

Municipality/Organization: Town of Dedham

EPA NPDES Permit Number: MAR041033

MassDEP Transmittal Number: W- 040861

Annual Report Number Year 10
& Reporting Period: April 1, 2012 – March 31, 2013

**NPDES PII Small MS4 General Permit
Annual Report
(Due: May 1, 2013)**

Part I. General Information

Contact Person: Virginia LeClair

Title: Environmental Coordinator

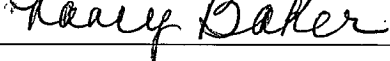
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Certification:

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: Nancy Baker

Title: Assistant Town Administrator

Date: April 30, 2013

Part II. Self-Assessment

The Town of Dedham 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 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1a	Establish an Advisory Committee	Town Administration	Form a Committee	The Town Administrator utilized the monthly Department Head meeting and weekly Operations meeting to update and discuss stormwater issues on a regular basis with staff.	Continue with monthly Department Head meetings and weekly Operations meetings
1b	Submit 2 press releases	Environmental	Reach thousands of residents	Information was posted on the Town's website and MWRA Dwayne the Stormdrain coloring books, supplied free of charge by DWWD were given out at the Farmer's Market along with water saving devices.	The Environmental Coordinator will utilize the Neponset River Watershed Association MS4 Outreach materials as part of a regional education and outreach campaign to increase awareness regarding ways to prevent water pollution. The catch phrase of the program is "Clean Streets, Clean Water". NPRWA will supply various forms of print material (postcards, posters, flyers, bookmarks, brochures etc) as well as a website that can be used by several communities to educate residents about stormwater pollution.
1c	Post article on town website	Engineering/Environmental	Reach thousands of web browsers	The Town posted information about the current General Permit and the previous year's annual reports, as well as public education information on stormdrain stenciling and the local watershed through a link to the non-profit group the Charles River Watershed Association.	The Town will continue to post our General Permit, as well as supply educational materials and links on stormwater. We will add a link to the NPRWA website.

Id	Add link to town website	Engineering/Environmental	Reach thousands of residents	The Town created a stormwater page on the official Town Website and posted regulations and educational brochures and notices. The Town has maintained links to several environmental agencies and watershed groups on the Town's official website	Continue to maintain links as necessary, and add additional content to the webpage.
1e	Publish list of department names	Town Administrator	Communicate with residents	The Town has maintained an updated list of Department head names, contact numbers, and email addresses.	Continue to maintain and update lists as necessary, and add contact information for specific stormwater questions or issues.

1a. Additions

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities
2a Revised	Develop stenciling program	Environmental/DPW	Educate hundreds of residents	The Environmental Coordinator has worked with the Dedham Westwood Water District in the past to develop a stormdrain stenciling program for youth. In 2008 we were unable to attract any youth to this program; however in early 2009 the Environmental Coordinator worked with two Eagle Scout candidates on this project for their badge. Over 113 stormdrains were stenciled in 2009.	Continue to work with Eagle Scout candidates and other groups to educate youth about stormwater pollution and prevention. In addition to stenciling projects the DPW continues to install permanent placards on major drainage projects. As part of the Dedham Square project, the re-constructed areas will have new placards affixed to the curbs above catch basins.
2b	Work with watershed groups	Engineering/Environmental	Coordinate efforts with others	This past year the Environmental Coordinator attended a workshop	Continue to work with watershed groups on education and

Revised				<p>hosted by the CRWA on stormwater pollution prevention as it pertains to road and field maintenance.</p> <p>The Engineering Dept. partnered with the Neponset River Watershed Association (NPRWA) to identify sites suitable for retrofitting with stormwater BMPs and to develop conceptual designs for the top 3 BMP retrofit site locations.</p> <p>The Environmental Department is participating in, for a 4th consecutive year, the annual CRWA Earth Day Cleanup.</p> <p>The Environmental Coordinator continues to work with the DWWD and the NPRWA on water conservation programs. The Environmental Coordinator has arranged for NPRWA to present to 3rd and 4th graders in the spring of 2012. The lesson is comprised of 2, 1 hour presentations.</p>	<p>outreach activities and participate in educational sessions offered by these groups for continued learning on stormwater issues.</p> <p>The Engineering Dept. will be working with the NPRWA to file an application to the State for a 319 grant for the construction of the 3 BMP retrofits.</p>
2c Revised	Post signs in critical resource areas	Environmental	Notify residents of critical areas	<p>Posted signs along Charles River and Mother Brook of potential hazards from eating certain fish that were indicated as having high levels of contaminants. We have also installed "Do Not Dump" signs along various parts of the rivers.</p>	<p>The Health Department continues to coordinate with neighboring communities and posts signs warning the public of hazards when they arise. The Environmental Department is in coordination with CRWA on water quality levels in Dedham, specifically at launch locations. CRWA has several Dedham residents that volunteer to test at sites in Town. If a poor or hazardous report came back the Town would post signs at launch locations, as well as on the Towns website and Dedham Trails website.</p>

