

TOWN OF DOUGLAS

Michael D. Hughes, *Chairman*
John P. Bombara, *Vice Chairman*
Paula Brouillette
Mitchell S. Cohen
Scott J. Medeiros

OFFICE OF THE SELECTMEN

29 Depot Street • Douglas, MA 01516

508-476-4000

Fax: 508-476-4012

TTY 508-476-1619

Michael J. Guzinski
Executive Administrator

May 8, 2008

United States Environmental Protection Agency
Water Technical Unit
P.O. Box 8127
Boston, MA 02114

RE: EPA NPDES Permit #MAR041106
Stormwater General Permit Notice of Intent for Discharges from Small
Municipal Separate Storm Sewers (MS4s)

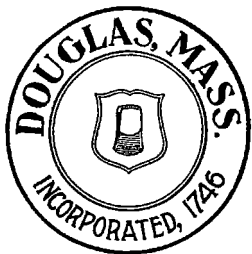
Dear Reviewer:

Enclosed, please find the fourth annual report for the above referenced permit. The Town of Douglas is please to work with the Department of Environmental Protection and the Environmental Protection Agency in preserving our natural resources. If there are any issues or questions pertaining to this permit application submittal, do not hesitate to contact our Town Engineer – William Cundiff, at 508-476-4000 ext. 108 to discuss. Thank you for your time and we look forward to working with you on this important project.

Respectfully,

Michael J. Guzinski
Executive Administrator

cc: William Cundiff
United States Environmental Protection Agency



TOWN OF DOUGLAS

Michael D. Hughes, *Chairman*
John P. Bombara, *Vice Chairman*
Paula Brouillette
Mitchell S. Cohen
Scott J. Medeiros

OFFICE OF THE SELECTMEN

29 Depot Street • Douglas, MA 01516

508-476-4000
Fax: 508-476-4012
TTY 508-476-1619

Michael J. Guzinski
Executive Administrator

May 8, 2008

Department of Environmental Protection
Division of Watershed Management
627 Main Street, 2nd Floor
Worcester, MA 01608

RE: BRP WM 08A: NPDES Stormwater General Permit – Douglas, MA
Notice of Intent for Discharges from Small Municipal Separate Storm Sewers
(MS4s)

Dear Reviewer:

Enclosed, please find the fourth annual report for the above referenced permit. The Town of Douglas is please to work with the Department of Environmental Protection and the Environmental Protection Agency in preserving our natural resources. If there are any issues or questions pertaining to this permit application submittal, do not hesitate to contact our Town Engineer – William Cundiff, at 508-476-4000 ext. 108 to discuss. Thank you for your time and we look forward to working with you on this important project.

Respectfully,

Michael J. Guzinski
Executive Administrator

cc: William Cundiff
United States Environmental Protection Agency

Municipality/Organization: Town of Douglas, MA
EPA NPDES Permit Number: MAR041106
MassDEP Transmittal Number: W-040641
**Annual Report Number
& Reporting Period:** April 1, 2006 – March 31, 2007

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2007)

Part I. General Information

Contact Person: William J. Cundiff, P.E. **Title:** Town Engineer
Telephone #: 508-476-4000 x108 **Email:** WCundiff@DouglasMA.org
Mailing Address: 29 Depot Street, Douglas, MA 01516

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: Michael J. Guzinski
Title: Executive Administrator
Date: October 29, 2007

Part II. Self-Assessment

The Town of Douglas has completed the required self-assessment and has determined that our municipality is in compliance with all the 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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
2.1	Lawn & Garden Activities	Community Development / Wm. Cundiff	Cable Advertisements & Internet	Cable Advertisements have been running.	Developing the internet information and continuing with the Cable Advertisements.
2.2	Household Hazardous Waste	Community Development / Wm. Cundiff	Cable Advertisements & Internet	Cable Advertisements have been running.	Developing the internet information and continuing with the Cable Advertisements.
2.3	Pet Waste Management	Community Development / Wm. Cundiff	Cable Advertisements & Internet	Cable Advertisements have been running.	Developing the internet information and continuing with the Cable Advertisements.
2.4	Trash Management	Conservation Commission / Wm. Cundiff	Cable Advertisements & Internet	Cable Advertisements have been running.	Developing the internet information and continuing with the Cable Advertisements.
2.5	Classroom Education	School Dept. / Robert Melican	Number of Classes	Nothing completed this past year.	Planning and evaluating how to incorporate classroom education.
2.6	Stormwater Education Materials	Community Development / Wm. Cundiff	Cable Advertisements & Internet	Cable Advertisements have been running.	Developing the internet information and continuing with the Cable Advertisements.

