

**Municipality/Organization:** Town of Seekonk  
**EPA NPDES Permit Number:** MAR041156  
**MassDEP Transmittal Number:** W041076  
**Annual Report Number & Reporting Period:** Year 14  
April 1, 2017 – March 31, 2018

**NPDES PII Small MS4 General Permit  
Annual Report  
(Due: May 1, 2018)**

**Part I. General Information**

**Contact Person:** David Cabral, P.E. **Title:** Public Works Superintendent  
**Telephone #:** 508-336-3305 **Email:** dcabral@seekonk-ma.gov  
**Mailing Address:** 871 Taunton Avenue, Seekonk, MA 02771

**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:** David Cabral

**Title:** Public Works Superintendent

**Date:** 4/30/18

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

The Town of Seekonk has completed the required self-assessment and determined that our municipality is in compliance with the permit conditions. The Town has either implemented ongoing control measures or achieved the measurable goals detailed in Part III of this permit.

Since the implementation of our stormwater by-laws we have corrected and resolved many issues through Best Management Practices (BMPs). These accomplishments were attainable through a substantial effort of the Stormwater Advisory Committee (SWAC) and Technical Review Committee (TRC). The TRC continues to meet to review implemented BMPs, practices, progress and the Town plans to begin holding SWAC meetings again.

The Town continues to utilize a proactive approach to administer our Stormwater Management Program. We have reduced pollutants by using a multitude of resources and a variety of in-house practices. The Town has made significant progress in mapping outfalls and drainage systems as well screening for, detecting, and eliminating illicit discharges. Our Bylaws, in conjunction with thorough site inspections have proven to be a valuable tool in the implementation of effective stormwater management at sites in both the construction and post-construction phases. The Town also operates a number of Pollution Prevention BMPs including a street sweeping program, catch basin cleaning, and training for municipal employees.

The fulfillment of the permit requirements has been challenging, but we believe our efforts have resolved issues with the existing stormwater management system and improved water quality in Seekonk. We continue to partner with public and private entities in attaining our goals.

**Part III. Summary of Minimum Control Measures**

**1. Public Education and Outreach**

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)</b>	<b>Planned Activities</b>
1A	Distribute & Post Nonpoint Source Pollution Posters	DPW	Post in all Town Buildings	Continue posting	Update information and re-post as necessary
Revised					Check posters annually
1B	Air stormwater message on local cable channel	DPW	Aired once per month	The stormwater message was not aired for Permit Year 14	The information included in the previous stormwater message will be updated as necessary and will be aired monthly again in Year 15.
Revised					
1C	Add stormwater info to the Town's website	DPW	Posted to the Town's website	Continue posting	The Town website is currently being overhauled. During this process the information posted will still be available and will be updated / reposted as needed.
Revised					
1D	Develop and distribute waste oil brochures	DPW	Distributed to all affected local business	Waste oil brochures were not mailed to businesses in Year 14	The brochure and list of affected businesses will be updated for futures mailings
Revised					
Revised					
Revised					

**1a. Additions - Outside of the permit scope**

	Stormwater Public Informational brochures	DPW/Recycling Coordinator	Distribute Stormwater Information on Earth Day / America Recycles Day	Earth Day - April 21 <sup>st</sup> , 2018 America Recycles Day – November 15 <sup>th</sup> , 2017	Continue to distribute in future years
	Save-the-Bay	ConCom	Partner with Save the Bay to foster public involvement and education about the protection and restoration of Ten Mile River, Runnins River, and Narraganset Bay	Seekonk’s Conservation Agent has been working with Save-the-Bay to secure funding for testing and restoration efforts related to high pathogen counts in stormwater outfalls along the Route 6 Corridor.	Continue working with Save-the-Bay to secure funding and strengthen public education and involvement efforts.

**2. Public Involvement and Participation**

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities
2A	Develop Adopt-A-Drain Program	DPW SWAC	Residents to maintain catch basin adjacent to their property	Catch basins are cleared of debris by residents. The cleaning of these basins has resulted in fewer pollutants entering into the stormwater system and overall improvements to the effectiveness of the system.	DPW to inspect drains during rain events to ensure compliance with program. A free roll of Seekonk trash bags is offered to participants following the maintenance / inspection of a catch basin for one year.
Revised				There were 30 participants in the program for Year 14 (2017-2018)	
2B	Hazardous Waste Collection - Earth Day	DPW - BOH	Hold Annual Earth Day and Hazardous Waste Day	Volunteers collecting roadside trash and debris	Continue to encourage public involvement and offer hazardous waste collection opportunities (fluorescent bulbs, batteries, propane tanks, etc.)
Revised				Earth Day and Hazardous Waste Collection Day were held on April 15 <sup>th</sup> , 2017.  There were 64 participants in Earth Day Litter Patrol and 128 participants in Hazardous Waste Collection Day.	

