

Municipality/Organization: Canton, MA/Department of Public Works

EPA NPDES Permit Number: MA 0410311

MassDEP Transmittal Number: W-03622

Annual Report Number

& Reporting Period:

April 1, 2009 – March 31, 2010

**NPDES PII Small MS4 General Permit
Annual Report
(Due: May 1, 2009)**

Part I. General Information

Contact Person: Michael Trotta

Title: Superintendent

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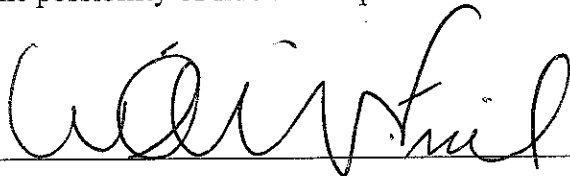
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Certification:

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 Friel

Title: Town Administrator

Date:

4/16/09

Part II. Self-Assessment

The Town of Canton has completed its annual report as summarized below:

One hundred sites have been investigated for illicit discharge during the dry water flows as of March 2009. Of these, 10 sites are being sampled for further investigation of illicit discharge. If any sites are found to have illicit discharges, then we will start investigating the areas further upstream to find out where the source is coming from.

Our sampling includes testing for ph, ammonia, potassium, detergents, e.coli and fluoride. The indicators that we are using are for odor, color turbidity and floatables not counting trash.

The Town of Canton DPW has in place an on going investigation of over 200 outfalls which we will continue to update to our data base. As new sites are found, they are located by GPS and added to our original Stantec map along with a new number. We are also in the process of setting up a maintenance schedule for the sites as needed.

We have been working closely with the Town of Canton Conservation Commission Agent, Robert Murphy, on information for the culverts and outlets within the Town.

The Town of Canton and the Neponset River Valley Watershed Association have partnered to receive a MA DEP 604B Grant to identify sites suitable for retrofitting with structural stormwater BMPs and to develop conceptual design for BMPs at those sites.

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 Revised	Design-Distribute Brochures	DPW	Spring	Water Conservation mailed Spring 09 water bill	Continue Program
1-2 Revised	Air Stormwater Info on CATV	DPW	Spring & Fall	Town Engineer met with local cable to develop information outline	Produce Broadcast Fall 09
1-3 Revised	Storm Water Committee (SWC)	ConComm	On going	ConComm, DPW, Eng. met Fall 08,	Assess Program Discuss and Recommend changes
1-4 Revised	Label Storm Drains	Con Com SWC		No Action	Discuss need as part of SWC assessment
1-5 Revised	High School Education	Con Com SWC	Winter 08 Spring 09	No Action	Discuss need as part of SWC assessment
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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year
2-1 Revised	Storm Water Committee	SWC	On going	Present Stormwater By-Law at ATM 07-April 07	Assess Program and By-Law Impact
2-2 Revised	Label Storm Drains	SWC		No Action	Discuss need as part of program review
2-3 Revised	Technical Comm	DPW	On going	Submitted Ph II CWRMP to MA DEP	Complete Phase III CWRMP Submit to MA DEP
2-4 Revised	Review General Permit	TC/SWC	On going	Presented Stormwater By-Law at ATM 07 April 07	Review new 5 yr permit requirements
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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year
3-1 Revised	Drain Map	DPW	Complete Winter 09	Met with Stantec Eng and Town GIS to review map	Town Engineer to coordinate Field Survey
3-2 Revised	Article XVI Town of Canton By-Law	BOS	Complete		
3-3 Revised	Enforce By-Law	Con Comm DPW	On going	Reviewing Drainage and Grading Plans Review Subdivision	Continue Reviews and site inspections
3-4 Revised	Train DPW Staff	TC/SWC DPW	On going	Engineering Staff working with DPW Supervisors on outfall identification	Continue to assist DPW
3-5 Revised	Dry Weather Outfall Inspection	TC/SWC DPW	Late Summer, Fall 2009	Began field inspection and survey	Continue field inspection and survey
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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year
4-1 Revised	Draft Erosion Sediment By-Law		Completed		
4-2 Revised	Procedures for Erosion/Sediment By Law	Con Comm	Article XX By Law	On Going Review	On Going Review
4-3 Revised	Procedure for Site Waste	Con Comm	Article XX By Law	On Going Review	On Going Review
4-4 Revised	Procedure for Site Plan Review	Con Comm DPW	Article XX By Law	On Going Review	On Going Review
4-5 Revised	Procedure for Enforcement	Con Comm	Article XX By law	On Going Enforcement	On Going Enforcement