1a. Additions

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
3.1	Storm Drain Stenciling	Highway Dept. / John Furno	No. of Storm Drains Stenciled	All catch basins in the vicinity of the downtown area have been stenciled.	Maintain stenciling during catch basin cleaning, as needed.
3.2	Stream Cleanup & Monitoring	Conservation Commission / Wm. Cundiff	No. of Cleanup Events	The Conservation Commission held no stream clean-ups this year.	Maintaining a Stream Cleanup and monitoring program.
3.3	Adopt-A-Stream program	Conservation Commission / Wm. Cundiff	No. of Streams Adopted	No Streams have been adopted to date.	Implementation of an Adopt-A-Stream program.
3.4	Community Hotlines	Highway Dept. / John Furno	No. of Calls Received	No Calls Received this year.	Continue advertisements on cable and internet to let people know what department to call.

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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
4.1	Failing Septic System	Board of Health / Marlene Bacon	No. of Systems repaired	No systems have been identified to have failed since last report.	Continue identifying failed systems and monitoring the progress of the repairs.
4.2	Improper Wastewater Connection / Discharge	Community Development / Wm. Cundiff	Surveys Completed	Form is currently being developed for posting on the Town Website.	Complete form development and post form on website.
4.3	Sanitary Sewer Overflows	Sewer Dept. / Denis Croteau	No. of Overflows / repairs	No overflows identified this past year.	Continue system inspection on an annual basis. I/I evaluation required under State wastewater Permit. TV inspection & Manhole Inspections

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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
5.1	Runoff Control	Community Development / Wm. Cundiff	Implementation of Requirements	Planning Board is establishing requirements for Runoff control thru Town Bylaws. Currently design standards require basic stormwater management such as post-developed flow be less than or equal to pre-developed stormwater flow.	Finalize new bylaw and Review submittals that fall under the authority of the bylaws.
5.2	Erosion Control	Community Development / Wm. Cundiff	Implementation of Requirements	Planning Board is establishing requirements for erosion control thru Town Bylaws. Currently design standards require basic erosion control measures such as erection of haybales, geotextile matting on sideslopes, establishment of vegetation as quickly as possible or similar mechanisms.	Finalize new bylaw and Review submittals that fall under the authority of the bylaws.
5.3	Sediment Control	Community Development / Wm. Cundiff	Implementation of Requirements	Planning Board is establishing requirements for Sediment control thru Town Bylaws. Currently design standards require basic sediment controls such as sediment forebays, deep sump catch basins or similar mechanisms.	Finalize new bylaw and Review submittals that fall under the authority of the bylaws.
5.4	Good Housekeeping	Community Development / Wm. Cundiff	Implementation of Requirements	Planning Board is establishing requirements for maintenance thru Town Bylaws. Currently board require submittal and approval of short term and long term operation and maintenance plans for proposed stormwater management structures prior to project approval.	Finalize new bylaw and Review submittals that fall under the authority of the bylaws.

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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
6.1	Structural BMPs	Community Development / Wm. Cundiff	Implementation of Requirements	Planning Board is establishing requirements for structural Best Management practices thru Town Bylaws.	Finalize new bylaw and Review submittals that fall under the authority of the bylaws
6.2	Non-Structural BMPs	Community Development / Wm. Cundiff	Implementation of Requirements	Planning Board is establishing requirements for non-structural Best Management practices thru Town Bylaws.	Finalize new bylaw and Review submittals that fall under the authority of the 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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
7.1	Operation & Maintenance	Highway Dept. / John Furno	Implementation of Requirements	Inspected and cleaned catch basins, detention basins, swept streets, and minimized the use of road salt throughout the Town as part of the Towns Annual Maintenance program.	Establish an inventory of the Town-wide stormwater management structures and develop a formal inspection and maintenance plan. Continue implementing requirements as outlined in Section 7 of the original plan.

