

Municipality/Organization: Town of Bourne

EPA NPDES Permit Number: MAR041094

MaDEP Transmittal Number: W-040428

Annual Report Number

& Reporting Period: No. 5: March 2007-March 2008

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5/21/08

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Mr. Thomas Guerino

Title: Town Administrator

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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: Thomas M. Guerino

Printed Name: Thomas M. Guerino

Title: Town Administrator

Date: 5/15/08

Part II. Self-Assessment

The Town of Bourne has completed the required self-assessment and has determined that our municipality is working toward full compliance within the five-year schedule as submitted to EPA and approved as Bourne's NOI to the General Permit issued to Massachusetts under Phase II of the Regulations. The Town has concentrated in the fifth year on engaging a consultant to draft new stormwater bylaws for adoption by Bourne's Town Meeting. Contract was signed in February 2008, initial meeting with staff has been held, and general approach has been agreed upon. The Phase II Stormwater Management Community Oversight Group has continued to meet monthly. Key members of the Phase II Staff Working Group have continued efforts to:

1. Be knowledgeable of the Phase II Requirements. Key members of the Staff Working Group have signed on to NPDES webcasts periodically made available by the EPA.
2. To assist in the formulation and implementation of Programs, Regulations and By-laws with Boards and Commissions.
3. The Town has requested and received a determination from U.S. Fish and Wildlife meeting the eligibility criteria for "listed species" and critical habitat.
4. Bourne has accomplished many of the objectives of the Stormwater Phase II Program, for example:
 - a. Bourne has a vacuum truck to clean storm drains, infiltration systems and the sanitary sewer collection system.
 - b. Bourne has worked closely with the Buzzards Bay National Estuary Program and has constructed many infiltration systems largely with grant funds.
 - c. Citizens of Bourne are aware of the delicate ecosystems with water on three sides and participate in the sampling and cleanups of shoreline at many locations. The DPW has a mechanical beach rake and cleans all beaches on a weekly basis in season
 - d. The Town has a Pollution Task Force consisting of dedicated citizens that identify sources of pollution and seeks relief by working with regional groups, seeking funds and overseeing the formulation of corrective action.
 - e. The Integrated Solid Waste Management Department (ISWM) has initiated and financially supported curbside recycling for residents, supports a recycling drop-off center for residents, accepts recyclables from most area communities, provides four (4) hazardous waste collections per year through the County Extension, receives waste oil at the drop-off center, and promotes these activities with a yearly newsletter mailed to each household (8,600).
 - f. Citizens volunteer time to assist environmental groups such as Baywatch and Buzzards Bay Action Committee.
 - g. The Bourne Department of Natural Resources operates 3 boat pumpout facilities, one stationary and two vessels.
 - h. The Town has an animal waste pickup By-law.
 - i. The Bourne Board of Health has adopted Regulations to prohibit illicit discharges.

Comprehensive Stormwater Bylaws to address BMP 4 & 5: The Town has signed a contract with a consultant and agreed on a general approach, and is now awaiting the first draft for review by the town departments that will have responsibility for permitting and enforcement of the bylaws.

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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1-1	Establish and Advisory Committee	1. Town Administrator 2. Board of Selectman	Task Force on Local Pollution appointed 3/30/04 as Phase II Stormwater Community Oversight Group	The Community Oversight Group meets monthly and is updated from time to time by the Town Staff Working Group.	Continued public education and outreach efforts. Continue a broad base of support for Phase II By-law enactment.
Revised					
1-2	Include Stormwater News with ISWM newsletter. Town initiatives	1. Public Works Supt., 2. Integrated Solid Waste (ISWM) Manager 3. Stormwater Working Group	Incorporation of Stormwater news into ISWM newsletter and mailing to all addresses. Handouts. Posters distributed. Media coverage.	• Mail newsletter Summer or Fall 2008 • Create 1-page flyer newspaper insert Spring 2008 • Place posters at Public Buildings • Handouts at Town Meeting • Regional Municipal Hazardous Waste Collections (4 times per year) Stormwater handout at event • Municipal weekly curbside recycling • 7 day a week drop off center • Used motor oil collection at drop off center. • Paint collection Fridays and Saturdays April – Oct. at drop off center • Stormwater flyer on Town of Bourne website. • ISWM again publicized and distributed rain barrels to residents. • Flyer distributed at Town Hall and at landfill on proper application of lawn products, authored by Buzzards Bay Action Committee.	Continue and improve this excellent program.