2d New	Water Quality Testing	Environmental	Record and report on water quality in the Charles River	The Charles River Watershed Association (CRWA) through volunteers in Dedham monitors water quality at several locations in Town. The Environmental Department receives these reports and if and when there was a case of high levels of bacteria reported the Dept. would disseminate information to the public. Each year the Board of Health runs a Household Hazardous Waste Day at the DPW facility.	Post information received from CRWA regarding water quality levels on the Town's Dedham Trails website, which is linked through the Town's main website. This site is specifically focused on the Water Trail and recreation on the Charles. Water Quality information would be a great addition to this site. Continue to run an annual HHW day.
2e	Household Hazardous Waste Day	Health/DPW	Annual event to remove and properly dispose of residential household hazardous waste		
2f	Educate students about environment	DPW/Environmental	Involve students and families	Engineering, DPW and Environmental Departments participated in the annual student government day and stressed issues related to stormwater and pollution to student leaders. See 2b above for more information on student education and outreach conducted.	Continue to participate in student government day and encourage students and youth groups to learn about pollution prevention through stormdrain stenciling projects, as well as invite guest lecturers to schools for presentations. <i>This BMP was discontinued and substituted with BMP 2f</i>
2g Deleted	Establish a suggestion box	DPW/Town Administration	Receive feedback	NA	
2h	Utilize DPW On-Line Service Request Form to solicit requests for trash/debris removal, street sweeping, etc.	DPW	Reduce the amount trash/debris and pollutants reaching receiving waters	Received and responded to hundreds of requests from residents for trash/debris removal and street sweeping using on-line request form.	Continue to solicit and respond to requests by residents so that trash/debris can be picked-up before it makes its way into receiving waters.

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 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities
3a	Develop a mapping system	Engineering	Map the drainage system	In 2007, the Town of Dedham established the GIS Division within the Department of Infrastructure Engineering. Prior to that, the Town's GIS had been managed primarily by outside consultants. The goal of the Town of Dedham has been to improve its GIS capabilities and to expand its services to other departments and the community.	The Engineering Department will continue to update and improve the existing drain and sewer mapping by verifying assumed structures improving connectivity issues. The Engineering Department will continue to update new outfalls installed and investigate assumed outfalls to determine exact locations and conditions using GPS.
3b	Locate all visible outfalls	Engineering	Inventory outfalls	Since that time the GIS Division has focused its efforts on establishing an enterprise GIS within the Town. A large part of this effort has been to improve public access to information by improving and expanding the Town's online GIS services. In 2011, the GIS Department won the Special Achievement in GIS Award. Additional inspection and GPS location were performed in conjunction with dry weather testing (BMP 3f)	
3c	Adopt new stormwater bylaws	Conservation Commission	Enforcement of illegal environmental actions	Stormwater By-Laws and Stormwater regulations have been previously adopted, but the Conservation Commission has revised them over the years to keep them current. The Town adopted a new by-law which prohibits illicit discharges to storm drains in November 2007. In 2011, the Conservation Commission revised the Town's Stormwater Bylaws.	Continue to review and revise bylaws as needed. The Engineering Department will continue to update and improve the existing drain and sewer mapping by verifying assumed structures improving connectivity issues.

3d	Develop a response plan	Town Administrator	Develop an emergency response plan to contain spills	The Town is in the process of updating the emergency response plan for Dedham and has created an Emergency Response team that meets quarterly.	Incorporate additional provisions into the revised emergency response plan to mitigate potential environmental emergencies such as spills, etc.
3e	Adopt a hazardous waste day	Health Dept.	Reduce illegal dumping of hazardous material	The Health Department has hosted a hazardous waste collection day	The Town will continue to conduct a yearly hazardous collection day.

