

**Municipality/Organization:** Stoneham, Massachusetts

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**EPA NPDES Permit Number:** MA041062

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**MassDEP Transmittal Number:** W-040960

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**Annual Report Number  
& Reporting Period:** April 1, 2009 – March 31, 2010

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4/30/10

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## NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2010)

### Part I. General Information

**Contact Person:** Robert E. Grover, P.E. **Title:** Director, Dept. of Public Works

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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:** 

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**Printed Name:** Robert E. Grover

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**Title:** Director, Department of Public Works

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**Date:** 4/27/10

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## **Part II. Self-Assessment**

The Town of Stoneham has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future
1-5	Promote Water Conservation Practices for Homeowners	Department of Public Works	<p><b>Spring '03 – Winter '09/10</b></p> <ul style="list-style-type: none"> <li>Post water conservation posters at Town Hall and the public library.</li> <li>Include water conservation bill inserts with the water bill.</li> <li>Issue an annual press release to the <i>Stoneham Independent</i> and <i>Stoneham Sun</i> to promote water conservation.</li> </ul> <p><b>Fall '05/'07</b></p> <ul style="list-style-type: none"> <li>Issue the press release to the <i>Stoneham Independent</i> and <i>Stoneham Sun</i> and track whether it was published.</li> <li>Submit copies of the informational flyers to the Stoneham Chamber of Commerce (SCC).</li> <li>Post the informational flyer on the Town's website.</li> </ul>	Educational materials were available at the DPW office, library, and Town Hall. Water conservation bill inserts were included in the water bill. Low-flow showerheads were available to residents at no cost.	TBD
1-6	Develop a Press Release and Flyer Targeting Community Businesses	Department of Public Works	<ul style="list-style-type: none"> <li>Issue the press release to the <i>Stoneham Independent</i> and <i>Stoneham Sun</i> and track whether it was published.</li> <li>Submit copies of the informational flyers to the Stoneham Chamber of Commerce (SCC).</li> <li>Post the informational flyer on the Town's website.</li> </ul>	No action planned for permit year 7.	TBD

### 1a. Additions

1-7	Develop a Stormwater Brochure for General Public	Department of Public Works	<p><b>Summer '05 – Winter '09/10</b></p> <ul style="list-style-type: none"> <li>Develop and issue a brochure educating the public on ways to prevent pollution in stormwater runoff.</li> </ul>	The DPW made the EPA brochure "After the Storm – A Citizen's Guide to Understanding Stormwater" available to the public at the DPW, the Town Hall and the library.	TBD
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## 2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future
2-1	Public Access to SWMP and Receipt of Comments	Department of Public Works Library Director	<p><b>Fall '03 – Winter '09/10</b></p> <ul style="list-style-type: none"> <li>Make draft SWMP available to the public for the review and comment period.</li> <li>Finalize SWMP.</li> <li>Make the final SWMP accessible to the public at the public library and Town's website.</li> </ul> <p><b>Spring '04/'05/'06/'07/'08/'09</b></p> <ul style="list-style-type: none"> <li>Prepare an annual report.</li> <li>Annually send a press release advertising the public comment period and the status of the Town's SWMP to the <i>Stoneham Independent</i> and <i>Stoneham Sun</i> and track whether it was published.</li> <li>Advertise the public comment period on the public cable access channel.</li> <li>Receive comments on the annual report.</li> <li>Submit an annual report to both the Environmental Protection Agency and MA Department of Environmental Protection.</li> </ul> <p><b>Spring '03 – Winter '09/10</b></p> <ul style="list-style-type: none"> <li>Post advertisement offering assistance with local cleanup activities on the Town's website and within the <i>Stoneham Independent</i> and <i>Stoneham Sun</i>.</li> <li>Track the number of cleanup activities that the DPW assists annually.</li> <li>Track the number of cleanup participants at these activities.</li> <li>Track which areas of Town are cleaned by these activities.</li> <li>Track the quantity of waste collected as a result of these cleanup activities.</li> </ul>	<p>A copy of the Storm Water Management Program continues to be available at the DPW, the library, and the Town Clerk's office.</p>	To be determined based on issuance and review of proposed NPDES General Permits for MS4 stormwater discharges in Massachusetts. (TBD)
2-2	Public Access to Annual Report and Receipt of Comment	Department of Public Works		The Annual Report for Permit Year 6 was completed and submitted in 2009. The annual reports are available at the DPW office.	TBD
2-3	Provide Assistance to Local Cleanup Activities	Department of Public Works		An advertisement offering assistance with local cleanup activities was placed in the <i>Stoneham Independent</i> and <i>Stoneham Sun</i> . During Permit Year 7 several community groups cleaned up public grounds. Additionally, some local court ordered community service obligations are met through cleanup activities under the DPW.	TBD