1-3	Network with other Agencies	1. Supt. DPW 2. Other Town staff, i.e Conservation Agent, BOH Agent	Meet 2 times per year minimum.	• Participated with Cape communities through resources of Cape Cod Commission. • Town is part of a current stormwater catch basin/outfall monitoring project through grant a received by Buzzards Bay National Estuary Program along with surrounding communities. Work has begun. • Conservation Department received CZM grant of \$15,000 (July 2007) for second phase of feasibility study to increase size of culvert from Conservation Pond to Hen Cove. • Town received CZM Grant for \$66,000 for implementation of Phase II of Conservation Pond Stormwater Remediation Project (CPR Grant), currently being implemented. • Pollution Task Force has been working with DPW to address stormwater issues on Cherry St (Queen Sewell Pond).	• Work closely with Cape Cod Commission Group to share information and reduce costs. Work with Buzzards Bay National Estuary Program staff to get information to the public. • Continue to participate in Buzzards Bay National Estuary Program for stormwater catch basin/outfall monitoring. • Pollution Task Force continue efforts to compile data to address stormwater issues on Cherry Street (Queen Sewell Pond) • Continue to utilize resources of Buzzards Bay National Estuary Program to seek Stormwater remediation construction funds
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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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities
2-1	Public Input to Process (HOTLINE)	Public Works Supt/Health Dept.	Record messages and respond to complaints	- Public is aware and has been using hotline. BOH responding to complaints - Local Emergency Planning Committee. Selectman's Task Force on Local Pollution investigates stormwater problems and determines pollution priorities.	Continue to inform Bourne Citizens of Hotline number and purpose. Meet with Civic Associations. Share information at Family Day at Town Green, Scallop Festival, and Beach Clean-up. Involve TRIAD (Senior organization)
Revised					
2-2	Work with stormwater groups to sample water quality and share information.	Stormwater Community Oversight Group/ DPW Supt.	Attendance at, and participation with Agencies and volunteer groups.	- Town is part of a current stormwater catch basin/outfall monitoring project through grant received by Buzzards Bay National Estuary Program along with surrounding communities. Work has begun. - Mass. Div. Of Marine Fisheries samples local waters and determines if restrictions (or prohibitions) will be placed on shellfishing. - BOH samples bathing beaches for similar sanitary conditions. - Coalition for Buzzards Bay has an active membership that regularly samples and reports water quality. - Massachusetts Bays Program.	- Continue participating in existing programs. - Continue to participate in Buzzards Bay National Estuary Program for stormwater catch basin/outfall monitoring.
Revised					
2-3	Present annual progress report at Selectmen's meeting.	Stormwater Community Oversight Group/Public Works Supt.	Meet and present information to Selectmen.	Stormwater Oversight group meets periodically with Selectmen also includes Selectmen in distribution of agendas & minutes.	Selectmen appoint the Stormwater Committee annually and are notified periodically of progress. Town Meeting is held annually in May and preparation precludes adequate focus on stormwater during this period.
Revised					

2a. Additions

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3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities
3-1	Inventory Storm Drain System.	Supt. DPW Planning Department	Produce map with drainage structures and outfall locations.	- Mapping of existing Bourne Stormwater Drainage system completed, May 2006. - Updated inventory data received May 2006 and available on server to GIS users. - The Planning Department 's Engineering Tech/GIS Specialist updates data per as-built plans of approved subdivisions. - Maps of Stormwater Drainage system posted at Town Hall. - DPW has three GPS units to update as necessary.	Engineering Tech/GIS Specialist to continue to update data per as-built plans of approved subdivisions and information provided by DPW Supt.
Revised					
3-2	Illicit discharge detection plan.	Supt. DPW and BOH Agent	- Respond to all complaints and record. - Install leaching chambers to reduce run-off to waterways.	- Public understands hotline purpose. It is utilized and response generated. - Staff is checking outfalls in dry weather and looking for suspicious indicators. - Town received CZM Grant for \$66,000 for implementation of Phase II of Conservation Pond Stormwater Remediation Project (CPR Grant), currently being implemented. - Pollution Task Force has been working with DPW to address stormwater issues on Cherry St (Queen Sewell Pond).	- Staff to continue checking outfalls in dry weather and look for suspicious indicators. Employees have been given training to also spot illicit discharges. Priorities will be set from water quality sampling and information from our HOTLINE. - Board of Health to finalize written illegal detection plan.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities
3-3	General Information Materials	Supt. DPW, Stormwater Community Oversight Group	Produce informational brochures or flyer. Distribute information to all employees. Distribute information to businesses. Provide to public at Library, Town Hall and Town Meeting.	Flyers have been printed and distributed at Town Meeting and are available at Town Hall and Public Library. Posters are also prominent at these locations.	• Continue distribution at Town Hall and Town Meeting. • Increase distribution to schools and public gathering places.
Revised					
3-4	DPW training for Illicit Connections	Supt. DPW	Hold meeting. Take attendance. Training materials available.	Meeting held for DPW personnel and a record of attendees and program is on file. (April 2008)	Continue to share training materials.
Revised					
3-5	Illicit discharge prohibition	Board of Health, Supt. DPW	Necessary Regulation changes.	Regulation adopted by Board of Health April 13, 2005	Action complete.
Revised					
Revised					

