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Municipality/Organization: City of Leominster, MA

EPA NPDES Permit Number: MA0100617

MaDEP Transmittal Number: W- 041009

Annual Report Number

& Reporting Period: No. 1: March 08-March 09

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NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Patrick LaPointe

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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: Dean J. Mazzearella

Title: Mayor

Date: May 1, 2009

Part II. Self-Assessment

The Leominster Department of Public Works has taken the lead in the implementation of a Stormwater Management Plan for our community. Our Committee was formed at a meeting held Tuesday, November 25, 2003. The committee members include the Planning Director, Health Director, Recreation Director, Public Works Director and the Building Inspector. The Environmental Inspector, who is a member of the Conservation Commission. Attendees included the Mayor and members of the City Council.

The DPW Engineering Department has completed the mapping of 450 actual outfalls onto Autocad. We have a flyover in preparation for the implementation of a GIS system. We are now in the implementation phase of our GIS system to include water, sewer, drain and outfalls. As of 4-1-06, we are 95% complete.

Very little input has been realized from other members of the Stormwater Management Committee and the committee is headed by the DPW. However, partnering with our Environmental Inspector, we were able to sue for an Ordinance that was adopted by our City Council on March 28, 2005. Copy Enclosed.

We will continue to work with the Recreation Department on a Pet Waste Policy and installation of pet waste stations. Funding is an issue that has been overcome and we have installed signs for 3 parks. In May 2006 we installed two pet waste stations in Carter Park in downtown Leominster. In fall 2007 we installed one at Sholan Farms and one on Granite Street.

We have had a catch basin cleaning program in place for the past 5 years and are now able to compute the amount of debris collected from catch basins on an annual basis. Our sweeping program initially begins with some low-level debris removal and we now have a strategy for future years. The Public would prefer main streets be done first. This is an issue. We have been able to accommodate both by using overtime and extra personnel qualified to run our program. We had one Eagle Scout candidate who completed one half of a catch basin stenciling program amounting to 225 basins being stenciled by October 2004. The other candidate has not been heard from so the project was completed by the Leominster Rotary Club which stenciled over 450 catch basins in September 2005.

In February 2006, we finished the installation of a new sewer line and new drain line in the DPW yard. We connected our building floor drains, which now empty into the sewer line. A new gas/oil separator was included at the connection. Boston Hoods in all yard basins. As we repair catch basins in town, we are using BMP's on all as we proceed. We designed our own type of Boston Hood that has a threaded cap to provide for easy cleanout of clogged drains. In a few years, we have installed 72 such units in catch basins throughout the city. We have also partnered with the Conservation Commission to produce a Storm Water Runoff Public Service Announcement that has run on Leominster Tele Vision since March 2, 2007 on two different cable channels. We are working with the Massachusetts Department of Environmental Protection on the Monoosnoc Brook Restoration Project. Project goals are to prevent pollution, reduce environmental impacts and the health of Leominster's central waterway. To achieve this goal we are installing bio-retention areas, rain gardens and rain boxes in a watershed area that drains into Rockwell Pond. These efforts should improve water quality and reduce pollution.

We have attached a list of the proposed locations of the various methods that we will be using. Four Rain Gardens were installed in 2008.

We have submitted a letter to USEPA Region 1 that outlines our efforts to separate combination manholes. Since that letter was written, we have done an additional 21 separations. We have partnered with MA Highway on a street widening project on Route 12 in Leominster. As part of the project, their contractor has separated one combination manhole and will separate an additional seven combination manholes in the project area in Spring 2009. As part of our annual paving program we will separate an additional 4 manholes on streets to be paved in summer 2009. Our Highway Construction crew will spend 2009 addressing the remaining 79 until complete.

In November 2007 we completed a DEP 2008 Clean Watershed Needs Survey, and a copy submitted last year. In the winter of 2007-2008 we partnered with our Conservation Commission Chairperson, Kelley Freda to run a Pet Waste Public Service announcement on LATV, our local cable television station. This PSA ran for several weeks in 2008 and 2009. Ms. Freda also provided us with a Pet Waste brochure developed by DCR which we have mailed to all residents in their water bills. We have mailed them to problem areas also and our Watershed Monitor has handed out several hundred to residents encountered walking their dogs in our watershed areas. The Conservation Commission staffed a table at the Leominster Schools Environmental Expo in April 2008 where storm water materials were distributed. In May 2008 ConCom put on a Theatre for Children where storm water and litter was discussed with 3rd & 4th graders and it is scheduled again this year. The Leominster Water Department sponsored the theatre. ConCom did a Public Presentation at the Leominster Library regarding water quality and storm water as it pertains to the Wachusett Reservoir, where Leominster maintains an emergency connection. Our Environmental Inspector has schedule speaking engagements at 3 local schools also. We are currently running a PSA on LATV encouraging residents to not sweep sand on to the sides of roadways and have rund "After the Storm" several times on local cable tv also.

