

# TOWN OF MILTON

DEPARTMENT OF PUBLIC WORKS  
629 RANDOLPH AVENUE  
MILTON, MA 02186  
[www.townofmilton.org](http://www.townofmilton.org)

CHASE P. BERKELEY  
*Director of Public Works*  
JOHN P. THOMPSON, P.E.  
*Town Engineer*  
THOMAS MCCARTHY  
*Assistant Director of Public Works*  
JOHN CALABRO  
*Manager of Wires and Maintenance*

CHRISTOPHER TRUDEL  
*Civil Engineer*  
ALLAN BISHOP, GISP  
*Engineering Department/GIS*  
HILLARY WAITE  
*Environmental Coordinator*  
KATHLEEN M.BOWEN  
*Senior Administrative Clerk – Conservation*

April 26, 2018

Glenda Velez-CIP  
U.S. Environmental Protection Agency- Region 1  
5 Post Office Square – OEP06-01  
Boston MA 02109 - 3912

Fred Civian  
Massachusetts Department of Environmental Protection  
1 Winter Street – 5<sup>th</sup> floor  
Boston, MA 02108

RE: NPDES Phase II Small MS4 General Permit  
Town of Milton, Massachusetts Annual Reports 13  
EPA Permit Number MAR041079  
MADEP Transmittal No. W-039893

To Whom It May Concern:

The Town of Milton, Massachusetts is pleased to provide you with the attached National Pollutant Discharge Elimination System (NPDES) Phase II Small MS4 General Permit Annual Report 15 for the period from March 31, 2017 to April 1<sup>st</sup>, 2018. The Town has developed its stormwater management program and will continue to implement activities in accordance with regulatory requirements and as available funding permits. Should you have any questions, please do not hesitate to contact me at (617) 898-4968 or [hwaite@townofmilton.org](mailto:hwaite@townofmilton.org).

Sincerely,



Hillary Waite  
Environmental Coordinator

Cc: Michael D. Dennehy, Town Administrator  
Chase Berkeley, P.E., Director of Public Works  
John Thompson, P.E., Town Engineer

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EPA NPDES PERMIT #MAR041079  
MA DEP TRANSMITTAL #: W-039893  
ANNUAL REPORT #15 (APRIL 2017-MARCH 2018)

Annual Report Number & Reporting Period: Year 15

April 1, 2017 - March 31, 2018

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

### Part I: General Information

Contact Person: Hillary Waite                      Title: Environmental Coordinator

Telephone #: 617 898-4968                      Email: hwaite@townofmilton.org

Mailing Address:                                      Town of Milton Engineering Department,  
525 CANTON AVENUE,  
MILTON, MA, 02186

#### 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: CHASE BERKELEY

Title: DIRECTOR OF PUBLIC WORKS

Date:

4/19/2018

## Part II: Self-Assessment Narrative

The Town of Milton, Massachusetts has completed the required self-assessment and has determined that our municipality has been working towards full compliance as submitted to EPA and approved as Milton's Notice of Intent (NOI) to the General Permit issued to Massachusetts under Phase II of the Regulations. All best management practices (BMPs) met the Town's measurable goals set forth in the NOI, except previously revised BMPs.

Since the NPDES permit inception, the Town has taken great efforts to permit and incorporate stormwater controls and management into all construction and post-construction activities within the Town. To this end, the town enforces its stormwater bylaw that requires stormwater and waste controls on construction sites. The Planning Board, the Zoning Board of Appeals, and the Board of Selectmen have adopted a Cluster Development Plan to amend zoning by-laws to allow for site-specific cluster developments. The Town continues to support and encourage low impact development in all new construction proposals.

In order to fund NPDES administration and compliance, the Town implemented a stormwater utility in 2016. Now in its second year, the stormwater utility pays into a stormwater enterprise fund that collects funding for future stormwater initiatives and projects. In an effort to raise awareness about the utility's purpose, the Town has mailed multiple town-wide messages about the stormwater utility and the projects it helps to fund.

The Town has also continued outreach efforts to the public in order to help curb stormwater pollution. Among other measures, the Town encourages obtainers of dog licenses to pick up after their pets; publishes stormwater management-related press releases in the local Milton Times; and updates local government officials on the stormwater management program annually. The Town has also used its Twitter account @TownofMiltonMA to post brief stormwater management messages and educational links. In addition, the Town has stuffed stormwater utility bills with educational materials and sent out Town-wide mailings related to BMP construction.

