

Municipality/Organization: Town of Leicester, MA

EPA NPDES Permit Number: MAR041202

MassDEP Transmittal Number: W-X274674

**Annual Report Number
& Reporting Period:**

Year 14
April 1, 2016 – March 31, 2017

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2017)

Part I. General Information

Contact Person: Thomas Wood

Title: Highway Superintendent

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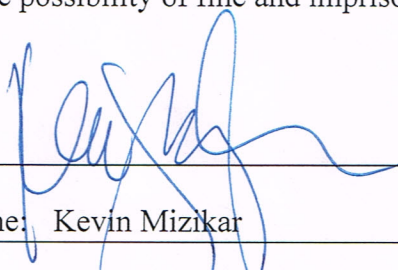
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Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature:



Printed Name: Kevin Mizikar

Title: Town Administrator

Date:

4/18/17

Part II. Self-Assessment

The Town of Leicester's Highway Department continues to take the lead on compliance with the Town's MS4 Permit.

Leicester continued moving forward in its illicit discharge program in Year 14. Highway Department staff has continued catchment delineation and confirming drainage connections. The Town has also continued work on its written IDDE program. The Town passed an illicit connection bylaw in Year 12 which continues to be in effect.

Operations and Maintenance activities completed by the Town's Highway Department continue to reduce potential for pollution from stormwater. During this period, all catch basins (approximately 1,500) on 131 streets in Town were cleaned at least once with approximately 100 catch basins cleaned a second time, and all 198 Town streets were swept. The Town uses catch basin cleaning activities as an opportunity to identify potential illicit discharges. The Highway Department also cleaned 14 miles of sidewalks in the Town, including those along Route 9, which is a State Highway.

The Town of Leicester continues to be an active member of the Central Massachusetts Regional Stormwater Coalition (Coalition). The Coalition was originally established in 2012 by a group of 13 communities working together to address municipal stormwater management. The initial group included the communities of Auburn, Charlton, Dudley, Holden, Leicester, Millbury, Oxford, Paxton, Shrewsbury, Spencer, Sturbridge, Webster, and West Boylston. The following year, the group added 17 new communities including Boylston, Grafton, Hardwick, Hopkinton, Monson, Northbridge, Northborough, North Brookfield, Palmer, Rutland, Southbridge, Sterling, Upton, Uxbridge, Ware, Westborough, and Wilbraham. The FY 2016 Coalition was comprised of 31 total communities. Coalition members work together to protect stormwater systems and surface waters, share ideas, equipment, and resources, and develop tools to expand stormwater management practices collectively in an effort to meet the requirements of the Massachusetts Small MS4 General Permit.

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 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1	Create a stormwater program	Highway Department; Planning Board; Conservation Commission; Board of Health; Board of Selectmen	Leicester will present its Comprehensive Stormwater Management Program to the public at a public meeting.	This goal was completed in previous Permit years.	Continue to educate the public about the Stormwater Management Program. The Town is applying for coverage under the new Massachusetts MS4 Permit and intends to comply with the requirements.
Revised					
2	Create a stormwater program	Highway Department	Leicester will identify appropriate sources of funding assistance (SRF, 319 Grant Program, Lakes & Ponds Grant Program, Source Water Protection Grant Program, Recycling Grant Program) and apply for assistance in implementing portions of Leicester's Comprehensive Stormwater Management Program, including public education and outreach.	Funding options continue to be explored. Leicester is an active participant in the Central Massachusetts Regional Stormwater Coalition.	Leicester will consider applying for Section 319 grant funding to support implementation of nonpoint source pollution projects. Leicester will continue to participate in the Coalition.
Revised					
3	Address specific groups	Highway Department	Distribute EPA and other relevant educational brochures to targeted audiences. Distribution points include Town Hall, Library, and Transfer Station.	Leicester continued involvement in local community events. Outreach materials continue to be available on the Town's	Continue to implement and evaluate outreach programs to educate the specific groups of the public, particularly