3a. Additions

3f	Perform dry weather testing of outfalls	Engineering	Identify illicit discharges	One illicit discharge was identified this year.	The illicit discharge indentified was traced back to a cross connection between the sewer and stormwater utilities. The DPW has eliminated this cross connection by plugging the pipe that goes from the sewer to the stormwater earlier this year.
	<i>Formerly BMP 6f</i>				

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities
4a	Review existing state and local regulations	Engineering	Update the Town regulations	Completed previously.	
4b	Develop town design and construction site review policy	Conservation Commission	Develop Town standards	The Conservation Commission has continued to enforce the stormwater regulations including the application of drainage design standards.	Continue the review of projects under the stormwater regulations.
4c	Create town specifications	Engineering	Develop standard details and specifications	Town standard details, which include standard structural BMP's have been created and posted on the Town's website.	Continue to update or add standards as necessary.
4d	Develop town inspection guidelines	Conservation Commission	Ensure that work that has been permitted is satisfactorily constructed	The Conservation Commission enforces the stormwater regulations.	The Conservation Commission is constantly reviewing the local Stormwater Bylaws and discussing ways to make improvements.
4e	Determine inspection responsibilities	DPW/Town Administration	Establish means of inspection	No action	<i>This BMP has been deleted as it is redundant with respects to BMP 4d.</i>

4a. Additions

4f.	Coordinate with neighboring communities regarding stormwater management	Environmental, Engineering, DPW, Town Administration	Coordinate with the City of Boston regarding discharges through interconnections or run-off from construction projects	The Town of Dedham signed in 2012 an inter-municipal agreement with the City of Boston regarding the management of stormwater.	Continue to coordinate with the City of Boston on stormwater, illicit connection and other issues related to the management of stormwater.
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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 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities
5a	Develop stormwater policy	Conservation Commission	Encourage recharge	The Town has created stormwater regulations that strongly encourage recharge. The Commission continues to revise and update these regulations.	Continue to enforce existing regulations.
5b	Develop standards for BMP's	Conservation Commission	Regulate subdivision and site plans	The Town currently reviews subdivision and site plans for compliance with the stormwater regulations, and utilizes the Town Standard Details.	Continue to enforce existing regulations, and update or add details to Town Standard Details as necessary.
5c	Develop bylaws and policy	Conservation Commission	Regulate new development runoff	The Conservation Commission enforces the stormwater regulations and regularly reviews the bylaws and policies.	In the upcoming year, the Conservation Commission will be reviewing the local Stormwater Bylaws.

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 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities
6a	Implement pollution prevention program	DPW	Identify ways to increase compliance	Increase street sweeping and continue to monitor catch basins for cleaning.	Continue with street sweeping program and catch basin monitoring.
6b	Develop TV inspection	DPW/Engineering Department	Eliminate illegal connections	The Town performed TV inspection on several hundred linear feet of storm drains in addition to the annual inspection of sewer lines.	<i>This BMP was discontinued; see new BMP 3f</i>
6c	Develop hazardous waste training	DPW	Train 20 employees on hazardous waste	Conducted 10-hour OSHA training for all DPW employees which also included proper handling of hazardous waste.	Continue to train new employees and maintain certification of current employees.
6d	Sweep all paved roads	DPW		The DPW continued annual street sweeping program. Arterial roads are swept every 3 days and all other roads twice per year.	Continue the annual street sweeping program.
6e	Clean all catchbasins	DPW	Clean catchbasins every three years	The DPW estimates that it has cleaned approximately one third of the catch basins and over the past year. Exact numbers are not available.	Implement a GPS/GIS system to track the cleaning of catch basins, to better identify how many and which basins have been cleaned as well as rate of sediment buildup if possible.
6f	Develop a litter management program	Conservation/Environmental	Eliminate dumping and pollution to catchbasins and water bodies	The Environmental Dept and Conservation Agent will be working with the NPRWA in the upcoming months to disseminate information about dog waste and proper disposal.	Continue to work with NPRWA on refining material for education and outreach regarding pet waste and pollution to waterbodies.
Revised					