The creation of detailed GIS databases and maps of the Town's utilities and waterways has provided a valuable tool for the Town to keep track of maintenance and a more efficient tool to update the Town's infrastructure and resources. GIS has also aided in tracking illicit discharges. The Town continues to refine the databases and maps through research, field survey, and television inspection.

The Town has combined Geographic Information Systems (GIS) software with tablets in the field and mobile databases to improve our work tracking system. Staff use GIS and PeopleForms to track and quantify municipal tasks including catch basin cleanings. The goal is to use this real-time data to refine and optimize the cleaning schedule to target the most heavily used catch basins for more frequent cleanings. The system also efficiently tracks catch basin issues so that staff can address them quickly and effectively. In anticipation of new permit requirements, these GIS maps will be updated continually with more information about the MS4 and Town outfalls.

The Town continues to have a successful partnership with the Neponset River Watershed Association (NepRWA). Together, NepRWA and the Town have undertaken a stormwater education program, a stormwater sampling program, illicit discharge detection and elimination program, and have completed construction of bio-retention cells and tree filter boxes along Pine Tree Brook as part of the 319 TMDL Implementation Grants, which the Town continues to maintain. In 2018, we expect construction to begin on another set of tree filter boxes along Wendell Park, a high-pollutant loading area for pathogens.

At the end of 2017, the Town renewed its membership in the NepRWA-assisted Neponset Stormwater Partnership, a coalition of municipalities that share resources in order to meet the requirements of the MS4 permit.

In partnership with the town Shade Tree Advisory Committee, the DPW created an inventory of all town-owned trees and their condition. The Shade Tree Advisory Committee secured a grant for town tree planting that allowed the town to plant over 160 trees, filling vacancies and replacing diseased or dead trees. Residents were also able to request town trees near their property. The Town also received a gift from a local family, a portion of which was appropriated to fund tree maintenance and planting. These measures allowed Milton to regain its eligibility to become a Tree City USA, and MassDCR approved Milton's status as a 2017 Tree City USA in April 2018.

In anticipation of EPA and MassDEP's issuance of a new General Permit for Small MS4s in Massachusetts, the Town has taken several measures to ensure compliance with the new permit. First, the Town has established a position with the specific responsibility of ensuring NPDES compliance and stormwater programming, the Environmental Coordinator. The Town's current Environmental Coordinator is Hillary Waite.

The Town has also drafted a major revision of its Stormwater Management Program to take effect with the new General Permit. Stormwater BMPs from the original Stormwater Management Program will remain part of the Town's new SWMP, either as their own BMP or incorporated into new BMPs. By incorporating older BMPs into the new SWMP, the Town will ensure that activities to comply with 2003 permit requirements continue once the 2016 permit becomes effective. New program BMPs will focus on an expanded outreach program, illicit discharge detection and elimination, and more specific bylaws for stormwater management in new development and redevelopment. The Town's continued partnerships with NepRWA and Neponset Stormwater Partnership have allowed the Town to make advance plans for stormwater BMPs and stormwater bylaw revisions in the early years of the new General Permit.

In the upcoming year, the Town intends to move forward on stormwater BMPs that will help to meet first-, second-, and third-year requirements for the 2016 issuance of the MA Small MS4 General Permit. Some of these BMPs include increased public outreach, changes in Town regulations, scheduling of catchment screenings, and establishment of written stormwater policies for municipal departments.

The following table is a complete list of the Town's current BMPs, the actions the Town has committed to perform, the progress on the goals, and projected activities for the upcoming year.

