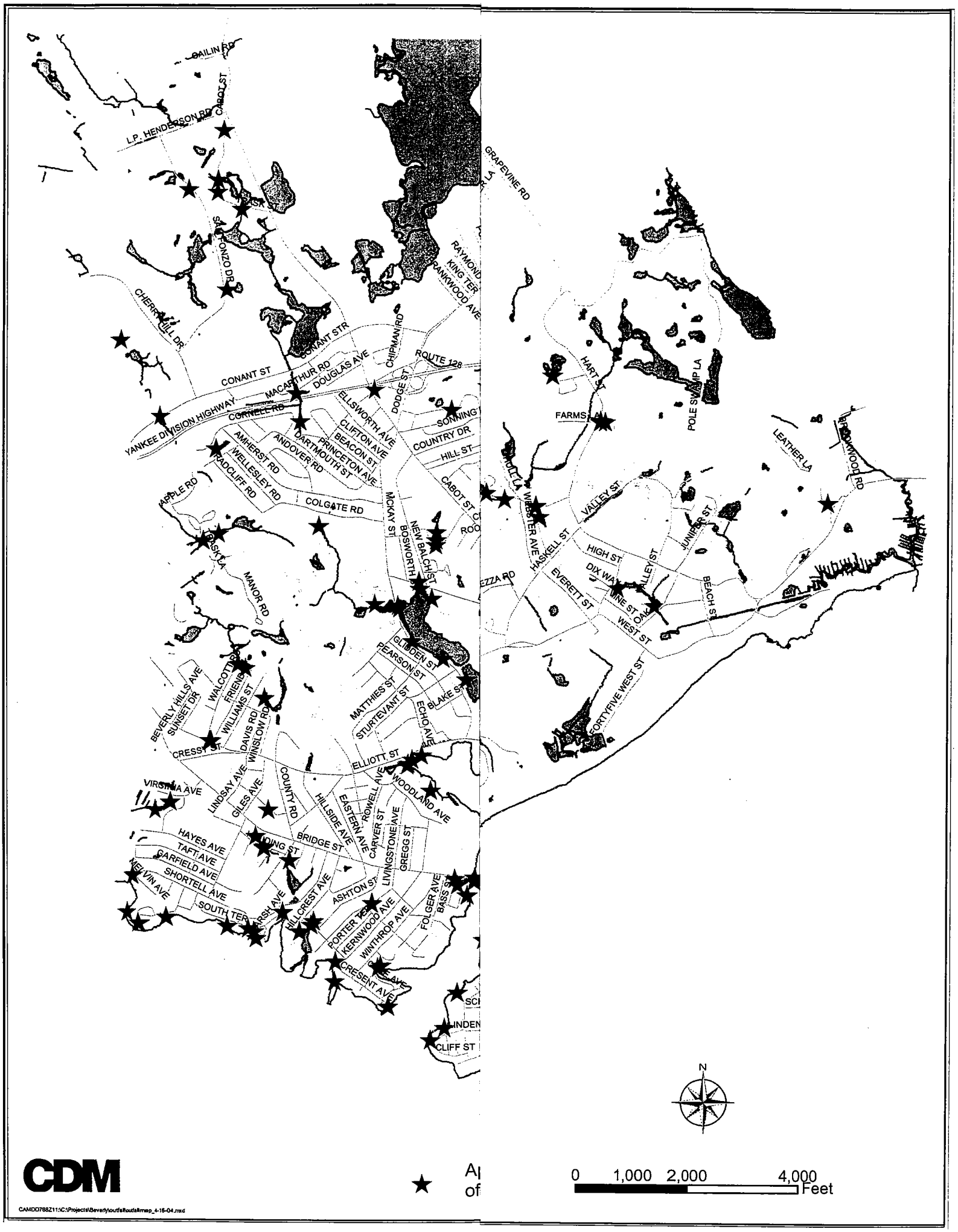
Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	
Total number of structures cleaned	(#)	
Storm drain cleaned	(LF or mi.)	
Qty. of screenings/debris removed 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)	



CDM

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