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future
2-4	Provide Assistance to Storm Drain Stenciling Activities	Department of Public Works	<b>Spring '04 – Winter '09/10</b> <ul style="list-style-type: none"> <li>• Post advertisement offering assistance with storm drain stenciling activities on the Town's website and within the <i>Stoneham Independent</i> and <i>Stoneham Sun</i>.</li> <li>• Track the number of drains stenciled each year.</li> <li>• Track the number of participants each year.</li> </ul>	Eagle Scouts stenciled storm drains throughout the Town during permit year 7.	To be determined based on issuance and review of proposed NPDES General Permits for MS4 stormwater discharges in Massachusetts. (TBD)

## 2a. Additions

No additions to report at this time.

### 3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future
3-1	Field Verify Outfall Locations	Department of Public Works	<p><b>Spring '04 – Winter '09/10</b></p> <ul style="list-style-type: none"> <li>Develop a schedule for outfall verification and outfall identification activities.</li> <li>Perform and track the outfall verification and outfall identification activities as scheduled.</li> <li>Continuously update the storm drainage system map as new or corrected information is added.</li> </ul>	While a formal schedule for outfall verification has not been developed, the DPW routinely visits the outfalls as part of the inspection and maintenance program. Inspection and maintenance activities were recorded in a logbook. The DPW updates the storm drainage system as new or corrected information is added.	To be determined based on issuance and review of proposed NPDES General Permits for MS4 stormwater discharges in Massachusetts. (TBD)
3-2	Development and Adoption of a Stormwater Bylaw	<p>Planning Board</p> <p>Stoneham Conservation Commission</p> <p>Department of Public Works</p> <p>Building Department</p>	<p><b>Winter '04/'05 – Winter '09/10</b></p> <ul style="list-style-type: none"> <li>Draft the Stormwater Bylaw, which will address (1) illicit discharges, (2) erosion and sedimentation from construction activities, and (3) stormwater runoff from new development and redevelopment projects.</li> <li>Present Stormwater Bylaw to Town Meeting for adoption.</li> <li>Post Stormwater Bylaw on Town's website.</li> <li>Track the number of enforcement actions taken.</li> </ul>	An Article is included for Town Meeting (scheduled for May 3, 2010) on the adoption of a Stormwater Bylaw.	TBD
3-3	Implement an Illicit Discharge Detection and Elimination Plan	Department of Public Works	<p><b>Winter '04/'05 – Winter '09/10</b></p> <ul style="list-style-type: none"> <li>Develop an IDDEP.</li> <li>Conduct dry-weather field screening of outfalls and track the number of surveys indicating a possible illicit connection.</li> <li>Trace the source of potential illicit discharges.</li> <li>Track the number of illicit connections found.</li> <li>Track the number of illicit connections repaired/replaced.</li> <li>Report on the success of obtaining alternative funding to assist in illicit connection removal.</li> </ul>	The DPW continually monitors its open brooks for gray water and, when found, works to identify the source. Gray water was found during Permit Year 7; the DPW is currently taking corrective action. Identification of gray water and corrective actions are recorded in a logbook.	TBD
3-4	Conduct Infiltration/Inflow Removal from Sanitary Sewer	Department of Public Works	<p><b>Spring '03 – Winter '09/10</b></p> <ul style="list-style-type: none"> <li>Perform I/I investigations of the sanitary sewer system and track the results.</li> <li>Perform capital improvement projects to remove I/I.</li> </ul>	The DPW continues to propose and perform projects associated with I/I removal. These capital improvement projects remove I/I through manhole sealing, pipe rehabilitation, pipe replacement and grouting. The DPW maintained records of these activities.	TBD

**3a. Additions**

No additions to report at this time.

