

Municipality/Organization: Southwick

EPA NPDES Permit Number: MAR041022

MassDEP Transmittal Number: W-045481

Annual Report Number Year 9
& Reporting Period: April 1, 2011 – March 31, 2012

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2012)

Part I. General Information

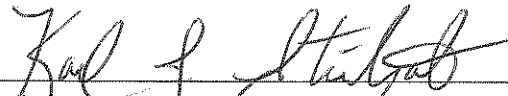
Contact Person: Karl Stinehart Title: Chief Administrative Officer

Telephone #: (413) 569-5995 Email: kstinehart@southwickma.net

Mailing Address: 454 College Highway, Southwick, MA 01077

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: Karl F. Stinehart

Title: CAO

Date: 4/27/12

Part II. Self-Assessment

The Town of Southwick has completed the required self-assessment and has determined that our municipality is in compliance with our Stormwater Management Program and permit conditions. The Town has aggressively mapped outfall locations throughout the Town as well as implemented Cartographic mapping for the Town. Southwick continues to publicize stormwater-related issues and encourages active participation by townspeople in addressing pollution and stormwater issues. The Town adopted by-laws that address the NPDES requirements while considering the existing regulations and procedures that address stormwater management at the March 15, 2008 and March 16, 2009 Town Meetings. The Southwick Stormwater and Floor Drain Bylaws and the Illicit Connection Bylaw were approved by Town voters at the March 15, 2008 Town Meeting. The Public Sewer Connections Bylaw was adopted May 12, 2003. The Sanitary Sewer Regulations were adopted on January 15, 2009, which also include specific stormwater prohibition provisions. The Town actively enforces these by-laws.

Acronyms Used in the Following Pages:

BOS = Board of Selectmen
Con Com = Conservation Commission
CRC = Citizens Restoring Congamond
DPW = Department of Public Works
LMC = Lake Management Committee
PB = Planning Board
PRC = Parks & Recreation Commission
PVPC = Pioneer Valley Planning Commission

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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1A	Classroom Education	School District	Incorporate Water Quality into curriculum	Program dropped due to school funding cuts.	Continue to seek support for funding to restore school program.
Revised					
1B	Westfield Evening News	Con Com / BOS	Publish stormwater / water quality information 1x/year	Drinking water results are published annually	Publish stormwater / water quality information once per year
Revised					
1C	Newspaper Press Releases	BOS	Publish stormwater / water quality information 2x/year	Newspaper articles published on Town Clean-up Day, Household Hazardous Waste Collection Day, Annual Lake Clean-up, sewer system installation progress and on-going 319 projects, including the addition of numerous deep-ump catch basins, infiltration structures and BaySeparators and grassed swales, along with other erosion prevention improvements.	Publish stormwater / water quality information twice per year
Revised					
1D	Local Cable Access	BOS	Post stormwater / water quality information 2x/year	Taped and televised re-runs of “Town Cleanup” and “Annual Lake Cleanup” Please refer to BMP 2C.	Post stormwater / water quality information twice per year.
Revised					
1E	Lakeside Kiosks	LMC	Post stormwater / water quality information 2x / year	Handout information on exotic species to boaters launching at two State Boat Ramps. Also, “No Weeds In / No	Post stormwater / water quality information twice per year.

Revised				<p>Weeds Out" and "Do not feed waterfowl" signs posted at boat ramps. A Visitor Information Center is also present to provide information to the general public. Applicable Town Bylaw and CMR information is also posted on a kiosk at the North Boat Ramp.</p>	
1F	Community Website	BOS	Post stormwater / water quality information 2x / year	<p>CRC and Commonwealth of Massachusetts websites are linked through the Town's website; LMC, Con Com and Community Preservation Committee also have pages on the Town website. The DPW webpage also includes information on Highway Division activities including catch basin repairs and cleaning, street sweeping and roadside cleanup. Town Cleanup Day was publicized on the Town website. These pages will continue to be expanded to include more stormwater information as the program develops.</p>	Post stormwater / water quality information twice per year.
Revised					