## Part III: Best Management Practices

### Public Education and Outreach

BMP ID#	BMP Description	Responsible Dept.	Measurable Goal(s)	Progress on Goal(s) - Permit Year 15	Planned Activities - Permit Year 16
1.1	Educate dog owners about picking up dog waste	Public Works	Develop and print collateral piece on pet waste	Posted palm card on website. Clerk's office distributed cards with dog licenses.	Continue to post Palm card on website annually, and make social media posts related to picking up dog waste.
1.2	Prioritize areas in Town that have pet waste problems; install up to three mutt mitt stations	Public Works	Inspect mutt mitt stations	DPW inspected mutt mitt stations and noted repairs may be necessary.	Keep mutt mitt stations functioning and free from graffiti.
1.3	Develop a draft by-law that requires dog owners to clean up after their dogs. Present to Town Meeting.	Town Counsel	Draft by-law; present to Town Meeting	Bylaw passed in 2004. See Milton General Bylaws, Chapter 6, Section 41.	Continue to enforce by-law.
1.4	Update stormwater section of Town website 3x a year	Public Works	Update stormwater section of the Town website 3x per year	Updated stormwater sections of the DPW website to include information about the harmful effects of stormwater pollution, updated information about the SWMP and the 2016 MS4 permit, and household best practices	Stormwater page and SWMP will be updated in accordance with new permit effective 7/1/18
1.5	Inspect signs that identify water bodies within town & contact DCR/MHD/NepRWA for repairs	Public Works	Inspect signs	Signs inspected.	Inspect all signs
1.6	Provide update of SWMP at Selectmen's meeting	Public Works	Present annual update of SWMP at Selectmen's meeting	Stormwater utility implemented. Meeting with Selectmen discussed new permit and Town regulatory changes.	Begin process of updating Town bylaws to ensure compliance with new permit, periodically meeting with Selectmen
1.7	Develop two press releases per year describing importance of stormwater management	Public Works	Publish two newspaper articles or press releases describing importance of stormwater management	Articles published in local newspaper; additionally: web press releases, mailings to residents near BMP constructions	Educate public on new stormwater regulations through two articles or press releases
1.8	Show two cable programs or PSAs on stormwater importance of stormwater management	Public Works	Two programs or PSA's on local cable TV	<ul style="list-style-type: none"> <li>Program about stormwater and rain gardens with the Milton Garden Club</li> <li>Stormwater update with Board of Selectmen</li> </ul>	Educate public on new stormwater regulations by airing related PSAs on cable TV.

## Public Participation and Involvement

<b>BMP ID#</b>	<b>BMP Description</b>	<b>Responsible Dept.</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 15</b>	<b>Planned Activities- Permit Year 16</b>
2.1	Comply with state public notification guidelines	Town Clerk	Post notice as required	All public hearings are posted in advance at Town Clerk’s office and Town website	Will post notice as required if public hearing is held
2.2	Provide trash pickup on Milton Clean-Up Day	Public Works	Trash pickup provided each year for town-wide cleanups	Clean-up Day held April 29 <sup>th</sup> , 2017. DPW provided collection bags and work gloves. Assisted in coordination of 2018 cleanup to be held 4/28.	Assist in the coordination of future Clean-up Days
2.3	Provide support for the NepRWA 319 TMDL Implementation Grant	Public Works	Assist with wetland projects as requested by NepRWA	Continued to maintain bio-retention cells and tree filter boxes. Began preconstruction work on new filter box project at Wendell Park.	Continue design process for future BMPs.
2.4	Outreach to Milton school teachers on stormwater issues	Public Works	Increased awareness among Milton families about stormwater issue	Sponsored NepRWA water curricula at Milton schools.	Continue to sponsor NepRWA’s curricula at Milton schools.
2.5	Work with NepRWA on Unquity Brook outreach	Public Works	Secure funding to examine flow patterns and possible septic tank leakage into Unquity Brook	Supported NepRWA in securing and implementing CZM grant to identify potential locations for structural BMPs near Unquity Brook and obtain 25 percent plans for these BMPs.	Continue to work with NepRWA on Unquity Brook planning and building.

