

Municipality/Organization: Town of Canton

EPA NPDES Permit Number: MA 0410311

MassDEP Transmittal Number: W-03622

Annual Report Number Year 13

& Reporting Period: April 1, 2015 – March 31, 2016

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2016)

Part I. General Information

Contact Person: Michael Trotta

Title: Superintendent of Public Works

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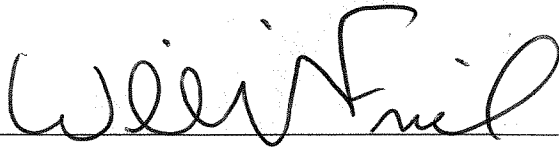
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Certification:

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: April 26, 2016

Part II. Self-Assessment

The Town of Canton has completed its annual report and has determined that our municipality is in compliance with all permit conditions.

The Town of Canton prepared for the renewal of the MS4 General Permit on the basis of the requirements detailed in the 2014 Draft permit. The Town is taking a proactive approach to collecting quantifiable information related to stormwater management through a centralized platform, VUE Works. VUE Works is currently being set up with regulatory reporting needs in mind and the Town has started to use the system to record data collected for reporting purposes.

The Town of Canton achieved significant progress in program development including completing Phase II of an Integrated Water Resource Management Plan which has been heavily focused on stormwater and in the implementation of asset management. The IWRMP also includes a Capital Improvement Plan framework.

This reporting year's activities included:

- Continuing to complete and update stormwater system mapping in GIS and incorporation into VUE Works. The system includes photographs for each outfall with inspection reports attached.
- Implementation of updated Town Facilities BMP's and Drainage O&M manual for preventing stormwater pollution from municipal operations.
- Participation in various stormwater program related training throughout the year including; IDDE training, Infrastructure O&M training, MS4 compliance training, and VUE Works data collection training.
- Implementing a computerized maintenance management system including the use of tablets for creating maintenance work orders, collecting data, recording catch basins cleaned and outfalls inspected.
- Continuation of construction site plan review, permitting, and site inspection.
- Holding household Hazardous Waste Day.
- Review and approval of proposed update to Stormwater Management Article XXI general by law by the Conservation Committee.

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 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1-1 Revised	Design Distribute Brochures <i>Neponset Storm Water Partnership Materials</i>	DPW	Spring / Fall	Outside watering tips mailed in spring water bills. Stormwater brochure distributed at DPW Office and Con Comm. meetings	Neponset Storm Water Partnership materials and web site to be used for outreach.
1-2 Revised	CATV	DPW	On going	Town Engineer discussed storm water with Con Comm.	Reassess activity under new MS4 permit
1-3 Revised	Storm Water Comm.	Con Comm. DPW	On going	Worked With Kleinfelder on IWRMP Phase II	Continue activity.
1-4 Revised	Label Catch Basins	DPW	On going	Labeled basins as part of CB cleaning program.	Continue activity.
1-5 Revised	High School Educ.	Con Comm.		No action	No action
Revised					

1a. Additions

1 – 6	Evaluate Stormwater Utility Feasibility	DPW	Fall / Winter	In summer 2014 presented a utility feasibility study report to BOS.	Look at utility as possible funding mechanism.

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
2-1 Revised	Storm Water Comm.	SWC	On going	Participated in Phase II of IWRMP	Assist in preparation for next MS4 General Permit
2-2 Revised	Label Catch Basins	DPW	On going	Continue labeling under CB cleaning program.	Continue activity.
2-3 Revised	Technical Comm.		On going	The IWRMP, mater plan, bylaws, and other documents related to stormwater management continue to be available on the Town of Canton website. http://www.town.canton.ma.us/494/stormwater-references	Continue work on IWRMP
2-4 Revised	Review General Permit	DPW	On going	Prepared annual report	Prepare for new MS4 General Permit
Revised					
Revised					

2a. Additions

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3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
3-1 Revised	Drainage System Map	DPW	On Going	Updated drainage system map.	Continue to collect data using mobile device.
3-2 Revised	Article XVI By-Law		Completed		
3-3 Revised	Enforce By-Law	Con Comm. DPW	On going	Reviewed site and subdivision storm water and grading plans	Continue activity
3-4 Revised	Train Staff	DPW	On going	Attended stormwater seminar presented by APWA. IDDE training by Kleinfelder in March 2015 attended by PWD Staff.	Attend seminars and view web casts
3-5 Revised	Dry Weather Outfall Inspection	DPW	Complete Annual Round Inspections	Located 4 new out falls. Sampled according to procedures outlined in IDDE at 7 outfalls. No ID's identified.	Continue activity
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 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
4-1 Revised	Draft Erosion / Sediment By-Law	Con Comm.	Completed		
4-2 Revised	Erosion / Sediment By-Law	Con Comm.	Article XX TOC By-Law	Revised regulations approved by Con Com April 2016.	Review new Permit requirements and revise as appropriate.
4-3 Revised	Procedures for Site Waste	Con Comm.	Article XX TOC By-Law	Revised regulations approved by Con Com April 2016.	Review new Permit requirements and revise as appropriate.
4-4 Revised	Procedure for Site Plan Review	Con Comm.	Article XX TOC By-Law	Revised regulations approved by Con Com April 2016.	Review new Permit requirements and revise as appropriate.
4-5 Revised	By-Law Enforcement	Con Comm.	Article XX TOC By-Law	On going enforcement	Review new Permit requirements and revise as appropriate. On going enforcement
Revised					