1a. Additions

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities
2A Revised	Wetland Cleanup	Southwick Rotary / Con Com	Support interested groups with trash pickup.	During 2011, the Southwick Rotary sponsored three highway clean-ups along College Highway. All trash collected was disposed of at the transfer station.	Continue to support interested groups by collecting trash bagged by participants
2B Revised	Student Water Quality Monitoring	School Department	Conduct water quality sampling and analysis	The schools were unable to continue lake water sampling program due to budget cuts.	Continue to seek support for funding to restore school program.
2C Revised	Annual Lake Clean-Up	CRC	Conduct Clean-Up Day	The CRC and LMC annual clean-up of Lake Congamond occurred on June 8, 2011 in which 15 volunteers removed 3 truckloads of debris from the lakes, shoreline etc.	Hold lake clean-up day in Summer 2012. The current plan is to clean up debris from the October 29, 2011 freak devastating snowstorm along Canal Brook (lake outlet) during the Lake Cleanup Day (June 4, 2012).
2D Revised	Lakeside Maintenance	LMC	Maintain trash receptacles at Lake Congamond	LMC continued to maintain ~25 trash receptacles at public access points to Lake Congamond	Continue to maintain trash receptacles at public access points to Lake Congamond
2E	Volunteer Water Quality Monitoring	CRC	Conduct water quality sampling and analysis	Water quality sampling & analysis was conducted monthly at Lake	Continue water quality sampling and analysis. A consultant has been

Revised				<p>Congamond. Analyses include: temperature, pH, dissolved oxygen, conductivity, phosphorus, and chlorophyll. The Town's consultant prepared a detailed report summarizing the findings and recommendations.</p>	<p>retained by the Town to perform a detailed study of lake conditions and to make long term recommendations. In addition, the LMC spawned a Canal Restoration Subcommittee that was approved by the BOS on 3/22/11 to address long term canal and lake water quality improvements. The LMC has requested FY2013 Town funding to begin implementing a web-based real-time lake monitoring and data charting system.</p>
	Transfer Station Operations	DPW	Improve material handling	<p>An Eagle Scout project was sponsored by DPW to build storage racks for fluorescent tube collection/storage</p>	<p>Continue to seek improvements to Transfer Station operations</p>
Revised					

2a. Additions

	Town-Wide Clean-Up	CRC / Con Com / DPW	Conduct Town-Wide Clean-up Day	<p>The Rotary Club sponsored 3 clean-ups of 1 mile of College Highway in 2011.</p>	<p>The Rotary Club plans to continue its work on College Highway via the "Adopt a Highway" program. A 2012 town-wide cleanup is currently being planned.</p>
	Plantings for Erosion Control	Scouts	Plant trees to control erosion	<p>The Scout's primary project for 2011 and 2012 is creating a raised walk access to Great Brook behind Southwick Town Hall.</p>	<p>Continue to encourage Scouts to continue plantings in this area as well as other areas in Town in need of erosion control.</p>
	Household Hazardous Waste Day			<p>The Board of Health typically hosts a household hazardous waste disposal once per year.</p>	<p>A household hazardous waste will be held during 2012 if funding is made available.</p>

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities
3A Revised	Mapping Stormwater Outfalls	DPW	Develop map of outfalls	The Town/DPW contracted the services of Cartographic, who mapped the Town for the Assessor's Office, mapped the catch basins and outfalls in the Town, along with the entire water and sewer system. This system, along with GPS and data system were made fully operational in 2008.	Continue to update system as necessary and map additional outfalls as found. The DPW has requested and received FY2012 funding for Asset Management Software that will greatly enhance the ability to map and track stormwater system components, work orders and actions. Procurement is expected to be completed by early June 2012.
3B Revised	Develop Illicit Discharge Program	DPW	Draft Plan	DPW has an existing Curtain Drain/Foundation Drain Policy allowing connection to catch basin and another bylaw that prohibits discharging of sump pumps into the street or catch basins. Periodic inspections are conducted by DPW for presence of gray water or bacteria, which would result in disconnection from the system. Through storm drain outfall mapping process, potential illicit connections (sump pumps) continue to be identified and addressed. Townspeople voted to approve the new Illicit Discharge and Floor Drain Bylaws at the March 15, 2008 Special Town Meeting	Revise procedures/ plan as necessary in future.
3C Revised	Non-Stormwater By-Law	BOS/DPW	Draft by-law.	During the March 2008 Town Meeting, the Town adopted an Illicit Connection By-Law regulating illicit connections and discharges to the storm drain system.	Enforce existing by-law.