Revised				website. Leicester added a link on the Town's website for the CMRSWC in a previous year.	materials developed by the Coalition project. Information will be provided at the Founder's Day event in June 2017.
4	Target groups likely to impact stormwater	Highway Department	Brochures targeting specific audiences and activities will be available. These target groups include homeowner and lawn maintenance activities, disposal of household waste, and pet maintenance.	Reviewed educational materials provided by Coalition on specific activities in a previous year.	The Town has initiated stormwater educational programs in elementary schools in Town.
5	Identify alternative information sources	Board of Selectmen; MIS Department	Leicester will post links to stormwater BMPs and other water quality education resources, including EPA and DEP, on its website. http://www.ci.leicester.ma.us/	Outreach materials continue to be available on the Town's website.	Continue to identify and implement alternative information sources for public outreach and evaluate the program.
Revised					Stream the Pennsylvania State University documentary "Liquid Assets" on the Leicester local cable access channel, which was streamed in previous years.
6	Identify alternative information sources	Highway Department	Leicester will also post links on its website to the Blackstone River Watershed Association at www.thebrwa.org , the Blackstone River Watershed Council at www.BVTourism.com , the Nashua River Watershed Association at http://www.nashuariverwatershed.org , the French River Watershed Basin Team at http://www.state.ma.us/envir/water/frenchquinebaug/frenchquinebaug.htm and the Chicopee River Watershed at www.chicopeeriver.org .	Leicester continues to maintain these links on its website. Promote Coalition developed educational website, www.CentralMAStormwater.org.	Continue to identify and implement alternative information sources for public outreach and evaluate the program.
Revised					

7	Utilize local website	Highway Department	Public meeting notice and the meeting reviewing Leicester's Comprehensive Stormwater Management Program will be posted on Leicester's local access channel.	Leicester held meetings of the Stormwater Committee in Year 14.	Continue to utilize the local website for public outreach and evaluate its use.
Revised				All meetings are published in advance on the Town website and open to the public.	The Town maintains Coalition developed public education and outreach materials on topics including illicit discharge detection and elimination, appropriate fertilizer use and pet waste management on its website.
8	Develop, conduct and document educational programs.	Highway Department Liaison	The Town of Leicester is looking at appointing a new liaison to the Blackstone River Watershed Association and the Nashua River Watershed Association to disseminate information to the Town on programs and activities.	The Town regularly reaches out to neighboring communities (DPWs) to discuss stormwater related issues.	Continue to reach out to neighboring communities (DPWs) to discuss stormwater related issues.
Revised					
9	Promote Household Waste Recycling	Highway Department; Board of Health	The Town of Leicester will work with the Town's contracted waste hauler and the Board of Health to continue to sponsor Hazardous Waste Collection Days.	Leicester uses its Town website to host a "FAQ" on hazardous waste disposal, to promote and evaluate household waste recycling programs and encourage residents to utilize services available at the Recycling Center.	Continue to promote and evaluate Household Waste Recycling programs. A HHHW Collection Event is scheduled every 2 years. The next is scheduled for the Fall of 2017.
Revised					Leicester will continue to participate in Drug Take-Back events.

				The Highway Department recycles its used oil and serves as a drop-off location for used oil from residents, with all materials collected and processed regularly by the Recycling Center. Leicester participates in all DrugTake-Back programs sponsored nationally by the federal government, and provides notice of these events locally.	
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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 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities
10	Storm drain stenciling	Highway Department	Leicester will work with local Scout groups to develop a stenciling program. Stenciling will target Leicester's sub-watersheds.	Leicester continues to maintain catch basin stencils.	Continue to maintain catch basin stencils, as needed and work with local scout troops for assistance.
Revised					
11	Community clean-ups	Highway Department; Leicester Conservation Commission	Town of Leicester will encourage local stream team cleanups with local residents and area Scout groups. Town will provide solicitation of sponsors and notice of events on local access channel and website.	As it does each year, Leicester Highway Department provided transportation and coordination of trash collected during Earth Day cleanup events in April 2016.	Continue to hold community clean-ups in the Town, including Earth Day events in Year 1 of the new permit, and evaluate the program.
Revised					
12	Community clean-ups	Highway Department	Town will provide trucks and other material to support cleanup efforts and disposal of materials.	The Highway Department continues to support local cleanup efforts with staff and equipment.	Continue to hold community clean-ups in the Town and evaluate the program.
Revised					