#### 4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future
3-2	Development and Adoption of a Stormwater Bylaw			See Section 3: Illicit Discharge Detection and Elimination	To be determined based on issuance and review of proposed NPDES General Permits for MS4 stormwater discharges in Massachusetts. (TBD)
4-1	Develop a Site Inspection Form and Conduct Site Inspections	Department of Public Works	<p><b>Spring '05 – Winter '09/10</b></p> <ul style="list-style-type: none"> <li>Develop an ESC Site Inspection Form that reflects the ESC requirements.</li> <li>Track the frequency of inspections conducted for each site.</li> <li>Track the completion of inspection forms.</li> <li>Track the number of failed ESC BMPs discovered on each site.</li> </ul>	Vote to adopt a Stormwater Bylaw to be taken at Town Meeting on May 3, 2010. (See BMP 3-2.) The Bylaw proposes to create a Stormwater Board to promulgate, adopt, implement, enforce, and amend stormwater regulations.	TBD
4-2	Develop and Implement a Citizen Tip Line	Department of Public Works	<p><b>Fall '05 – Winter '09/10</b></p> <ul style="list-style-type: none"> <li>Establish the Citizen Tip Line.</li> <li>Advertise the Citizen Tip Line.</li> <li>Track the number of complaints received via the Citizen Tip Line.</li> <li>Track the problems/incidents remedied as a result of the Citizen Tip Line.</li> </ul>	Residents currently contact the DPW during working hours and the police during non-working hours when stormwater related problems/incidents occur. Residents can also notify the DPW through the Town's website. The DPW maintains a complaint log in which complaints are tracked by category. These practices are being done in lieu of a Citizen Tip Line.	TBD

#### 4a. Additions

No additions to report at this time.



### 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 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future
3-2	Development and Adoption of a Stormwater Bylaw			See Section 3: Illicit Discharge Detection and Elimination	To be determined based on issuance and review of proposed NPDES General Permits for MS4 stormwater discharges in Massachusetts. (TBD)

#### 5a. Additions

No additions to report at this time.

## 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 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future
6-1	Develop a Formal Training Program for DPW Staff	Department of Public Works	<p><b>Fall '05 – Winter '09/10</b></p> <ul style="list-style-type: none"> <li>Develop the DPW employee training manual.</li> <li>Conduct training sessions with all current employees.</li> <li>Train all new DPW employees in accordance with the training program requirements.</li> <li>Track the number of employees trained.</li> <li>Conduct refresher training for employees after every two years of employment.</li> </ul>	DPW staff received hands-on training for stormwater best management practices.	To be determined based on issuance and review of proposed NPDES General Permits for MS4 stormwater discharges in Massachusetts. (TBD)
6-2	Catch Basin Cleaning Program	Department of Public Works	<p><b>Spring '03 – Winter '09/10</b></p> <ul style="list-style-type: none"> <li>Clean all catch basins on an annual basis.</li> <li>Document annual cleaning activities and keep all records through the permit term.</li> </ul>	The DPW completed the annual catch basin cleaning program as scheduled. The DPW attempted to track sources of illegal material in catch basins.	TBD
6-3	Parking Lot and Street Sweeping Program	Department of Public Works	<p><b>Spring '03 – Winter '09/10</b></p> <ul style="list-style-type: none"> <li>Track the streets and lots that are swept each year.</li> <li>Maintain a log of the disposed materials</li> </ul>	The DPW completed the annual parking lot and street sweeping program as scheduled.	TBD
6-4	Develop a Vehicle and Equipment Maintenance Policy	Department of Public Works	<p><b>Fall '05 – Winter '09/10</b></p> <ul style="list-style-type: none"> <li>Develop and implement a Vehicle and Equipment Maintenance Policy and incorporate policy requirements into the DPW employee-training program.</li> </ul>	The DPW enforced the Vehicle and Equipment Maintenance Policy. DPW employees received hands-on training for this policy.	TBD
6-5	Develop a Vehicle and Equipment Cleaning Policy	Department of Public Works Fire Department Police Department	<p><b>Fall '05 – Winter '09/10</b></p> <ul style="list-style-type: none"> <li>Develop and implement a Vehicle and Equipment Cleaning Policy.</li> <li>Place policy in the DPW employee-training manual and provide to the Town's Police Department and Fire Department.</li> <li>Review MADEP's vehicle rinsing policy when issued and develop a plan to come into compliance with it.</li> </ul>	The DPW enforced the Vehicle and Equipment Cleaning Policy. DPW employees received hands-on training for this policy.	TBD
6-6	Develop a Landscaping and Lawn Care Policy	Department of Public Works	<p><b>Spring '05 – Winter '09/10</b></p> <ul style="list-style-type: none"> <li>Develop and implement a Landscaping and Lawn Care Policy.</li> <li>Place policy in the DPW employee-training manual.</li> <li>Educate landscaping/lawn care service companies retained by the Town on this policy.</li> </ul>	The Town required that no pesticides and only organic fertilizers be used on Town property. This policy was written into the contracts for the landscaping/lawn care service companies employed by the Town.	TBD