### Illicit Discharge Detection and Elimination

<b>BMP ID#</b>	<b>BMP Description</b>	<b>Responsible Dept.</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s)- Permit Year 15</b>	<b>Planned Activities- Permit Year 16</b>
3.1	Remove sewer underdrains if found during routine maintenance	Public Works	Document number of underdrains found and removed	1 underdrain removed	Remove as needed
3.2	Map stormwater outfalls and receiving waters; identify outfalls and other structures owned by other entities; evaluate structures on state-owned Town roads	Public Works	Create map	Continued to update and edit GIS drainage map initially completed in fall 2005.	Continue to use and update map for day-to day stormwater-related activities; use GIS features to classify priority outfalls
3.3	Digitize stormwater collection system in a GIS-compatible format	Public Works	None	GIS map completed in fall 2005. Full-time GIS operator updates maps and databases on a continual basis	Continue to use map in day-to day stormwater-related activities. Use PeopleForms or other platform to implement written reporting.
3.4	Develop and implement a plan to identify and remove non-stormwater discharges to the MS4	Public Works	Create Map	Continued to support NepRWA in investigating illicit discharges. Prioritized investigation of current known illicit discharges.	Continue ongoing illicit discharge detection & elimination. Follow up with results from optical brightener report to track illicit discharges. Begin work on written IDDE protocols and procedures per new permit requirements.
3.5	Develop bylaw requiring inspection of new construction for correct connection to the sanitary sewer	Town Counsel	Develop bylaw requiring inspection of new construction for correct connection to the sanitary sewer	Sewer regulations and permit requirements revised and implemented in 4/03. All new connections are inspected for correct connection.	Continue bylaw enforcement.
3.6	Conduct a Town-wide sewer rehabilitation program	Public Works	Implement program	Funding secured; rehabilitation plan continued.	Continue sewer rehabilitation program; secure funding for year 13.

### Construction Site Runoff Control

<b>BMP ID#</b>	<b>BMP Description</b>	<b>Responsible Dept.</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s)- Permit Year 15</b>	<b>Planned Activities- Permit Year 16</b>
<b>4.1</b>	Develop a Construction Site Erosion & Sediment Control bylaw for all construction sites requiring a building permit (7500 sq. ft or over)	Public Works	Pass the By-law	Enforced By-law that was passed in May 2006	Begin bylaw revision process to ensure compliance with 2016 General Permit
<b>4.2</b>	Require a waste management plan at construction sites 1-5 acres	Conservation Commission; Building Dept., Public Works	Implement regulation or by-law requiring a waste management plan at construction sites 1-5 acres	Enforced regulatory mechanism in place for requiring a waste management plan for all construction sites.	Continue to enforce
<b>4.3</b>	Review Site Plans not already subject to Conservation Commission or Planning Board review	Conservation Commission, Public Works (Engineering)	Implement protocol for site plan review	All site plans reviewed as part of DPW permitting process	All site plans will be reviewed by the Engineering Department
<b>4.4</b>	Consider public input for new construction sites not subject to the jurisdiction of Conservation Commission or Planning Board	Planning Board, Conservation Commission	Discuss plan for public input	By-law adopted at Town Meeting in May 2006	Consider public input for any updates to construction site policies undertaken in pursuit of compliance with new MS4 permit
<b>4.5</b>	Inspection erosion and sediment controls at construction sites involving wetlands	Conservation Commission/Engineering	Report number of Inspections conducted	18 total inspections, 3 inspections conducted at wetlands	Continue inspections as needed



Post-Construction Stormwater Management in New Development and Re-Development

<b>BMP ID#</b>	<b>BMP Description</b>	<b>Responsible Dept.</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s)- Permit Year 15</b>	<b>Planned Activities- Permit Year 16</b>
5.1	Develop a draft bylaw to apply Standards 2,3,4 and 7 of MSP to entire Town; present bylaw to Town Meeting	DPW	Develop bylaw and present to Town Meeting until passed	Bylaw adopted at Town Meeting in May 2006	Continue to enforce Bylaw; prepare for updates to bylaw to ensure compliance with new permit
5.2	Specify a stormwater BMP manual to be used for consistent design and performance standards	DPW	Select BMP manual	MassDEP and CZM "Stormwater Management Vol 2: Stormwater Technical Handbook" selected	Continue to research useful BMP's and add to reference list in anticipation of new permit regulations.
5.3	Develop a draft bylaw that ensures long-term maintenance of private structural BMPs	DPW	Include in stormwater bylaw and present to Town Meeting	Bylaw adopted at Town Meeting in May 2006	Continue to enforce Bylaw
5.4	Develop a draft zoning bylaw that allows and/or encourages use of low-impact development (LID)	Planning Board	Draft bylaw developed and presented to Town Meeting	Town adopted a site-specific Cluster Development Plan	Continue to work with developers with LID projects.