The Conservation Commission is ensuring that sites with greater than 1 acre of disturbance file for the EPA Construction General Permit and each Commission member has received a copy of the Stormwater Pollution Protection Plan (SWPPP). In March 2009 the City Council passed a Petition banning the feeding of waterfowl near water bodies within the city. The Conservation Commission has submitted a Petition requiring all pet owners to dispose of their pet's solid waste on any property, public or private, not owned or possessed by that person.

In a time of limited budgets and staffing, we feel that we are doing the absolute best that we can do. We also feel that we are in complete compliance with all permit conditions to date.

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 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
1.1	Educational signage at high-use recreational areas	Recreation & Conservation	Install signage at watershed trail areas and dog park, spring '04	Signs have been installed at all trail heads. Pet Waste signs were installed at Barrett Park in spring/summer '03 Laurie Cormier Park and Doyle Field 5-16-05	Install signs and establish formal pet waste policy spring/summer 2005. Pet waste dispensers were placed at Carter Park, Hachey Park and Laurie Cormier Park, spring 2006. Sholan Farms & Granite Street 2008.
Revised			Signs installed 5-05		
1.2	General Education Brochure	DPW Engineering	Develop & distribute mass mailing in water bills	Have received 300 brochures from EPA and will plagiarize them for use in a City of Leominster brochure	Distribute to all residents by November 2005. Have run "After the Storm" on local cable tv in 2008 and 2009.
Revised					
	Lawn care and pet waste brochure and survey.	Recreation and Water Department	Sent lawn care brochures starting spring '03	Recreation Department working on a pet waste brochure for distribution spring '04.	Draft Survey form for distribution in fall 2005.
Revised	<i>Healthy Lawn Workshop 3-30-05</i>	DPW & DEP	Broadcast on local cable TV	ConCom completed 2008.	PSA, mailings and hand delivered Pet Waste brochures starting 2008.
1.3	Stormwater Curriculum for grades 5 & 6	Conservation & School Dept.	Revised curriculum already in place.	Hold planning meeting in preparation for school year beginning Sept. 04 Revised to September 05.	Prepare revised curriculum for review by School Dept. and related staff. Annual programs in elementary schools.
Revised					
	Storm Water Runoff Public Service Announcement	Conservation & DPW	Reach as many households as possible.	Partnered with ConCom to develop a PSA that has run on Leominster Access Tele Vision since March 2, 2007	Develop Construction Site PSA on Storm Water Management practices. Now ongoing through Conservation and Planning Departments.
Revised	<i>Pet Waste PSA and Brochure 2008</i>	Conservation & DPW	Mail to all licensed dog owners 2008.		
	Pet Waste PSA	Conservation & DPW	Reach local residents	PSA run on local cable TV in winter 2007-2008, mail brochures and provide brochures at Public Spaces. Fall 2008	Brochures mailed to all residents in water bills 2008/2009. Distributed by Watershed Monitor on site 2008.
Revised					

1a. Additions

1.8	Develop Stormwater web site	Engineering	Add Stormwater page to existing web site by Spring '05	In Process April 2006 and will use existing city website.	Prepare and set up content and send to site coordinator, August 2006
	Use DEP Information	ConCom & DPW	In Process	In Process summer 2007	Started August, 2008