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future
6-7	Maintenance of Trash Racks and Outfalls	Department of Public Works	<b>Fall '05 – Winter '09/10</b> <ul style="list-style-type: none"> <li>• Develop an inspection and maintenance plan for the trash racks and outfalls.</li> <li>• Educate DPW employees on the proper inspection and maintenance of the trash racks and outfalls.</li> <li>• Maintain records of inspection and maintenance activities.</li> </ul>	The DPW inspected the outfalls before and after heavy rainstorms. When heavy rainstorms deposited a large amount of debris at the Town's drainage outfalls and inlets, the DPW removed this material and properly disposed of it. In addition, at the larger outfalls, silt was cleaned out once a year as part of routine maintenance. The inspection and maintenance activities were recorded in a logbook.	TBD
6-8	Maintenance of the Detention Basins at Stoneham Public Schools	Stoneham School Department	<b>Spring '04 – Winter '09/10</b> <ul style="list-style-type: none"> <li>• Develop a maintenance plan for the detention basins at the elementary schools.</li> <li>• Educate school department staff on the proper maintenance of the detention basins.</li> <li>• Maintain records of maintenance activities.</li> </ul>	The detention basins were maintained by the school department.	TBD

### 6a. Additions

No additions to report at this time.

**7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA)**

NOT APPLICABLE TO THE TOWN OF STONEHAM

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) -- Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities -- Future
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

**7a. Additions**


**7b. WLA Assessment**

**Part IV. Summary of Information Collected and Analyzed**

N/A.

**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, 2010)

**Programmatic**

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	
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 %)	
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		
<ul style="list-style-type: none"> <li>▪ days sponsored **</li> <li>▪ community participation **</li> <li>▪ material collected **</li> </ul>	(#)	
	(# or %)	
School curricula implemented	(tons or gal)	
	(y/n)	

**Legal/Regulatory**

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

**Mapping and Illicit Discharges**

	(Preferred Units)	Response
Outfall mapping complete	(%)	
Estimated or actual number of outfalls	(#)	
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	
<b>Mapping method(s)</b>		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	
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	(%)	
% of population on septic systems	(%)	

### Construction

	(Preferred Units)	Response
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 (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 **	(#)	
Qty. of storm drain cleaned **	(%, LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	



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

		(Preferred Units)	Response
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)	
Annual Sweeping Costs			
• Annual budget/expenditure (labor & equipment)**		(\$)	
• Hourly or lane mile contract rate **		(\$/hr. or In mi.)	
• Disposal cost**		(\$)	
Sweeping Equipment			
• Rotary brush street sweepers owned/leased		(#)	
• Vacuum street sweepers owned/leased		(#)	
• Vacuum street sweepers specified in contracts		(y/n)	
• % Roads swept with rotary brush sweepers **		%	
• % 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 <sub>2</sub> % MgCl <sub>2</sub> % CMA % Kac % KCl % Sand
(also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)	
Pre-wetting techniques utilized **	(y/n or %)
Manual control spreaders used **	(y/n or %)
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)	(%)
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**