### Municipal Good Housekeeping

<b>BMP ID#</b>	<b>BMP Description</b>	<b>Responsible Dept.</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s)- Permit Year 15</b>	<b>Planned Activities- Permit Year 16</b>
<b>6.1</b>	Identify sensitive receptors within Town	Public Works	Develop list of sensitive receptors; notify staff	Accomplished	Accomplished
<b>6.2</b>	Funding to develop employee training program	Public Works	Keep DPW staff informed on importance of stormwater management	Conducted DPW staff training for expectations under new 2016 permit. Obtained curriculum for future staff trainings.	Continue to provide stormwater management training to the staff.
<b>6.3</b>	Sweep all streets once every spring & fall	Public Works	Percent of streets swept twice per year	100% of streets swept once a year. Arterial streets swept monthly. Business districts swept weekly (in non-winter months).	Continue ongoing street sweeping programs. Begin to identify areas for increased maintenance in accordance with new permit requirements.
<b>6.4</b>	Continue existing road salting procedures	Public Works	Maintain documentation of de-icer amount used	4900 tons of de-icer used	Continue to maintain documentation of de-icer amount used; Regularly train best practices for salt storage
<b>6.5</b>	Minimize impacts from vehicle maintenance	Public Works	Build containment area for vehicle washing; switch to phosphate-free biodegradable soap	Continued to use environmentally-friendly soap products	Review equipment wash practice for 2016 permit compliance
<b>6.6</b>	Minimize impacts from vehicle maintenance	Public Works	Hold employee training	Vehicle maintenance area workers aware of good maintenance protocol	Continue to train and improve good housekeeping practices

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<b>6.7</b>	Maintain storm drain system	Public Works	Clean all catch basins once every 3 years; inspect & clean drain pipes as needed; keep daily record of catch basin residuals volumes; prioritize large volume catch basins for more frequent cleaning	Catch basins cleaned on schedule.	Continue to use revamped inspection and record keeping procedures to meet measurable goals
<b>6.8</b>	Train staff to minimize chemical applications in recreational areas	Public Works	Hold training; minimize use of chemical pesticides, fertilizer & herbicides; keep maintenance records	Town follows Massachusetts regulations for Integrated Pest Management practices; Town's Turf Management contractor applies low-phosphate chemical treatments.	Continue to coordinate with other town departments on proper use of pesticides, fertilizer & herbicides
<b>6.9</b>	Hold biennial HHW Day	Public Works	Hold at least one HHW Day every other year; hold one tire and battery collection per year	Annual HHW Day was held in September of 2017. Tires, auto fluids, and batteries were collected throughout the year.	HHW Disposal Day scheduled for September 2018. Continue to collect tires, auto fluids, and batteries year round
<b>6.10</b>	Plant a new tree to replace every tree removed each year	Public Works, Tree Warden	Plant more trees than are cut down every year	Renewed Tree City USA status. Reviewed town tree protocol with the help of Shade Tree Advisory Committee and planned to maintain Tree City status.	Maintain Tree City USA status, including public messaging about Arbor Day

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<b>6.11</b>	Pursue cooperative agreements with Milton garden clubs to implement litter management program	Public Works	Work with Milton Garden Club and Amateur Gardeners of Milton to raise funds for litter vacuum purchase; develop litter management program	Accomplished. Continued to follow the Litter Management Program.	Continue to use litter vacuum from early Spring to late Fall.
<b>6.12</b>	Identify stormwater outfalls within Milton owned by other entities and inform them of their management responsibility	Public Works	Outfalls assessed; state agencies notified	Accomplished	Re-evaluate stormwater interconnections in anticipation of new permit regulations

## Part IV. Program Outputs & Accomplishments (OPTIONAL)

(Since beginning of permit coverage unless specified otherwise by a \*\*, which indicates response is for period covering April 1, 2017 through March 31, 2018)

### Programmatic

Stormwater management position created/staffed	Y/N	Yes
Annual program budget	(\$)	\$793,836 (FY 2018)
Total program expenditures since beginning of permit coverage	(\$)	\$5,753,055.00
Funding mechanism(s)		Capital borrowing, stormwater utility

### Education, Involvement, and Training

Estimated number of property owners reached by education programs(s)	(# or %)	9800
Stormwater management committee established	(y/n)	No
Stream teams established or supported	(# or y/n)	Yes
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	Yes
Shoreline cleaned since beginning of permit coverage	(mi.)	8.6
Household Hazardous Waste Collection Days		
▪ days sponsored**	(#)	1
▪ community participated**	(# or %)	310 cars
▪ material collected**	(tons or gal)	1400 gal
School curricula implemented	(y/n)	Yes