6a. Additions

6g	Perform visual-dry weather-outfall inspections	Engineering	Identify illicit discharges to storm drains and outfalls	No action planned in year 3.	Perform visual-dry weather inspections of outfalls giving priority to outfalls discharging to impaired waters. Determine the number of outfalls which are suspected of having illicit connections and the scope of work required to further identify the source(s).
	Replaced by BMP 3f				

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 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities
7a	Develop a landscaping policy	DPW/Parks Department	Eliminate excessive chemicals	No action.	
7b Deleted	Develop a spill prevention plan	DPW/Town Administration	Reduce spill prevention to divers	No action.	This BMP was deleted as it was redundant with respects to BMP 3d.
7c Deleted	Develop a training program	DPW/Town Administration	Educate 8 employees	No action.	This BMP was deleted as it was redundant with respects to BMP 6c.
7d	Install new drainage structures	DPW	Eliminate some TSS	The DPW replaced/installed over 9 substandard catch basins with new deep sump catch basins.	Install deep sump catch basins as needed and incorporate new basins into existing roadway reconstruction when possible.
7e	Develop a housekeeping plan	DPW	Construct new salt shed to replace current uncovered salt storage	Construction of the Salt Shed was completed in November 2006.	

7a. Additions

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7b. WLA Assessment

The Town of Dedham has not yet implemented controls at this point in the permit process that would significantly impact the waste load allocation.

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, 2012 through March 31, 2013)

Programmatic

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	Y
Annual program budget/expenditures **	(\$)	\$98,037.50
Total program expenditures since beginning of permit coverage	(\$)	\$98,037.50
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 %)	Unknown
Stormwater management committee established	(y/n)	N
Stream teams established or supported	(# or y/n)	N
Shoreline clean-up participation or quantity of shoreline miles cleaned **	(y/n or mi.)	Y
Shoreline cleaned since beginning of permit coverage	(mi.)	Unknown
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	1
▪ community participation **	(# or %)	178
▪ material collected **	(tons or gal)	4.88 tons
School curricula implemented	(y/n)	y

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 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	(%)	99%
Estimated or actual number of outfalls	(#)	375
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	99%
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	100%
Outfalls inspected/screened **	(# or %)	45
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	151
Illicit discharges identified **	(#)	1
Illicit discharges identified (Since beginning of permit coverage)	(#)	4
Illicit connections removed **	(#); and (est. gpd)	1
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	3
% of population on sewer	(%)	93%
% of population on septic systems	(%)	7%

Construction

	(Preferred Units)	Response
Number of construction starts (>1-acre) **	(#)	3
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)	100%
Site inspections completed **	(# or %)	100%
Tickets/Stop work orders issued **	(# or %)	1
Fines collected **	(# and \$)	0
Complaints/concerns received from public **	(#)	3

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	100%
Site inspections (for proper BMP installation & operation) completed **	(# or %)	100%
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)	1/3 per year
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	1/3 per year
Qty of structures cleaned **	(#)	949 +/-
Qty. of storm drain cleaned **	(%, LF or mi.)	3000 lf +/-
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	Unknown
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Beneficial

Basin Cleaning Costs			
• Annual budget/expenditure (labor & equipment)**	(\$)		\$100,000 +/-
• Hourly or per basin contract rate **	(\$/hr or \$ per basin)		Unknown
• Disposal cost**	(\$)		
Cleaning Equipment			
• Clam shell truck(s) owned/leased	(#)		Owned
• Vacuum truck(s) owned/leased	(#)		Leased
• Vacuum trucks specified in contracts	(y/n)		Yes
• % Structures cleaned with clam shells **	(%)		85 %
• % Structures cleaned with vector **	(%)		15%

	(Preferred Units)	Response
Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	5
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	Every 3 Days
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	Unknown
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Beneficial
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	\$400,000 +
• Hourly or lane mile contract rate **	(\$/hr. or In mi.)	
• Disposal cost**	(\$)	
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	Yes
• 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	NaCl MgCl ₂
(also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)		
Pre-wetting techniques utilized **	(y/n or %)	Yes
Manual control spreaders used **	(y/n or %)	No
Zero-velocity spreaders used **	(y/n or %)	
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)	(%)	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)	

Water Supply Protection

Storm water outfalls to public water supplies eliminated or relocated	# or y/n	N
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	N
Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	N