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
2.1 Revised	Stormwater Advisory Committee	Public Works & ConCom	Establish Committee by fall '03, etc.	Established Committee 11-25-03, reviewed SWMP and solicited comments. Complete	Developing ordinances related to SWMP for adoption in 2004. Adopted Ordinance 3-28-05
2.2 Revised	Public Meetings on SWMP	SW Advisory Committee	Host annual public meetings each fall, beginning November 2005	Met at the Doyle Conservation Center February 9, 2006 and attended a DEP Low Impact Development Conference. Planning Department hosted the same conference for local developers 3/06.	Host public meeting to discuss SWMP and solicit public comment for consideration yearly. Low Impact Development Conference March 2008.
2.3 Revised	Shoreline Clean-ups <i>Partnership with Mosquito Control</i>	Public Works & ConCom DPW P. LaPointe	Expand annual Monoosnoc Brook cleanup. Remove trees along north side of brook	Met with Monoosnoc Greenway Group after August 2 nd cleanup to possibly expand to upstream of starting point. Canceled winter 2005, waiting to reschedule. Spring 2007	Will do an additional ½ mile of brook cleanup in summer 2005. Scouts completed 7-30-05. Done Yearly.
2.4 Revised	Catch basin stenciling <i>Completed fall 2005</i>	Public Works	Stencil priority basins by Fall 2004. Will inspect March 2007.	Only 1 Scout completed ½ project. Leominster Rotary re-stenciled all 450 basins in September 2005.	Stencils have been secured and work will proceed in June 2007 if repainting is needed.
2.5 Revised	HHW Collection Events <i>Electronics collection 4 events in 2006</i>	Public Works	Host annual HHW collection events. 4 per year	Hosted Events scheduled March 31, June 30, August 25 & November 17, 2007. 2008 schedule is March 29, June 28, August 23 and November 15 th .	Continue electronics collection in conjunction with HHW for 2007. Very successful with local company, East Coast Electronics Recycling.
	Pet Waste	Health Dept.	Control Pet Waste Conservation Comm.	Passed Petition to ban feeding of water Fowl along water bodies within the city.	Submitted Petition for proper disposal of pet waste.

2a. Additions

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
3.1 Revised	Identify & map outfalls and receiving waters. <i>Complete by fall 2005</i>	Engineering	Map all outfalls in GIS by Spring '05	Outfall mapping 95 complete. Have completed flyover for GIS and will be complete June 2006.	Completed mapping and GIS integration June 2006.
3.2 Revised	Screen outfalls for illicit connections	Public Works	Screen all outfalls by Spring '05	In process and 450 outfalls have been identified and stenciled.	Continue screening and GIS. Began inspections after 1 inch rain events February 2008 and ongoing.
3.3 Revised	Draft Illicit connection bylaw <i>Adopted 3-28-05</i>	Engineering & ConCom	Submit to City Council Spring '04 Adopted 3-28-05	In Process	Complete and in ordinance form by fall 2004 Adopted by City Council 3-28-05
3.4 Revised	Revise Sewer and Drain Use Regulations <i>Complete</i>	Engineering	Revise and adopt with new Illicit bylaw	In Process	Complete and in ordinance form by fall 2004 Adopted 3-28-05
Revised					
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 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
4.1	Construction Site ESC Bylaw and regulations for sites >1-acre	ConCom, Public Works	Reviews existing mechanisms for adequacy and completeness by Spring '05, etc.	Research existing ordinances and regulations and determined that more comprehensive revisions are needed, especially in Sewer Ordinances	Drafting new ordinances to cover all phases of SWMP for fall 2004 or spring 2005. Adopted 3/05
Revised	<i>Bylaw adopted 3/05</i>				
4.2	Site Plan Review	Planning, Building & Engineering	Incorporated into Development Review Board process with appropriate ordinance changes In place fall 2004	Met with all appropriate parties and supplied same with copy of SWMP. Jurisdiction for enforcement determined to be shared by Health Inspector and Environmental Inspector.	Institute new policy and inspection protocol. Weekly inspections of construction sites began September, 2005. Done by Environmental Inspector ongoing.
Revised	<i>In Place fall 2004</i>				
4.3	Site inspections	Building Dept. & ConCom	Implement a new site inspection process for Spring '07	Started weekly inspections September 2005.	Research conceptual inspection process with associated ordinance. Follow up with ConCom 2008 ongoing.
Revised	<i>In Process</i>				
4.4	Establish system to report non-compliant activities	Building Dept. & ConCom	Establish during 2004 construction season & use web site reporting. Web-site being developed spring '05	ConCom has taken the lead in doing on site inspections of construction sites during heavy rain events and every weekend during construction.	Post ConCom & Building reporting hotlines on city web site and include in monthly Neighborhoods section of local newspaper. Investigate web site reporting process. Ongoing.
Revised	<i>In place through Conservation Comm.</i>				
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 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
5.1	Stormwater Mgmt. Ordinance and regulations for site .1-acre	Engineering & ConCom, City Council	Research and/or revise existing ordinances to comply with SWMP plan	Research complete and completion of ordinances in process	Complete and submit ordinances to City Council for adoption summer 2004
Revised	Completed 12/04	ConCom	Complete 12/04	Petition passed 1-10-05 and Ordinance adopted March 28, 2005.	Adopted 3-28-05.
Revised					
Revised					
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 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
6.1 Revised	Employee Training	Public Works	Conduct stormwater training each winter	Provide all day off site training to 2 full time engineering employees winter '03-'04 Completed.	Conduct ½ day follow up training each winter, ongoing. 6 employees enrolled May, 2007. Ongoing.
6.2 Revised	Street Sweeping	Public Works	Sweep all city streets annually by 6-30 and downtown areas once a week	Completed annual sweeping program by 6-3-04 and will be complete by 5-20-06.	Continue ongoing annual street sweeping program in place since 1995. Purchased 1 replacement sweeper September 2007. Swept outfall (low-lying) areas and downtown starting March 21, 2008.
6.3 Revised	<i>Sweep outfall areas first</i> Catch Basin Cleaning <i>Ongoing</i>	Public Works Public Works	Sweep outfalls while doing main roads Clean all basins once per year (3600)	Developed plan fall 2005. Continue to collect volume data from existing program.	Revise cleaning schedule to reach outfall areas early in program. Developed program in fall 2005.
6.4 Revised	O & M Schedule for town owned structural BMPs <i>Separated garage drains.</i>	Engineering Engineering	Implement program by Spring '05 Tie garage drains into sanitary sewer	Inventoried DPW garage and designed new particle separator system. Continue to inventory town owned BMPs. Installed oil/gas separator and separated DPW floor drains.	Complete construction of DPW separator system fall '05 and implement O & M Procedures. Tie floor drains into sanitary sewer. Completed 2-14-06 new lines.
6.9 Revised	Vehicle Washing <i>Separated floor drains in February '06</i>	Public Works Public Works	Establish a new washing policy Tie into sanitary sewer	Design new drainage system with new separation technology. Installed new sewer and drain lines with Boston Hoods in catch basins.	Funding provided July 2005. Installed new drain line completed February 06. Tie floor drains into sewer. Install Boston Hoods in outfall catch basins 2006 as repairs are made 29 to date, 72 as of 4-08
Revised					