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 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
5-1 Revised	Storm Water Management Policy	Building DPW Con Comm.	On going	Review Drain Connection Permits. Site plan reviews and follow up inspections.	Review new Permit requirements and revise as appropriate. Continue activity
5-2 Revised	Review Storm Water BMP's	DPW SWC	On going	Evaluate implications of new MS4 General Permit on proposed and existing BMP's.	Review BMP requirements under new MS4 General Permit.
5-3 Revised	Review Long Term O&M	DPW SWC	On going	Implemented O&M plan	Review new Permit requirements and revise as appropriate. Review O&M plan with Staff
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 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
6-1 Revised	Catch Basin Cleaning	DPW	Clean 1100 / Year	Cleaned 1760 catch basins	Continue activity. Review new Permit requirements and revise as appropriate.
6-2 Revised	Street Sweeping	DPW	Complete Spring and Fall Sweeps	Completed 3 full sweeps of all streets. Swept CBD twice monthly. Swept low areas after .5" rain.	Continue activity. Review new Permit requirements and revise as appropriate.
6-3 Revised	Hazard Waste Materials	DPW	Yearly Collection	Held HHW Day May 2, 2015	Hold HHW Day May 14, 2016
6-4 Revised	Procedure for Catch Basin Cleanings	DPW	Yearly	Recycle sweepings and catch basins with compost or gravel fill	Continue activity
Revised					
Revised					

6a. Additions

6-5	Revise and update O&M Ops Manual	DPW	Year 13	Implemented revised O&M manual. Kleinfelder training March 2016.	Continue activity.

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 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
7-1 Revised	Identify and Categorize Outfalls	DPW	Year 13	Updated stormwater map and developed a tracking / sampling program through VUE Works.	Implement sampling program and investigate outfalls. Review new Permit requirements and revise as appropriate.
7-2 Revised	Test Outfalls	DPW	Test 50% of Outfalls	Sampled 7 locations	Continue activity.
7-3 Revised	Identify Illicit Drainage Source	DPW Con Comm.	Sample as needed	None Identified.	Continue Activity.
7-4 Revised	Eliminate Illicit Drainage Source	DPW Con Comm.	Sample as needed	None Identified.	Continue Activity.
Revised					
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

- Number of outfalls inspected for IDDE – 7
- Number of outfalls resampled – 7
- No Illicit Discharges were found during this permit year
- 1760 catch basins were cleaned
- All streets were swept 3 times

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, 2009 through March 31, 2015)

Programmatic

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	N
Annual program budget/expenditures **	(\$)	348,000
Total program expenditures since beginning of permit coverage	(\$)	
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		General Fund

Education, Involvement, and Training

Estimated number of property owners reached by education program(s)	(# or %)	6500
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 **	(#)	May 2, 2015
▪ community participation **	(# or %)	106 Cars
▪ material collected **	(tons or gal)	682 gals.
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					X
▪ Erosion & Sediment Control					X
▪ Post-Development Stormwater Management					X
Accompanying Regulation Status (indicate with "X")					
▪ Illicit Discharge Detection & Elimination					
▪ 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	(#)	270
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	100
Outfalls inspected/screened ** 2014	(# or %)	7
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	923
Illicit discharges identified **	(#)	
Illicit discharges identified (Since beginning of permit coverage)	(#)	2
Illicit connections removed **	(#); and (est. gpd)	
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	1
% of population on sewer	(%)	75
% of population on septic systems	(%)	25

Construction

	(Preferred Units)	Response
Number of construction starts (>1-acre) **	(#)	2
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)	100
Site inspections completed **	(# or %)	12
Tickets/Stop work orders issued **	(# or %)	0
Fines collected **	(# and \$)	0
Complaints/concerns received from public **	(#)	1

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)	Y
Low-impact development (LID) practices permitted and encouraged	(y/n)	Y

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)	2
Qty of structures cleaned **	(#)	1760
Qty. of storm drain cleaned **	(%, LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	1410 T
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Beneficial

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	126,000
• 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 vector **	(%)	

(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)	14
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	435 T
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Beneficial Use
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	120,000
• Hourly or lane mile contract rate **	(\$/hr. or ln 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)	Y

	(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	80 20
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/l _n mi. or %)	
Estimated net reduction or increase in typical year sand application rate **	(±lbs/l _n mi. or %)	
% of salt/chemical pile(s) covered in storage shed(s)	(%)	100
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	