3a. Additions

	Regional Landfill (See BMP 1-2, 6.5)				
	Encourage restaurants to find free or low-cost markets for used cooking oils				Utilize resources of Cape & Islands Self Reliance, based at Waquoit National Estuarine Reserve, for referrals.
	Stormwater Remediation Projects, Year 5	Supt. DPW	New catch basins & leaching galleys installed	• Cranberry Rd/Cherry St/Queen Sewell Pond: Installed 2 new catch basins & 12 leaching galleys, and removed outfall pipe. • Gray Gables/Jefferson Road: Installed 2 new catch basins & 26 leaching galleys, capturing first flush.	Continue stormwater remediation efforts.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities
4-1	Wetlands By-law for Stormwater Management	Conservation Commission	Adoption of additional Regulations and/or By-laws to expand and improve requirements for stormwater management.	- Conservation Commission currently administers provisions of the Massachusetts Wetlands Protection Act, and Riverways Act and all development projects within 100 & 200 feet of a wetlands resource. - Town has contracted with consultant to complete General Stormwater/ Erosion Control Bylaw & zoning & other regulatory changes, for passage by the next possible Town Meeting & by appropriate boards.	- Conservation Commission review recommendations for revisions to expand and improve stormwater management practices. - Conservation Commission to seek Town Meeting approval of changes to Bourne's Wetlands Regulations, defining new standards and/or referring to a new Town Stormwater By-law.
Revised					
4-2	Subdivision Regulations for Stormwater Management	Planning Board, Zoning Enforcement Officer, Bldg. Inspector, DPW Supt.	Adopt Regulations/By-laws as necessary to expand and improve requirements for stormwater management.	- Stormwater management is currently required, and standards specified, by Bourne's Subdivision Regulations. - Planning Board currently requires certification of Site Plan stormwater design and calculations by a Registered Professional Engineer. - Town has contracted with consultant to complete General Stormwater/ Erosion Control Bylaw & zoning & other regulatory changes, for passage by the next possible Town Meeting & by appropriate boards.	- Town Staff, Boards & Committees promote passage of new bylaws. - Develop permitting processes. - Zoning Enforcement Officer and other appropriate personnel will enforce new bylaws.
Revised					
4-3	Erosion control by-law	Planning Board, Conservation Commission, Zoning Enforcement Officer, Bldg. Inspector, DPW Supt.	Adoption of Construction Erosion Control language in a Town Stormwater By-law and/or Subdivision Regulations.	- Construction Erosion Controls are currently required, and reviewed by Planning Staff and Planning Board, for commercial projects under Site Plan Review. - Town has contracted with consultant to complete General Stormwater/ Erosion Control Bylaw & zoning & other regulatory changes, for passage by the next possible Town Meeting & by appropriate boards.	- Planning Board amend Subdivision Regulations to require construction Erosion Controls by specifying new standards, or by referring to the new Town Stormwater By-law. - Town Staff, Boards & Committees promote passage of new bylaws. - Develop permitting processes. - Zoning Enforcement Officer and other appropriate personnel will enforce new bylaws.
Revised					

Revised				by the next possible Town Meeting & by appropriate boards.	other appropriate personnel will enforce new bylaws.
4-4	Reporting Hotline	Supt. DPW/ Board of Health	Record calls and respond. Keep records	Hotline has been established and publicized and is being utilized.	Continue to inform the public of the program and how everyone can help by forwarding information via the HOTLINE
Revised					
4-5	Site plan review/ construction site inspection program	DPW Supt., Planning Board, Building Inspector, Conservation Commission	Review plans, inspect, pre-construction site visit.	• Town has formal site plan-special permit review of commercial development, including PE Certified stormwater design, calculations, construction and post-construction erosion control measures. Conservation Commission currently reviews projects within 100 and 200 feet of wetlands resources. • Town has contracted with consultant to complete General Stormwater/ Erosion Control Bylaw & related zoning & other regulatory changes, for passage by the next possible Town Meeting & by appropriate boards.	Town Boards develop processes for review and inspection of additional development sites not already subject to review & development by Town Boards for stormwater management.