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
13	Inventory and mapping of storm drain system	Highway Department	Leicester will identify appropriate sources of funding assistance (SRF, 319 Grant Program, Lakes & Ponds Grant Program, Source Water Protection Grant Program, Recycling Grant Program) and apply for assistance in implementing portions of Leicester's Comprehensive Stormwater Management Program, including public education and outreach.	The Town utilized the Coalition purchased Leica GPS device to map catch basins in permit year 14. All catch basins in Urbanized Area have been mapped. Leicester has started the process of catchment delineation.	Continue to inspect mapped outfalls, and update mapping as new outfalls are added. Utilize the Town's tablet computer to complete outfall and catch basin inspections.
Revised					Continue to utilize the Coalition Leica GPS devices to map all catch basins in Town as well as storm drain manholes and structural BMPs.
14	Mapping and identification of outfalls and receiving waters.	Highway Department	Leicester will continue to develop and implement its plan to map all outfalls and receiving bodies of water, contingent on Town Meeting approval of funding.	Leicester has mapped all known outfalls in the Urbanized Area to date. The Town is currently working on mapping BMPs and storm drain outfalls.	The Town will continue to locate new outfalls that are added and to screen high priority outfalls.
Revised					Utilize water quality field test kits to test and monitor priority outfalls.
15	Identification/description of problem areas	Highway Department	Leicester will develop and implement an Illicit Discharge Detection and Elimination (IDDE) plan within Year 1 of the new permit.	The Leicester Water Supply Board designed new sewer infrastructure at the intersection	Continue to implement and be proactive with the IDDE plan from data

Revised				of Franklin Street and Grove Street to eliminate an illicit discharge located. The construction contract was completed during a previous reporting year, permanently eliminating this illicit discharge. The Town has prepared a Statement of IDDE Program Responsibilities, which establishes a chain of command for reporting illicit discharges and responsibilities for important positions in Town.	from the consultant and evaluate the progress. Utilize the Coalition developed standard operating procedure (SOP) for locating and identifying illicit discharges. Keep documents and presentations on file for interested parties to review.
16	Enforcement procedures addressing illicit discharges.	Planning Board Town Counsel Board of Health	Leicester will review whether local authority is appropriate and able to respond to potential illicit discharges. New by-laws, if necessary, will be proposed to Town Meeting.	The Town received training on the IDDE Documentation Packet materials, developed as part of the Coalition project in a previous reporting year. The objective of this task was to educate people in multiple Town departments on illicit discharges and define how these people (and departments) will work together to eliminate them. An IDDE bylaw was passed at Town meeting during a previous reporting year and continues to be in effect.	Continue to implement and evaluate the current policy. Review and evaluate the Coalition developed IDDE Plan template.
Revised					
17	Public information program regarding hazardous wastes and dumping.	Highway Department; Recycling Center	Leicester will provide educational brochures to residents promoting proper disposal of household hazardous wastes.	Leicester has continued to prioritize education about hazardous wastes and appropriate material disposal. Its website continues to be a powerful tool for residents.	Continue to implement and evaluate the current policy.
Revised					

18	Initiation of recycling programs	Planning Board Board of Health	Leicester will apply for funding assistance from DEP's Recycling Grant Program for assistance in public education and the purchase of recycling materials.	Leicester continues to actively seek recycling grants, and implemented a program to provide low-cost composting containers to residents in previous years and another program to serve as a drop-off location for unused herbicides and pesticides. The Recycling Center website maintains a large amount of information for residents to guide and encourage recycling and proper disposal of wastes.	Continue to implement and evaluate the current policy. Continue to encourage residents to drop off materials (recycle) that otherwise may result in pollution.
Revised					
19	Watershed assessments and studies	Highway Department; Conservation Commission; Board of Health	Leicester will identify opportunities for funding assistance from DEP's 604(b) and 319 grant programs and the Department of Environmental Management's Lakes and Ponds Grant Program to support watershed assessment and implementation activities. Tasks can include design and installation of stormwater BMPs and public outreach including storm drain stenciling. Emphasis will be on assessments and remediation of stormwater related problems impacting water quality in Smiths Pond, Southwick Meadow, Bouchard Pond, Greenville Pond West, Rochdale Pond, and Greenville Pond. These water bodies have been identified as impaired and are on DEP's 303d list.	Leicester continued to receive great benefit in Year 14 from the Coalition. Most of the Coalition tasks have been developed with a "regionalization" focus, and address multiple watersheds.	Continue to implement and evaluate the current policy with the Stormwater Committee in place. Maintain active participation in the Coalition in Year 1 of the new permit.
Revised					
20	Watershed assessments and studies	Highway Department Leicester Water Supply Districts	The Town of Leicester will continue to encourage cooperation with Leicester's Public Drinking Water Supply Districts to apply for funding assistance from DEP's Source Water Protection Program for grant assistance to develop wellhead protection plans and stormwater management plans within Leicester's Zones II in Leicester.	Leicester's Stormwater Committee continues to have a strong relationship with local public drinking water and sewer departments and districts.	Continue to implement and evaluate the current policy.