2C	Waste Oil Collection Anti-Freeze collection	DPW	Collect waste oil and antifreeze daily	Oil is collected at the DPW garage Residents are encouraged to drop off waste oil and antifreeze at no charge	Continue with current practices
Revised					
2D	Town Outreach meetings	DPW/ConCom Planning Board	Hold public outreach meetings quarterly	Several meetings were held with little to no participation from the public.	The Town is evaluating the format, location of, and information presented at these meetings. The Town is also seeking new ways to encourage public participation such as setting up a booth with stormwater brochures and activities at the "Seekonk Meadows Summer Kickoff Celebration"  This is an annual event held at Seekonk Meadows, a former landfill that is now home to the Seekonk Public Library and a 9-acre park. This event has good public participation and would be an excellent opportunity to highlight the importance of effective stormwater management.
Revised					
2E	T-Shirt Contest	DPW/Recycling Coordinator	Earth Day T-Shirt design contest	In the past, the elementary school had participated in the contest. Due to time constraints and a lack of interest the contest is no longer held.  T-shirt designs are developed by SWAC or Recycling Committee members.	The Town is investigating new ways to increase participation with the schools including the "Seekonk Meadows Summer Kickoff" event discussed above.  In the past the Conservation Agent has run a scavenger hunt for local Girl Scouts that includes information on the ecology and History of the Seekonk Meadow area. The Town will evaluate opportunities to conduct similar events that involve youth participation and stormwater education.
Revised					

**2a. Additions**

	Form Stormwater Advisory Committee	DPW	Hold Semi-Annual Meetings Additional meetings to be held as needed	<p>The Stormwater Advisory Committee formed with the following members. DPW Superintendent., Conservation Agent, Town Planner, Building Official and Board of Health Agent.</p> <p>Due to changes in staff, SWAC meetings have not been held over the past year. The Seekonk Technical Review Committee has assumed many of the functions that the SWAC was responsible for. The Seekonk TRC is responsible for review of all bylaws and development / redevelopment.</p>	<p>Review of the existing stormwater practices has been the responsibility of the Department of Public Works and the TRC.</p> <p>The Town plans to begin holding SWAC meetings again to review stormwater practices and discuss the success and shortcomings of the Town's Stormwater Management Program to date.</p>

**3. Illicit Discharge Detection and Elimination**

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities
3A	Map outfalls and drainage system	DPW/ConCom Planning Board	Mapping of entire storm drain conveyance system	An engineering company was hired to GPS point locate structures. The Town has started the process of combining these GPS locations with its GIS layer.	The Town Plans to continue to locate new structures. The Town is looking into hiring a consultant to determine DMH inverts and finalize the mapping of pipe structures. To simplify this process the Town is developing a methodology and nomenclature for locating, surveying, and describing structures. Seekonk DPW would like to move this process forward within the next year.
Revised					
3B	Review existing bylaws and regulations	SWAC TRC	Determine if existing bylaws & regulations meet EPA requirements	The SWAC reviewed existing bylaws and made recommendations on how to improve them. In the absence of the SWAC, the TRC has continued to review and amend the bylaws as necessary.	In the absence of the SWAC the TRC will continue to review existing by-laws and regulations.  The Town plans to begin holding SWAC meetings again within the next year.
Revised					

3C	Develop Illicit Discharge Detection and Elimination Plan	DPW	Make recommendations for proposed plan	The Illicit Discharge Detection and Elimination plan has been developed by DPW	The DPW will continue to review its IDDE Plan and amend it as needed
Revised					
3D	Develop bylaw for Illicit Discharge Detection + Elimination	DPW	Make recommendations proposed for bylaw	The Illicit Discharge Detection bylaw has been developed by DPW	The DPW will continue to review the bylaw and recommend the changes necessary to effectively aid in the identification and elimination of illicit discharges.
Revised					
3E	Present bylaw for adoption at Town meeting	DPW	Bylaw presented and adopted at Town meeting	The Bylaw was adopted as of February 27, 2017	We have eliminated numerous illicit discharges since the inception of the bylaw. We continue to locate and eliminate illicit discharges
Revised					
Revised					