3D Revised	Illegal Dumping	DPW	Perform regular patrols/cleanup	DPW performed regular patrols and cleaned up illegal dumped trash. Police have ticketed those found responsible for illegal dumping. The DPW continues to pull Transfer Station Permits for violating Transfer Station policies and/or dumping trash along the road.	Continue to perform regular patrols/cleanup.
3E Revised	Water Quality Monitoring	BOH	Regular sampling at beach sites in summer	BOH performed weekly sampling at Town Beach when open from June through August 2011.	Continue to perform weekly water quality monitoring at beaches during summer months.
Revised					

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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities
4A Revised	Construction Run-Off By-Law	PB / Con Com / DPW	Draft By-Law	The Town, with the assistance of PVPC, drafted a by-law which was approved by Town voters at the March 16, 2009 Special Town Meeting. Building Department is distributing information packages on NPDES construction and requiring builders to sign off on receipt of package. Planning Board and DPW are also informing developers of NPDES requirements and have incorporated proof of NPDES NOI submittal and development of SWPPP as permitting requirement	Continue to work with developers to incorporate BMPs during construction activities.
4B Revised	Plan Review	PB / Con Com / DPW	Enforcement under by-law	Continued plan review per new by-laws.	Continued inspection / reporting under new by-law.
4C	Inspection / Reporting	DPW / PB / Con Com	Enforcement under by-law	Continued inspection / reporting under new by-laws. Town officials have	Continued inspection / reporting under new by-law.

Revised					worked with developers to ensure compliance with required BMPs during construction. A consultant was hired to oversee stormwater management, etc on a new development. The developer has been cited and fined by Con Com for violations and the violations continue to be corrected when identified. DPW cited 2 property owners for illegal discharges that have been corrected. Con Com issued 5 citations/fines for stormwater violations.	
Revised						
Revised						
Revised						

4a. Additions

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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities
5A Revised	Post-Construction Runoff By-Law	PB / Con Com / DPW	Draft By-Law	The Town, with the assistance of PVPC, drafted a by-law which was approved by Town voters at the March 16, 2009 Special Town Meeting.	Continue to monitor need for updating bylaws.
5B Revised	Construction Site Plan Review	PB / Con Com / DPW	Enforcement under By-Law	Continued plan review per new by-law.	Continued inspection / reporting under new by-law.
5C Revised	Stormwater System Maintenance Plan	PB / Con Com / DPW	Enforcement under By-Law	Continued inspection / reporting under new by-law.	Continued inspection / reporting under new by-law.
Revised					
Revised					
Revised					
Revised					

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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities
6A Revised	Municipal Maintenance Activity Program	DPW / PRC	Evaluate and draft additional polices	All roads swept as part of spring cleanup. Some are swept 2x/year. All catch basins are vacuumed 1x/year after sweeping, some 2x/year (by lakes).	Continue with annual sweeping and catch basin cleaning program. Draft new policies as necessary.
6B Revised	Training of all Municipal Activities	DPW	Initial good housekeeping training	In-house training is done for new hires or anyone transferring within DPW. Good housekeeping training attended by Town Officials, maintenance and DPW staff on April 28, 2011.	Conduct good housekeeping training. Training session for Town Officials, maintenance and DPW staff is scheduled for April 26, 2012.
6C Revised	Catch Basin Cleaning Program	DPW	Clean 90% of catch basins annually	Town purchased its own vacuum/jet rodder truck in 2005 and now performs catch basin maintenance with DPW employees. 100% of town catch basins within the entire town were cleaned in the months of May through October, 2011.	Clean at least 90% of catch basins in 2012.
6D Revised	Street Sweeping & Cleaning	DPW	Sweep 90% of the streets annually	100% of paved town streets within the entire town were swept in the months of April, May and June, 2011. Approximately 25% of streets within urbanized area were swept twice.	Sweep at least 90% of streets in 2012.
Revised					
Revised					

6a. Additions

	<p>Exotic Aquatics Bylaw</p>	<p>LMC</p>		<p>Townpeople voted 11/30/99 to accept LMC proposed "No Weeds In/No Weeds Out" Town bylaw that addresses boats launching on Congamond Lakes – Ramp Attendants inspect boats entering/leaving ramps. DCR summer employee helped pass out info and educate boaters during summer 2011. New Visitor Center has lots more information available to public.</p>	<p>Continue reminding public, boat inspection process & giving out handouts on preventing spread of nuisance aquatics. Depending on FY2013 budget, DCR plans to supply summer employees in 2012 to assist in monitoring boats in/out of ramps and educate users.</p>
--	----------------------------------	------------	--	--	--