4a. Additions

	Site Plan-Special Permit Review process adopted as amendment to Zoning Bylaw, May 2006.	Planning Board, regulatory staff		Passed unanimously by Town Meeting May 2006. Includes requirement that commercial development projects infiltrate all runoff on site, employ best management practices and control erosion and siltation. Reviewing staff recommend improved stormwater/ erosion-siltation control measures, e.g., separate infiltration of roof runoff, vegetated swales, construction entrances, and have been providing relevant fact sheets & diagrams to applicants & consultants.	Continue to require, recommend and educate re best management practices.
	Request copy of commercial projects' construction permit 1+ acre filings with EPA.	Planning Board, staff		As part of Site Plan-Special Permit review process for commercial development projects.	Continue this practice.

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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities
5-1	Conservation Commission Wetlands By-law	Conservation Commission/ Agent	Town Meeting Approval of enabling by-law and/or regulations to expand and improve requirements for adequate Stormwater Management.	- Conservation Commission currently reviews development projects within 100 & 200 feet of wetlands resources. - Town has contracted with consultant to complete General Stormwater/ Erosion Control Bylaw & related zoning & other regulatory changes, for passage by the next possible Town Meeting & by appropriate boards.	- Conservation Commission will review recommendations for changes to expand and improve stormwater management. - Conservation Commission to seek Town Meeting approval of enhanced regulations to Bourne's Wetlands Regulations by adoption of a new Town Stormwater By-law and/or new standards.
Revised					
5-2	Subdivision Regulations change	Planning Board, Zoning Enforcement Officer, Building Inspector, DPW Supt.	Regulation adopted by Planning Board and/or by-law to ensure full compliance with Stormwater requirements.	- Stormwater Management is currently required, and standards specified by Bourne's Subdivision Regulations. - Planning Board currently requires PE certification of Site Plan stormwater design consistent with Subdivision Regulations. - Town has contracted with consultant to complete General Stormwater/ Erosion Control Bylaw & related zoning & other regulatory changes, for passage by the next possible Town Meeting & by appropriate boards.	Subsequent to passage of General Stormwater Bylaw, staff to draft and Planning Board adopt referral to General Bylaw & other improvements to Subdivision Regulations as required relative to stormwater and erosion/siltation control. Staff & Planning Board may recommend additional changes to Zoning Bylaw for adoption by Town Meeting.
Revised					
5-3	Erosion Control by-law	Planning Board, Zoning Enforcement Officer, Building Inspector, DPW Supt.	Adoption of post-construction erosion control language in a Town Stormwater By-law and/or in Subdivision Regulations.	- Post-construction erosion controls are currently required, and reviewed by Planning Staff and Planning Board for commercial projects under site plan-special permit review. - Town has contracted with consultant to complete General Stormwater/ Erosion Control Bylaw & related zoning & other regulatory changes, for passage by the next possible Town Meeting & by appropriate boards.	- Town Staff, Boards & Committees promote passage of new bylaws. - Town Meeting & boards adopt new bylaws & regulations. - Town Staff & Boards develop processes for permitting & enforcement.
Revised					

5a. Additions

	Site Plan-Special Permit Review process adopted as amendment to Zoning Bylaw, May 2006.	Planning Board, regulatory staff		Planning Board & Staff review commercial development projects re requirement that they infiltrate all runoff on site, employ best management practices and control erosion and siltation. Reviewing staff recommend improved stormwater/ erosion-siltation control measures, e.g., separate infiltration of roof runoff, vegetated swales, construction entrances, and have been providing relevant fact sheets & diagrams to applicants & consultants.	Continue to require, recommend and educate re best management practices.
	Request copy of commercial projects' construction permits 1+ acre filings with EPA.	Planning Board, staff		As part of Site Plan-Special Permit review process for commercial development projects.	Continue this practice.
	Work with Plymouth Carver Aquifer Advisory Committee on stormwater regulations	Conservation Commission, staff		Town has been working with the Plymouth Carver Aquifer Advisory Committee to develop regionally consistent bylaws for stormwater regulations.	Continue this collaboration.