### Legal/Regulatory

Regulatory Mechanism Status (indicate with "X")	In place prior to Phase II	In Review	Drafted	Draft in review	Adopted
Illicit Discharge Detection & Elimination					X
Erosion & Sediment Control					X
Post-Development Stormwater Management					X

Accompanying Regulation Status (indicate with "X")					
Illicit Discharge Detection & Elimination					X
Erosion & Sediment Control					X
Post-Development Stormwater Management					X

**Mapping and Illicit Discharges**

Outfall mapping complete	(%)	100
Estimated or actual number of outfalls	(#)	230
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	100
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	100
Illicit connections removed **	(#); and (est. gpd)	0

**Construction**

Number of construction starts (>1-acre)**	(#)	3
Estimated percentages of construction starts adequately regulated for erosion and sediment control**	(%)	100
Site inspections completed**	(# or %)	100
Tickets/Stop work orders issued**	(# or %)	0

Fines collected**	(# and \$)	0
Complaints/concerns received from public**	(#)	1

**Post-Development Stormwater Management**

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	100
Site inspections (for proper BMP installation & operation) completed**	(# or %)	100
BMP maintenance required through covenants, escrow, deed restrictions, etc.	(y/n)	Y
Low-impact development (LID) practices permitted and encouraged	(y/n)	Y

**Operations and Maintenance**

Average frequency of catch basin cleaning (non-commercial /non-arterial streets) **	(times/yr)	1/3 PER YR
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)**	(times/yr)	1/3 PER YR
Qty of storm drains structures	(#)	3482
Qty. of screenings/debris removed from storm sewer infrastructure**	(lbs. or tons)	679 T (estimated)
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.)**	(location)	Onsite stockpile to landfill

Basin Cleaning Costs		
• Annual budget/expenditure(labor & equipment)**	(\$)	51,721.14
• Hourly or per basin contract rate**	(\$/hr or \$ per basin)	\$49.00 per basin
• Disposal cost**	(\$)	\$54.98 per ton
Cleaning Equipment		

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• Clam shell truck(s) owned	(#)	1
• Vacuum truck(s) owned/leased	(#)	0
• Vacuum trucks specified contracts	(y/n)	Y, One
• % Structures cleaned with clam shells **	(%)	100
• % Structures cleaned with vector**	(%)	0

Average Frequency of street sweeping (non-commercial/non-arterial streets)**	(times/yr)	2X
Average frequency of sweeping (commercial/arterial or other critical streets)**	(times/yr)	32X
Qty. of sand/debris collected by sweeping**	(lbs. or tons)	727T
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)**	(location)	
Annual Sweeping Costs		
• Annual budget/expenditure(labor & equipment)**	(\$)	60,000
• Hourly or lane mile contract rate**	(\$/hr or \$ ln mi.+)	\$36 PER HOUR
• Disposal cost**	(\$)	\$54.98/Ton
Sweeping Equipment		
• Rotary brush street sweepers owned	(#)	1
• Vacuum street sweepers owned/leased	(#)	1
• Vacuum street sweepers specified in contracts	(y/n)	1
• % Roads swept with rotary brush sweepers**	%	0
• % Roads swept with vacuum sweepers**	%	100



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Reduction (since beginning of permit coverage) in application on public land of: ("N/A" =never used;"100%" = elimination)		
▪ Fertilizers	(lbs. or %)	NA
▪ Herbicides	(lbs. or %)	NA
▪ Pesticides	(lbs. or %)	NA
Integrated Pest Management (IPM) Practices Implemented	(y/n)	Yes

Average Ratio of Anti-/De-Icing products used ** (also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)	% NaCl	95
	% CaCl <sub>2</sub>	5
	% MgCl <sub>2</sub>	
	% CMA	
	% K <sub>2</sub> ac	
	% KCl	
	% Sand	Trace
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 %)	NA
Estimated net reduction or increase in typical year sand application rate**	(± lbs/l <sub>n</sub> mi. or %)	
% of salt/chemical pile(s) covered in storage shed(s)	(%)	100
Storage shed(s) in design or under construction	(y/n or #)	NA
100% of salt/chemical pile(s) covered in storage shed(s) by May 2008	(y/n)	Yes

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