Revised					
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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
21	Bylaw: Stormwater management regulations for construction sites 1 acre or larger	Planning Board; Conservation Commission; Town Counsel; Board of Health; Zoning Board of Appeals	Leicester will review model by-law developed by MassDEP in consultation with the Attorney General's Office and the requirements in the new permit.	Stormwater by-law was developed in previous permit years. The Town has reviewed and evaluated Coalition developed SOP for construction inspection and erosion and sedimentation control.	Continue to implement and evaluate the current policy with the stormwater committee in place and update per the requirements of the new permit. Continue to use tools created from the Coalition regarding Construction Site Stormwater Runoff Control.
Revised					

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
22	Bylaw: Require post-construction runoff controls	Planning Board; Conservation Commission; Town Counsel; Board of Health; Zoning Board of Appeals	Leicester will review model by-law developed by DEP in consultation with the Attorney General's Office and the requirements in the new permit.	Stormwater by-law was developed in previous permit years. The Town received structural Best Management Practice (BMP) inspection SOPs developed as part of the Coalition in previous Permit years.	Continue to implement and evaluate the current policy with the stormwater committee in place. Review and evaluate for potential implementation or incorporation into existing policy the Coalition developed Stormwater Best Management Practices (BMP) Toolbox, which was developed to provide property owners with information about low impact stormwater management tools.
Revised					

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 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities
23	Develop a municipal Operations and Maintenance Plan	Highway Department	Using regulations and recommendations from DEP and EPA, Leicester will develop and update an operations and maintenance plan to include proper disposal of street sweepings, catch basin cleanout, snow disposal, roadway deicing procedures, vehicle washing, and outside storage of materials.	The Town continues to maintain compliance at facilities it owns and operates. A Highway Department SWPPP was developed in previous years. Catch basin screening forms and a maintenance schedule were implemented prior to Year 14. All basins were cleaned at least once in Year 14, with approximately 100 basins cleaned a second time. In addition, all Town streets were swept at least once. The Town received SOPs on wet and dry weather outfall inspection, IDDE, and other actions that were developed as part of the Coalition project prior to Year 14. These forms and inspections were incorporated in the integrated mapping and inspection database. Fire stations and police headquarters were evaluated for the need of SWPPPs in a previous year. Documents are not needed at this time but will be evaluated again in the future.	Utilize the Coalition developed Stormwater Pollution Prevention Plan (SWPPP) template to produce a fully developed SWPPP for individual properties, as needed. Review and evaluate the Coalition developed Sump Pump Discharge Policy, which may be used to provide guidance on the removal of sump pumps from the sanitary sewer system and subsequent incorporation into the drainage system.
Revised					