### 3a. Additions

	Review requirements of new permit.	SWAC	Evaluate scope of new permit requirements	Determine work to be performed by the SWAC/TRC or outsourced to Engineers	Complete NOI for new permit & identify separate drainage systems
	Identify separate storm drain systems	DPW ConCom Planning Board	Inventory separate systems to outfalls	90% completed to date	The DPW, Conservation Agent, and Planning Board Continue to identify separate storm drain systems and will continue working towards 100% identification

### 4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities
4A	Review current site inspection practices	ConCom Planning Board	Determine if current practices meet EPA requirements	Review of current site inspection practices has been completed and it has been determined that they meet EPA requirements.	Continue current practices and continue to review practices to ensure they are in line with EPA requirements / goals
Revised					

4B	Develop/modify site inspection program	DPW/ConCom Planning Board	Make recommendations to modify existing program	Incorporate changes into existing program and inspection practices	Continue to research existing practices in other communities and ways to improve the inspection program.
Revised					
4C	Review existing bylaw and regulations	ConCom Planning Board TRC	Determine if existing bylaw meets EPA requirements	The TRC has submitted its recommended changes to the existing bylaws.	Continue to review bylaws.
Revised					
4D	Develop/modify bylaw for construction site runoff	ConCom Planning Board TRC	Propose recommendations to existing bylaw	Bylaw developed and adopted by SWAC/TRC	The construction site runoff bylaw has been reviewed and adopted at Town Meeting. The TRC / SWAC will continue to review and aid in the enforcement of the bylaw.
Revised					
4E	Present bylaw for adoption at Town Meeting	ConCom Planning Board TRC	Bylaw developed and approved at Town Meeting and by the Attorney General	The Bylaw was adopted as of February 27, 2017	Incorporate new bylaw and regulations into plan review process and inspection practices
Revised					

**4a. Additions - Outside of the permit scope**

	Plan reviews and construction site inspections	Planning Board DPW TRC	Assure compliance with new bylaw	Consultant hired to perform site plan reviews and inspect construction activity	Continue current practices
	Training	DPW ConCom Planning Board	Increase knowledge of inspection procedures	Attend erosion and sedimentation control workshop	Incorporate training into inspection practices

**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 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities
5A	Review existing site inspection practices	ConCom Planning Board TRC	Determine if existing practices meet EPA requirements	A review of current site inspection practices was completed. It was determined that the Town's current practices are consistent with EPA requirements.	The Town will maintain its current inspection practices and continue to review ways to improve the process and meet EPA goals / requirements.
Revised					

5B	Develop/modify site inspection practices and procedures	ConCom Planning Board TRC	Recommendations made to modify existing practices	Propose recommendations to Planning Board to incorporate into current practices and procedures	Recommendations have been incorporated into inspection practices by the Planning Board. The TRC will continue to make recommendations to the Planning Board to improve inspection practices.
Revised					
5C	Review existing bylaw and regulations	ConCom Planning Board TRC	Determine if existing bylaw meets EPA requirements	Review of existing bylaws has been completed and the Planning Board has adopted modifications to the bylaw and regulations.	The TRC will continue to review the Town's existing bylaws and regulations and propose modifications that will improve the Post-Construction Management of Stormwater.
Revised					
5D	Develop/modify bylaw and regulations for Post Construction Site Runoff	ConCom Planning Board TRC	Propose changes to existing bylaw and regulations	A new bylaw and regulations were developed and adopted by the SWAC. The TRC has continued to review this bylaw and its administration.	The TRC will continue to review existing bylaws and regulations. The Town plans to reform the SWAC at which point it will assume its original responsibilities.
Revised					
5E	Present bylaw for action at Town Meeting	ConCom Planning Board TRC	Bylaw presented and adopted at Town Meeting	The Bylaw was adopted as of February 27, 2017	Incorporate new bylaw and regulations into plan review process and inspection practices
Revised					
Revised					

**5a. Additions – Outside of the permit scope**

	Plan Reviews and site construction inspections	Planning Board	Assure compliance with new bylaw	Consultant hired to perform site plan reviews and inspect construction activity. These peer reviews aid in the selection of BMPs at new development and redevelopment sites.	Continue current practices