6a. Additions

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

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
8.1	Upgrade of WWTP	Sewer Dept. / Denis Croteau	Completion of Construction	Construction of WWTP upgrade is presently completed.	None
8.2	Implementation of Requirements	Community Development / Wm. Cundiff	Implementation of Requirements	Draft of Stormwater Bylaw has been compiled.	Begin review process with Conservation Commission and the Board of Selectmen

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

No water quality information has been collected for this period. The Town Contracted BETA Engineering to provide GIS mapping of the stormwater outfalls within the community. This mapping will be utilized for developing a sampling program to determine compliance with NPDES.

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

		Response
Stormwater management position created/staffed	(y/n) (Preferred Units)	Y – Town Engineer
Annual program budget/expenditures **	(\$)	\$30,000
Total program expenditures since beginning of permit coverage	(\$)	\$30,000
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		Capital Exp.

Education, Involvement, and Training

Estimated number of property owners reached by education program(s)	(# or %)	60%
Stormwater management committee established	(y/n)	No
Stream teams established or supported	(# or y/n)	Y
Shoreline clean-up participation or quantity of shoreline miles cleaned **	(y/n or mi.)	Y
Shoreline cleaned since beginning of permit coverage	(mi.)	2
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	0
▪ community participation **	(# or %)	0
▪ material collected **	(tons or gal)	0
School curricula implemented	(y/n)	Y

Legal/Regulatory

	In Place Prior to Phase II	Reviewing Existing Authorities	Drafted	Draft 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				X	
▪ Erosion & Sediment Control				X	
▪ Post-Development Stormwater Management				X	

Mapping and Illicit Discharges

		Response
Outfall mapping complete	(%)	100%
Estimated or actual number of outfalls	(Preferred Units)	81
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	100%
Mapping method(s)		
▪ Paper/Mylar	(%)	0%
▪ CADD	(%)	0%
▪ GIS	(%)	100%
Outfalls inspected/screened **	(# or %)	100%
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	100%
Illicit discharges identified **	(#)	0
Illicit discharges identified (Since beginning of permit coverage)	(#)	0
Illicit connections removed **	(#); and (est. gpd)	0
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	0
% of population on sewer	(%)	10%
% of population on septic systems	(%)	90%

Construction

		Response
Number of construction starts (>1-acre) **	(#)	Approx. 10
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(Preferred Units)	Approx. 80%
Site inspections completed **	(# or %)	Approx. 80%
Tickets/Stop work orders issued **	(# or %)	0
Fines collected **	(# and \$)	0
Complaints/concerns received from public **	(#)	Approx. 10

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	Approx. 90%
Site inspections (for proper BMP installation & operation) completed **	(# or %)	Approx. 80%
BMP maintenance required through covenants, escrow, deed restrictions, etc.	(y/n)	N
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)	1
Qty of structures cleaned **	(#)	700
Qty. of storm drain cleaned **	(%, LF or mi.)	900'
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	0
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	N/A

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	\$27,900
• Hourly or per basin contract rate **	(\$/hr or \$ per basin)	N/A
• Disposal cost**	(\$)	N/A
Cleaning Equipment		
• Clam shell truck(s) owned/leased	(#)	0
• Vacuum truck(s) owned/leased	(#)	1
• Vacuum trucks specified in contracts	(y/n)	N/A
• % Structures cleaned with clam shells **	(%)	0
• % Structures cleaned with vector **	(%)	100%

Response

Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	1
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr) (Preferred Units)	1
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	90
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Fill, Locally
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	\$15,300
• Hourly or lane mile contract rate **	(\$/hr. or ln mi.)	\$90.00/hr
• Disposal cost**	(\$)	0
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	0
• Vacuum street sweepers owned/leased	(#)	0
• Vacuum street sweepers specified in contracts	(y/n)	No
• % Roads swept with rotary brush sweepers **	%	100%
• % Roads swept with vacuum sweepers **	%	0