24	Develop a municipal Operations and Maintenance Plan	Highway Department	Leicester will implement a formal inspection program, including maintenance logs and scheduling, for catch basin cleaning, repairs, and new installation. They currently have a worksheet that is used to log maintenance activities.	Catch basin screening forms and a maintenance schedule were implemented prior to Year 14. The Town received SOPs on wet and dry weather outfall inspection, IDDE, and other actions that were developed as part of the Coalition project in previous permit years. These forms and inspections were incorporated in the integrated mapping and inspection database, on which several Highway Department staff members received training in a previous year.	Continue to implement this project and evaluate the progress. Continue to evaluate and implement the Coalition developed 15 SOP's, which provide guidance on activities including but not limited to outfall inspection (both dry and wet weather), catch basin cleaning, erosion and sedimentation control, oil/water separator maintenance and use and storage of pesticides and fertilizers.
Revised					
25	Develop and implement training programs for municipal employees.	Highway Department	Leicester will send public works employees to training seminars sponsored by relevant agencies or vendors as they are available and applicable to stormwater and other public works activities.	Highway Department employee Derek Keats is licensed in Massachusetts for gas dispensing. The training required for this certification involves efforts toward spill prevention and cleanup and pollution prevention, both of which benefit the Highway Department facility and are consistent with goals in its SWPPP. Municipal employees received OSHA 10-hour training prior to Year 14.	Continue to implement this project and evaluate the progress. Continue to provide Coalition-developed education and training to municipal employees.
Revised					
26	Review storm drainage infrastructure needs.	Highway Department	Leicester will incorporate storm drain infrastructure review in Leicester's Chapter 90 project utilizations.	This storm drain evaluation is incorporated into project reviews.	Continue to implement the requirement for this evaluation and monitor the progress.
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
	Not Applicable	Not Applicable	Not Applicable	Leicester will review TMDLs published under the new permit and will evaluate published Waste Load Allocations, accordingly.	Evaluate any TMDLs developed for Leicester impaired waters as listed in the new MS4 permit.
Revised					
				TMDLs have been developed for several water bodies (Category 4a), including: Cedar Meadow Pond (aquatic plants); Smiths Pond, Southwick Pond (aquatic plants); Waite Pond (mercury in fish tissue); Dutton Pond (total phosphorus and “Nutrient/Eutrophication Biological Indicators”), Greenville Pond (turbidity), and Rochdale Pond (“Nutrient/Eutrophication Biological Indicators”). Most of these impairments do not require actions under the MS4. All new impairments (if any) will be reviewed and appropriate actions taken under the new MS4 permit.	

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

Other than the information presented in Part III, above, no information was collected or analyzed. The Town of Leicester maintains that it continues to be in compliance with the 2003 Massachusetts Small MS4 Permit.

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, 2016 through March 31, 2017)

Programmatic

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	
Annual program budget/expenditures **	(\$)	\$20,000
Total program expenditures since beginning of permit coverage	(\$)	
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		General Fund

Education, Involvement, and Training

Estimated number of property owners reached by education program(s)	(# or %)	
Stormwater management committee established	(y/n)	y
Stream teams established or supported	(# or y/n)	
Shoreline clean-up participation or quantity of shoreline miles cleaned **	(y/n or mi.)	
Shoreline cleaned since beginning of permit coverage	(mi.)	
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	2
▪ community participation **	(# or %)	
▪ material collected **	(tons or gal)	
School curricula implemented	(y/n)	y

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	(%)	100%
Estimated or actual number of outfalls	(#)	89
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	100%
Outfalls inspected/screened **	(# or %)	89
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	
Illicit discharges identified **	(#)	
Illicit discharges identified (Since beginning of permit coverage)	(#)	6
Illicit connections removed **	(#); and (est. gpd)	
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	6
% of population on sewer	(%)	Approx. 45%
% of population on septic systems	(%)	Approx. 55%

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 **	(#)	1

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	
Site inspections (for proper BMP installation & operation) completed **	(# or %)	
BMP maintenance required through covenants, escrow, deed restrictions, etc.	(y/n)	
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)	1
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	1, but a 2 nd cleaning as needed based on field observations
Qty of structures cleaned **	(#)	Approx. 1,500 catch basins
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)	
(Preferred Units) Response -		
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 vacuor **	(%)	
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)	1
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 ln 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 ** (also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)	% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand Treated salt (NaCl/ MgCl ₂ mix)	200 tons 1,500 tons
Pre-wetting techniques utilized **	(y/n or %)	n
Manual control spreaders used **	(y/n or %)	n
Zero-velocity spreaders used **	(y/n or %)	n
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/lb mi. or %)	
Estimated net reduction or increase in typical year sand application rate **	(±lbs/lb mi. or %)	
% 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)	y

Water Supply Protection

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