6a. Additions

	Separate Combination Sewer/Drain manholes	Public Works	Separate when encountered	Separated 5 combination manholes in 2004.	Finish list in 2009.
1.	Repair leaking sewer trunk line.	Public Works	Replace leaking sewer trunk line-Granite St.	Eliminate leaking sewer line near Rockwell Pond in Leominster	Completed November 2006.
2.					

Identified 400 CSO's and separated 360 CSO's as of fall 2006. Plans are to separate additional 12-20 in 2007 and finish all 400 by summer 2009, 23 were done by 4-26-08 with an additional 8 being done by MA Highway. This project is ongoing as of the date of this report and will continue Spring 2009 until all are complete.

Completed 100% replacement of sewer trunk line along Rockwell Pond currently under moratorium with DEP as of November 18, 2005. Work resumed April 24, 2006 to install a final manhole and reline approximately 600 feet of sewer line. Second Phase, pipe-bursting, to commence on or about May 16, 2006. Pre-Construction meeting May 3, 2006 with contractor J. Coughler Inc. Construction to begin May 2006 and finish 3-4 weeks after start up. Pipe-bursting eliminated as an option due to discovery of ledge, open trench continued all summer and project finished, November 2006. Moratorium lifted by DEP, March 2007. Completed 70% replacement of the Industrial Road sewer trunk line from North Leominster to the WWTP. Final 30% scheduled to be replaced June, 2007. Due to scheduling conflicts, the final phase (15%) of this project will be finished in July/August 2008. Completed October 2008.

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 1 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 2
7.1	Targeted education to septic system owners	Health Dept & Engineering	Develop & distribute phosphorus reduction brochure	Begin research and development of brochure to septic system owners in sensitive areas	Distribute brochures to residents with septic system in watershed areas
Revised	Bring Sanitary sewer to 2 streets in 2007	New England Development	Finish in 2007	Install sanitary sewer as part of Wal-Mart/ Lowes project. Complete fall 2007. Completed September 2007.	Bring sanitary sewer as part of Brooks Pond housing project. Scheduled for Spring 2009.
7.3	Street Sweeping	Public Works	Increase sweeping to 3-4 times/yr. in watershed areas	Develop plan	Continue present schedule and develop long-range plan to increase sweeping frequency in watershed areas. Began spring 2008. Ongoing.
Revised	Summer/Fall 2007		In Process 2007	Sweep outfall areas early in sweeping program while doing main roads.	
Revised					
Revised					
Revised					
Revised					
Revised					

7a. Additions

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Part IV. Summary of Information Collected and Analyzed

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	Yes	Summer 2007
Annual program budget/expenditures	\$45,392	Employed

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	80-90%	
Stormwater management committee established	Yes	11-25-03
Stream teams established or supported	Yes	Spring '04
Shoreline clean-up participation or quantity of shoreline miles cleaned	M-Brook	2.0 miles
Household Hazardous Waste Collection Days		
▪ days sponsored	4	
▪ community participation	216 full	306 halves
▪ material collected	See below *	
School curricula implemented	Yes	Ongoing
* Waste Oil 1,099 gals., Latex/Oil based paint 2,875 units, 4 Propane Tanks, Fluorescent Lamps/Bulbs		
24 linear feet.		