	Stormwater Management	LMC/DPW	<p>LMC began seeking Town Funds & matching grants in 1995 to address erosion, sedimentation, etc. LMC received grants in 1995, 1997, 1999, 2001 & 2008 for various catch basin, erosion control, sedimentation chambers, etc. New 65-space public parking area designed & built in 1998 adjacent to boat ramp with 100% of stormwater sheet flowing onto grassy area where it percs naturally into ground. The Town & PVPC received another 319 grant to address erosion & sediment issues in 4 subwatersheds on the western side of Middle Pond. Five deep-sump catch basins, four BaySeparators + grassy swales were added to the four outfalls in these subwatersheds. This work was completed in 2008. Two more BaySeparators were added as part of the Middle/South Pond culvert replacement project. As part of a third S319 Grant, five BaySeparators, 18 deep sump catch basins, two infiltrator systems and two grassed swales were added in the lakes area. Completion of this project and Town DPW work brings the total to 16 BaySeparators, 2 detention/infiltration ponds, and 9 grassed swales that address 16 major stormwater outfalls on the Congamond Ponds.</p>	Continue seeking funding for projects in watershed. Work with PVPC (319 project manager), consulting engineering company, and contractor to implement BMPs.
--	-----------------------	---------	---	---

	Stormwater Management (cont.)	DPW	<p>Banks of infiltrators with emergency overflow were added to an outfall by the Rail Trail that served a small development and another local street. Two business expansion projects, a large park project and one new development are all making use of separators and infiltrators as recommended by the Town. During 2011, three Stormceptors, 16 deep sump catch basins and a large infiltration system were all added as part of the Nicholson Hill Road reconstruction project and 4 shallow sump catch basins were replaced with deep sump structures as part of stormwater repair work on local roads.</p>	
	Waterfowl Bylaw	LMC	<p>Townpeople voted 3/14/02 to accept LMC proposed "Do Not Feed Waterfowl" Town bylaw that setup fines for feeding waterfowl. Ramp Attendants hand out literature on "why" not to feed waterfowl & LMC installed "Do Not Feed Waterfowl" signs at ramps & public areas. Compliance is nearly 100% without having to issue fines.</p>	<p>Continue reminding ramp users & public on benefits of not feeding waterfowl (besides fines).</p>
	Nutrient Reduction	LMC/DPW	<p>The LMC handed out Organic Lawn Care/Landscaping information packets at meetings and made them available at the Visitor Center located at the State Boat Ramp.</p>	<p>PVPC is sponsoring a Lawnathon Festival for area residents on 5/12/12 at Look Park in Florence, MA.</p>
	Waste Oil and Antifreeze	DPW	<p>Added waste oil & antifreeze collection depot for recycling at the Transfer Station. Residents may bring in motor oil, hydraulic oil, and antifreeze.</p>	<p>Continue to collect waste oil and antifreeze from residents.</p>

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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities
7A Revised	No TMDL for waters in Southwick				
Revised					
Revised					
Revised					
Revised					
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

- The Town notes the high involvement of its citizens and various community and lake organizations in improving town-wide environmental conditions.
- Nine weekly water samples were collected and analyzed for coliform at the Town beach during the 2011 beach season. No samples were above recommended coliform levels; therefore, no beach closures occurred.
- There was an Cyanobacteria algae bloom in South Pond in October 2011 that triggered an advisory that lasted ~1 month. More extensive water analysis is planned for 2012 in an effort to determine cause and to take timely preventive action.

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, 2011 through March 31, 2012)

Programmatic

	(Preferred Units)	Response
	(y/n)	Y & N (See note left)
Stormwater management position created/staffed – Currently being covered by DPW, Con Com & Board of Health – Long range staffing and necessary funding being assessed. Con Com hired an outside consultant under MGL 44§ 53G to perform peer reviews of new subdivision stormwater management plans. DPW secured \$30K funding in FY2012 for Asset Management software that will aid in identifying, categorizing tracking and servicing parts of the stormwater utility. Procurement of the system is being finalized.		
Annual program budget/expenditures **	(\$)	25,000
Total program expenditures since beginning of permit coverage	(\$)	Unknown
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		General Fund +\$319 Grants

Education, Involvement, and Training

Estimated number of property owners reached by education program(s)	(# or %)	20%
Stormwater management committee established	(y/n)	Y

Stream teams established or supported – LMC Canal Brook Restoration Subcommittee was formed in March 2012.	(# or y/n)	Y
Shoreline clean-up participation or quantity of shoreline miles cleaned **	(y/n or mi.)	5-6 miles/yr
Shoreline cleaned since beginning of permit coverage	(mi.)	30 – 40 miles
Household Hazardous Waste Collection Days		Normally 1x / year
▪ days sponsored **	(#)	1
▪ community participation ** (Waste oil/antifreeze and latex paint taken at Transfer Station)	(# or %)	88 vehicles
▪ material collected **	(tons or gal)	~9 Tons
School curricula implemented May be restored pending funding restoration by regional school district	(y/n)	NA