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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year
5-1 Revised	Storm water Management Policy	DPW	On Going	Permitted drain connections. Did Site Plan Reviews and Inspections	Continue permitting, plan reviews, site inspections
5-2 Revised	Review Storm water BMP	DPW	Summer, Fall 2008	Reviewed Stormwater By-Law with ConCom, BOS, DPW	Review Stormwater By-Law with SWC, BOS, DPW
5-3 Revised	Review Long Term O & M	DPW	On Going	Began Draft of O & M Manual for Bolivar Street Dam	Complete O & M for Bolivar Street Dam Review O & M for Forge Pond Dam
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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year
6-1 Revised	Catch Basin Cleaning Program	DPW	Clean 1100 /year	Cleaned 1055 Basins	Continue Program
6-2 Revised	Street Sweeping	DPW	Complete Spring & Fall Sweep	Completed 2 Full Sweeps Swept low areas after rain Swept CBD Twice monthly	Continue Program
6-3 Revised	Hazardous Waste Materials	DPW	Yearly Collection	Held Household Hazardous Waste Day May 17, 2008	Household Hazardous Waste Day May 30, 2009
6-4 Revised	CB Cleanings	DPW	Yearly	Recycle sweepings and CB cleanings with compost and gravel fill	Continue Program
Revised					
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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year
7-1 Revised	Identify & Categorize Outfall	DPW	Continue survey	Checked GPS location of mapped outfalls	Survey outfalls to check locations
7-2 Revised	Test Outfalls	DPW	Continue Testing	Engineering tested 100 outfall locations for dry weather discharge	Develop program as required by new 5 year permit
7-3 Revised	Identify Illicit Drainage Source	DPW, ConComm	As needed	ConComm investigated one complaint	Based on need and testing work with Con Comm and Building Inspector
7-4 Revised	Eliminate Pollutant Discharge	DPW ConComm	Enforce as needed	ConComm investigated one complaint	Enforce By Law as needed through plan review, site inspection, and written notice
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
	(y/n)	N	
	(\$)	51,000	
	(\$)	General Fund	
Storm water management position created/staffed			
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 %)	5800
Storm water 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 **	(#)	1- May 30, 2009
▪ community participation **	(# or %)	
▪ material collected **	(tons or gal)	
School curricula implemented	(y/n)	

Legal/Regulatory

Regulatory Mechanism Status (indicate with "X")	In Place Prior to Phase II	Reviewing Existing Authorities	Drafted	Draft in Review	Adopted
▪ Illicit Discharge Detection & Elimination					X
▪ Erosion & Sediment Control					X
▪ Post-Development Storm water Management					
Accompanying Regulation Status (indicate with "X")					
▪ Illicit Discharge Detection & Elimination					
▪ Erosion & Sediment Control					
▪ Post-Development Storm water Management					

Mapping and Illicit Discharges

	(Preferred Units)		Response
Outfall mapping complete	(%)		77
Estimated or actual number of outfalls	(#)		232/300
System-Wide mapping complete (complete storm sewer infrastructure)	(%)		95
Mapping method(s)			
▪ Paper/Mylar	(%)		45
▪ CADD	(%)		
▪ GIS	(%)		100
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	(%)		72
% of population on septic systems	(%)		23

Construction

	(Preferred Units)	Response
Number of construction starts (>1-acre) **	(#)	0
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)	
Site inspections completed **	(# or %)	35
Tickets/Stop work orders issued **	(# or %)	
Fines collected **	(# and \$)	
Complaints/concerns received from public **	(#)	1

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction storm water 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 **	(#)	1055
Qty. of storm drain cleaned **	(%, LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	1320 tons
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Compost/Use

Basin Cleaning Costs			
• Annual budget/expenditure (labor & equipment)**	(\$)		30,000
• Hourly or per basin contract rate **	(\$/hr or \$ per basin)		
• Disposal cost**	(\$)		
Cleaning Equipment			
• Clam shell truck(s) owned/leased	(#)		1 owned
• Vacuum truck(s) owned/leased	(#)		
• Vacuum trucks specified in contracts	(y/n)		
• % Structures cleaned with clam shells **	(%)		100
• % Structures cleaned with vacor **	(%)		

	(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)	16
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Compost/use
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	28,000
• Hourly or lane mile contract rate **	(\$/hr. or In mi.)	
• Disposal cost**	(\$)	
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	1 owned
• Vacuum street sweepers owned/leased	(#)	
• Vacuum street sweepers specified in contracts	(y/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)

▪ 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 **	% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand	75 25
(also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)		
Pre-wetting techniques utilized **	(y/n or %)	N
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 %)	
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)	Y

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	