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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities
6-1	Street sweeping program	Supt. DPW	Spring annual sweeping all streets/parking lots. Record periodic sweeping of other areas as needed.	• Goal has been met and exceeded. All primary arterial roadways swept a minimum of 6 times per year. • Disposal at double-lined landfill in Bourne. • Town utilizes 3 sweepers. • Winter salt stockpiles kept in storage shed.	Continue this program.
Revised					
6-2	Catch basin Cleaning/drain cleaning	Supt. DPW	500 catch basins per year	• 378 catch basins have been cleaned with Town's Vac-All truck. • Disposal at municipal double-lined landfill. • All stormwater infiltration systems inspected and cleaned as needed.	Continue this program.
Revised			350 catch basins per year.		
6-3	DPW Annual Training and Policy Guide	Supt. DPW	Preparation of document, distribution, completion of annual training and attendance	• Training session held in April 2008. Training material & attendance on file. • Policy document not yet complete. • Separate Right-To-Know training conducted early April 2008.	Continue this program and complete the Policy Guide.
Revised					
6-4	Pet waste prohibition	DNR/DPW	Pet waste education, signage and collection	• By-law exists. • Educational literature distributed with dog licenses. Dog-waste stations in place.	• Continue to publicize Town By-law change passed in 2006 prohibiting dogs from all Town owned beaches. • Continue to add more dog waste stations at busy locations.
Revised					
6-5	Regional Landfill	Town Manager Facility Manager	To provide and operate a state-of-the-art double-lined landfill for region.	• Revenues from the operation of the facility fund extraordinary recycling/hazardous waste programs to regional residents. • Facility is also depository for street sweepings & catch basin cleanings from municipal operations. New program offers rain barrels to resident through a grant program.	Facility and programs it supports are scheduled to continue.
Revised					

6a. Additions

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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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
Revised					
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	Part time consultant to develop bylaw
Annual program budget/expenditures	(\$)	\$25,000 FY08

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	11,000 +/-
Stormwater management committee established	(y/n)	Yes
Stream teams established or supported	(# or y/n)	No
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	Yes
Household Hazardous Waste Collection Days		
▪ Days sponsored	(#)	4 (regional)
▪ Community participation	(%)	30%
▪ Material collected	(tons or gal)	
School curricula implemented	(y/n)	Yes

Legal/Regulatory

	In Place Prior to Phase II	Under Review	Drafted	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

Outfall mapping complete	(%)	100%
Estimated or actual number of outfalls	(#)	154
System-Wide mapping complete	(%)	100%
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	100%
Outfalls inspected/screened <i>[of 243 pipes & outfalls per GIS data]</i>	(# or %)	20% +/-
Illicit discharges identified	(#)	2 (temporary) [CVM1]
Illicit connections removed	(#) (est. gpd)	2
% of population on sewer	(%)	12%
% of population on septic systems	(%)	88%

Construction

Number of construction starts (>1-acre)	(#)	9
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	
Site inspections completed	(# or %)	0
Tickets/Stop work orders issued	(# or %)	0
Fines collected	(# and \$)	0
Complaints/concerns received from public	(#)	0

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	
Site inspections completed	(# or %)	
Estimated volume of stormwater recharged	(gpy)	

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	As needed
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	As needed

Total number of structures cleaned <i>[of 1718 catch basins per GIS data]</i>	(#)	378
Storm drain cleaned	(LF or mi.)	Clogged only
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	1100 Tons
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Landfill
Cost of screenings disposal	(\$)	0\$
Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	Annually as needed

Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	Bi-Monthly
Qty. of sand/debris collected by sweeping	(lbs. or tons)	1250 tons +/-
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Landfill
Cost of sweepings disposal	(\$)	0\$
Vacuum street sweepers purchased/leased	(#)	0
Vacuum street sweepers specified in contracts	(y/n)	0

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	N/A
▪ Herbicides	(lbs. or %)	N/A
▪ Pesticides	(lbs. or %)	N/A

Anti-/De-Icing products and ratios	% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand	25% neg. 75%
Pre-wetting techniques utilized	(y/n)	Some
Manual control spreaders used	(y/n)	Yes
Automatic or Zero-velocity spreaders used	(y/n)	No
Estimated net reduction in typical year salt application	(lbs. or %)	10%
Salt pile(s) covered in storage shed(s)	(y/n)	Yes
Storage shed(s) in design or under construction	(y/n)	Yes