Legal/Regulatory

	<i>In Place</i> Prior to Phase II	<i>Reviewing</i> Existing Authorities	Drafted	Draft in Review	Adopted
Regulatory Mechanism Status (indicate with "X")					
▪ Illicit Discharge Detection & Elimination					3/15/2008
▪ Erosion & Sediment Control					3/16/2009
▪ Post-Development Stormwater Management					3/16/2009
Accompanying Regulation Status (indicate with "X")					
▪ Illicit Discharge Detection & Elimination					3/15/2008
▪ Erosion & Sediment Control					3/16/2009
▪ Post-Development Stormwater Management					3/16/2009

Mapping and Illicit Discharges

	(Preferred Units)	Response
Outfall mapping complete	(%)	100%
Estimated or actual number of outfalls	(#)	~225

System-Wide mapping complete (complete storm sewer infrastructure) Structure locations GPS'd, flows paths not completed – New Asset Management system should be installed in June 2012 and stormwater data collected will repose in this new system.	(%)	100%
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	100%
Outfalls inspected/screened **	(# or %)	~200
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	100%
Illicit discharges identified **	(#)	2
Illicit discharges identified (Since beginning of permit coverage)	(#)	~35
Illicit connections removed ** Owner notified 2x; Fines to follow if not corrected.	(#); and (est. gpd)	0
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	~29
% of population on sewer	(%)	25
% of population on septic systems	(%)	75

Construction

	(Preferred Units)	Response
Number of construction starts (>1-acre) ** (11 2011 starts on ANR lots >1 acre are not covered by current NPDES regs)	(#)	6
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)	80
Site inspections completed ** (3 rd party weekly site reviews for TOS + DPW & Con Com reviews	(# or %)	~40
Tickets/Stop work orders issued ** Con Com & DEP issued STOP WORK at same site	(# or %)	~10
Fines assessed/collected ** Fines issued by Con Com for above (1) site	(# and \$)	5/15,000
Complaints/concerns received from public **	(#)	~15

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	75
Site inspections (for proper BMP installation & operation) completed **	(# or %)	~85
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)	1x / year
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	1x / year
Qty of structures cleaned **	(#)	~1,100
Qty. of storm drain cleaned **	(%, LF or mi.)	~300'
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	700-800 tons (dry weight)
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Town landfill / compost

Basin Cleaning Costs

• Annual budget/expenditure (labor & equipment)** Part of DPW overall tasks/budget	(\$)	~\$60,000
• Hourly or per basin contract rate ** Performed in-house since 2005; Estimate is for 2 DPW workers and vac truck	(\$/hr or \$ per basin)	~\$125/hr
• Disposal cost** (Performed in-house since 2005, estimated vac cost if contracted out)	(\$)	~\$30,000
Cleaning Equipment		
• Clam shell truck(s) owned/leased	(#)	0
• Vacuum truck(s) owned/leased	(#)	1
• Vacuum trucks specified in contracts	(y/n)	0
• % Structures cleaned with clam shells **	(%)	0
• % Structures cleaned with AquaTech B10 **	(%)	100

(Preferred Units) Response

Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	1x / year
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	1x / year
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	1,200 – 1,300 tons

Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Town landfill / compost
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)** Contracted cost including in-house trucking)	(\$)	\$60,000
• Hourly or lane mile contract rate **	(\$/hr. or In mi.)	\$110/hr
• Disposal cost**	(\$)	
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	0
• Vacuum street sweepers owned/leased	(#)	0
• Vacuum street sweepers specified in contracts	(y/n)	Y
• % 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 %)	NA
▪ Herbicides	(lbs. or %)	NA
▪ Pesticides	(lbs. or %)	NA
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	15% NaCl 5% CaCl ₂ 0% MgCl ₂ 0% CMA 0% Kac 0% KCl 80% Sand
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/ln mi. or %)	N/C
Estimated net reduction or increase in typical year sand application rate **	(±lbs/ln mi. or %)	N/C
% of salt/chemical pile(s) covered in storage shed(s)	(%)	100
Storage shed(s) in design or under construction (DPW planned relocation in 2011)	(y/n or #)	Y
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	N/A
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	N/A
• Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	N/A