Legal/Regulatory

Regulatory Mechanism Status (indicate with "X")	In Place Prior to Phase II	Under Review	Drafted	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	450	
System-Wide mapping complete	100%	
Mapping method(s)		
▪ Paper/Mylar	100%	
▪ CADD	100%	
▪ GIS	In Process	
Outfalls inspected/screened	Two	
Illicit discharges identified	Two	
Illicit connections removed	1000 gpd estimated	
% of population on sewer (% of water customers)	94%	
% of population on septic systems	6%	
Added 42 new sewer services from 3-07 to 3-08.		

Construction

Number of construction starts (>1-acre)	5	
Estimated percentage of construction starts adequately regulated for erosion and sediment control	100%	
Site inspections completed	275	
Tickets/Stop work orders issued	4	Enforcement
Fines collected	-0-	Site.
Complaints/concerns received from public	22	

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	100%	
Site inspections completed	11	
Estimated volume of stormwater recharged	Unknown	

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	Once per yr.	
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	Once per yr.	
Total number of structures cleaned	5843	
Storm drain cleaned	3-4 miles	
Qty. of screenings/debris removed from storm sewer infrastructure	8367 c.y.	
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)	compost	
Cost of screenings disposal	-0-	

Leominster, MA
Storm Water Report
2009

Report for the record:

I have spent many hours investigating and enforcing storm water management practices. I have listed the sites and what is taking place. For the most part many construction sites are on hold due to the economy. These sites require stabilization and continued monitoring. Sites that are on hold include:

- Sawyer Way – Housing development on hold –steep embankments and detention ponds. Slope stabilization and replace silt fence and hay bales
- Royal Oaks Way – Housing Development on hold – Steep slopes with severe erosion. This required slope stabilization and placement of hay bales and silt fences.
- Spindletop Drive – This development is on hold. This requires constant monitoring of the detention basins and replacement of silt fences and hay bales.
- 96 Exchange Street – This condo development is on hold and the site remains unstable. This site requires constant monitoring. The silt fences and hay bales are replaced regularly.
- 1339 Central Street – A commercial site that had significant runoff and polluted an adjacent pond and stream. This required building a new detention pond and also replacing silt fence and hay bales.
- Off Hamilton St – This commercial site is on hold and requires constant monitoring and replacement of silt fence and hay bales.

Throughout 2008 we have had significant rainfall events that have impacted many stormwater structures. On September 6th, the New England Development site on Rte 117 experienced a catastrophic detention basin failure which resulted in an Enforcement Order and ongoing reconstruction. This basin is undergoing a major redesign.

We also issued an Enforcement Order against CSX regarding the collapsed culvert on North Main Street. This is under negotiation.

An Order of Conditions was issued to enable Home Depot to reconstruct a very Overgrown Detention Basin.

I also worked with the DPW to install several new check dams built along Elm/Wachusett/Pleasant St to help filter storm water.

Storm water complaints:

970 Pleasant Street
32 Stearns Ave
Pierce Street
54 Lowe Street
Eugene Street

Average frequency of street sweeping (non-commercial/non-arterial streets)	Once per
Average frequency of street sweeping (commercial/arterial or other critical streets)	2-3 per
Qty. of sand/debris collected by sweeping	2100 c.
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	compos
Cost of sweepings disposal	-0-
Vacuum street sweepers purchased/leased	one
Vacuum street sweepers specified in contracts	yes

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)	
▪ Fertilizers (Using organic fertilizer on 20 acres of Cemetery land)	100%
▪ Herbicides	75%
▪ Pesticides	N/A

Anti-/De-Icing products and ratios	% NaC % CaC % MgC % CM % Kac % KCl % Sand
Pre-wetting techniques utilized	yes
Manual control spreaders used	yes
Automatic or Zero-velocity spreaders used	no
Estimated net reduction in typical year salt application	20%
Salt pile(s) covered in storage shed(s)	yes
Storage shed(s) in design or under construction	Yes - s