**6. Pollution Prevention and Good Housekeeping in Municipal Operations**

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)</b>	<b>Planned Activities</b>
6A	Street sweeping program	DPW	Sweep all streets once annually sweep main and secondary roads twice or more	We have been able to complete our street sweeping program as implemented, all non-commercial / non-arterial roadways are swept once annually. Commercial and arterial roadways are swept a minimum of 2-3 times annually. Sweeping generally begins in April and continues through November.	The Town plans to continue its street sweeping program as implemented.
Revised					
6B	Catch basin cleaning program	DPW	Clean all catch basins annually	All catch basins are cleaned once annually with clam shell trucks. Clogged or otherwise impeded basins are cleaned on an as needed / emergency basis with a vacuum truck contracted by the Town.	The Town plans to continue its catch basin cleaning program as implemented.
Revised					
6C	Perform site visits and inspect practices at municipal facilities	DPW	Target all applicable municipal facilities	The Town continues to inspect municipal facilities and implement new BMPs and improvements to existing BMPs on an as needed basis.	The Town will begin drafting a plan for the funding and implementation of new BMPs at municipal facilities.
Revised					
6D	Train municipal employees at facilities	DPW	Target employees at each facility	Some completed - ongoing	Town employees will continue to attend seminars and training on topics such as erosion and sedimentation control and BMP maintenance. The Town will continue to research new opportunities for training.  The Town plans to have further discussion with CEI about future training opportunities.
Revised					
6E	Perform follow up inspections at each targeted facility	DPW	Implementation of corrective measures and BMPs	Some completed - continuing	Continue to review current practices and implement BMPs to insure compliance with stormwater regulations
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 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities
7A	Water quality management project for the Runnins River	SWAC	Provide water samplings and report	Water samplings completed final report completed and submitted	The SWAC completed its sampling, the Town has continued to monitor water quality on Runnins River through the Conservation Agent.
Revised					
7B	Illicit discharge detection and elimination program	DPW	Implement BMPs referenced 3C, 3D & 3E	Elimination of numerous illicit discharges	Continue to identify and eliminate illicit discharges
Revised					
7C	Consider deterring waterfowl from the Grist Mill Pond	SWAC ConCom DPW	Partner with Grist Mill Tavern owner	Signage has been installed and has been successful in deterring the public from feeding waterfowl	The Town will continue to monitor, repair and replace signs as necessary. The Town also plans to investigate other areas and waterbodies where similar signs can be installed such as the Ten Mile River Corridor.
Revised					
7D	Municipal Good Housekeeping	DPW	Municipal audit completed, BMPs identified	Implementation of BMPs, reference 6A, 6B & 6C	Continue to review current practices and implement BMPs to ensure compliance with stormwater regulations
Revised					
Revised					
Revised					

**7a. Additions**

	Cleanup at the Attleboro Dye Works Facility	Attleboro Dye Works Steering Committee (Town Administrator, DPW, ConCom, BOH, Planning Board)	Continue to define Activity and Use Limitations, determine redevelopment options, create plan for site redevelopment that promotes public access and recreation along Ten Mile River	The Town received two grants in 2017, a MassDevelopment Grant and an EPA Brownfield Grant.	The Town will continue to develop a plan for the redevelopment of the facility. The facility is bounded by Ten Mile River to the north and the redevelopment of the site would include new BMPs to improve stormwater quality and remove any illicit discharges from the site into Ten Mile River.
	Funding / Grants for Water Quality Sampling	ConCom TRC	Research opportunities for grants to conduct water quality sampling in various waterbodies throughout Seekonk	The Conservation Agent has begun research into grants and alternative funding sources for water quality sampling efforts.	The Conservation Agent and TRC will continue to research additional funding opportunities.

**7b. WLA Assessment –**

NA

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

In previous years the Town of Seekonk has collected data on E. Coli at various locations along Runnins River, Ten Mile River, and other waterbodies. The Town has also kept records on the installation, operation, and maintenance of Stormwater BMPs on private developments. The Town has recently partnered with Save the Bay, the Rhode Island Department of Environmental Management, Narragansett Bay Estuary Program, City of East Providence, and Town of Barrington to seek funding for proposed testing, mapping, and water quality improvement efforts in the Hundred Acre Cove and its associated watershed.