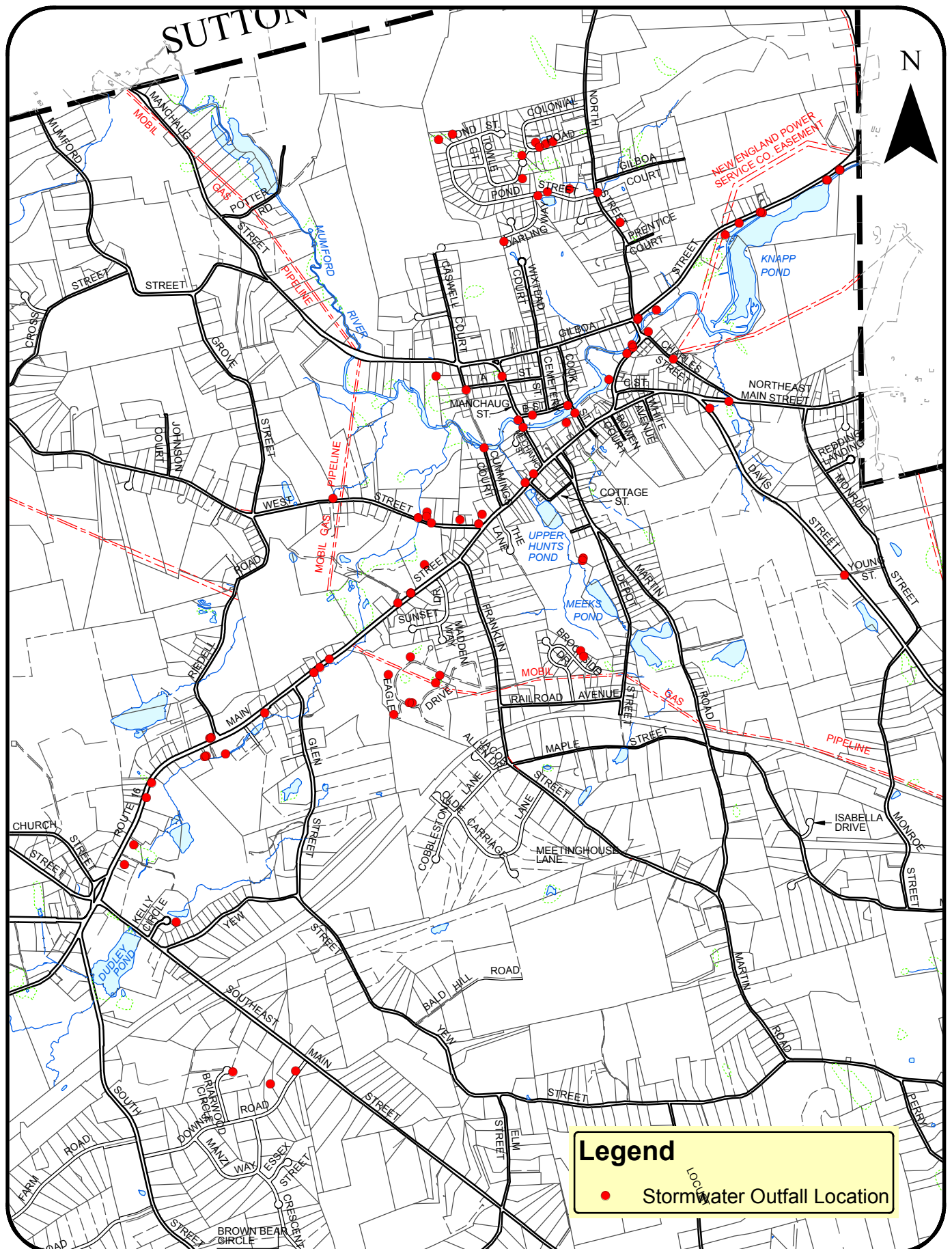
Reduction (since beginning of permit coverage) in application on public land of:
 (“N/A” = never used; “100%” = elimination)

▪ Fertilizers	(lbs. or %)	0
▪ Herbicides	(lbs. or %)	0
▪ Pesticides	(lbs. or %)	0
Integrated Pest Management (IPM) Practices Implemented	(y/n)	No

		Response
Average Ratio of Anti-/De-Icing products used ** (also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)	(Preferred Units) % NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand	60% NaCl 40% Sand
Pre-wetting techniques utilized **	(y/n or %)	No
Manual control spreaders used **	(y/n or %)	Yes
Zero-velocity spreaders used **	(y/n or %)	No
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/l _n mi. or %)	0
Estimated net reduction or increase in typical year sand application rate **	(±lbs/l _n mi. or %)	0
% of salt/chemical pile(s) covered in storage shed(s)	(%)	0
Storage shed(s) in design or under construction	(y/n or #)	No
100% of salt/chemical pile(s) covered in storage shed(s) by May 2008	(y/n)	Yes

Water Supply Protection

Storm water outfalls to public water supplies eliminated or relocated	# or y/n	No
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	Yes
• Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	No



0 500 1,000 2,000 3,000 4,000 Feet
1 inch equals 2,000 feet

Stormwater Outfall Locations Douglas, MA