**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, 2014 through March 31, 2015)

**Programmatic**

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	N
Annual program budget/expenditures **	(\$)	\$25,000
Total program expenditures since beginning of permit coverage	(\$)	\$350,000
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		GF

**Education, Involvement, and Training**

Estimated number of property owners reached by education program(s)	(# or %)	Unknown
Stormwater management committee established	(y/n)	Y
Stream teams established or supported	(# or y/n)	No
Shoreline clean-up participation or quantity of shoreline miles cleaned **	(y/n or mi.)	No
Shoreline cleaned since beginning of permit coverage	(mi.)	0
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	4
▪ community participation **	(# or %)	192*
▪ material collected **	(tons or gal)	NA***
School curricula implemented	(y/n)	Unknown

\* There were 64 participants in Hazardous Waste Collection Day and 128 participants in Earth Day Litter Patrol

\*\*\* The materials collected vary in type and unit of measure but include: fluorescent tubes, aerosols, pesticides, non-processable paints, processable paints, and consolidated solids.

**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					X
▪ Erosion & Sediment Control					X
▪ Post-Development Stormwater Management					X

**Mapping and Illicit Discharges**

	(Preferred Units) Response	
Outfall mapping complete	(%)	90%
Estimated or actual number of outfalls	(#)	220
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	35%
Mapping method(s)		
▪ Paper/Mylar	(%)	99%
▪ CADD	(%)	0%
▪ GIS	(%)	85%
Outfalls inspected/screened **	(# or %)	30%
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	95%
Illicit discharges identified **	(#)	1
Illicit discharges identified (Since beginning of permit coverage)	(#)	47
Illicit connections removed **	(#); and (est. gpd)	1
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	36
% of population on sewer	(%)	0%
% of population on septic systems	(%)	100%

**Construction**

(Preferred Units) Response

Number of construction starts (>1-acre) **	(#)	4
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)	100%
Site inspections completed **	(# or %)	1-2 times daily
Tickets/Stop work orders issued **	(# or %)	0
Fines collected **	(# and \$)	0
Complaints/concerns received from public **	(#)	2

**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
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	1
Qty of structures cleaned **	(#)	1,967
Qty. of storm drain cleaned **	(%, LF or mi.)	85 LF
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	400 tons
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Landfill
<b>Basin Cleaning Costs</b>		
• Annual budget/expenditure (labor & equipment) **	(\$)	\$21,046.90
• Hourly or per basin contract rate **	(\$/hr or \$ per basin)	\$10.70/hr
• Disposal cost**	(\$)	\$0

<b>Cleaning Equipment</b>		
• Clam shell truck(s) owned/leased	(#)	1
• Vacuum truck(s) owned/leased	(#)	1 (Leased)
• Vacuum trucks specified in contracts	(y/n)	N
• % Structures cleaned with clam shells **	(%)	100%
• % Structures cleaned with vactor **	(%)	<1 % *

\*2 Structures were cleaned with a vactor, the total cost of these cleanings was \$595.00

(Preferred Units) 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)	2-3
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	300 tons
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Landfill
<b>Annual Sweeping Costs</b>		
• Annual budget/expenditure (labor & equipment) **	(\$)	\$30,000
• Hourly or lane mile contract rate **	(\$/hr. or ln mi.)	NA
• Disposal cost**	(\$)	Unknown
<b>Sweeping Equipment</b>		
• Rotary brush street sweepers owned/leased	(#)	1
• Vacuum street sweepers owned/leased	(#)	1
• Vacuum street sweepers specified in contracts	(y/n)	N
• % Roads swept with rotary brush sweepers **	%	5%
• % Roads swept with vacuum sweepers **	%	95%

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

▪ Fertilizers	(lbs. or %)	50%
▪ Herbicides	(lbs. or %)	N/A
▪ Pesticides	(lbs. or %)	N/A
Integrated Pest Management (IPM) Practices Implemented	(y/n)	N

	(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 <sub>2</sub> % MgCl <sub>2</sub> % CMA % Kac % KCl % Sand	95%  5%
Pre-wetting techniques utilized **	(y/n or %)	Y
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 <sub>n</sub> mi. or %)	25% Reduced
Estimated net reduction or increase in typical year sand application rate **	(±lbs/l <sub>n</sub> mi. or %)	98% Reduced
% of salt/chemical pile(s) covered in storage shed(s)	(%)	100%
Storage shed(s) in design or under construction	(y/n or #)	N
100% of salt/chemical pile(s) covered in storage shed(s) by May 2008	(y/n)	100%

#### 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	Y
• Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	N