

Municipality/Organization: Town of Clinton, MA

EPA NPDES Permit Number: MA 041186

MassDEP Transmittal Number:

**Annual Report Number
& Reporting Period: No. 13: April 1, 2015 - March 31, 2016**

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Christopher J McGown **Title:** Superintendent of Public Works

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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: Christopher J. McGown

Title: Superintendent of Public Works

Date: 4-12-16

Part II. Self-Assessment

The Town of Clinton has completed the required self-assessment and has determined that our municipality is in compliance with the permit conditions. Town of Clinton Department of Public Works has continued to work diligently to coordinate the local committees and departments of the Town to address Stormwater Management. During the 2015-2016 permit year, the Town of Clinton continued implementation of the minimum control measures. Discussions of the progress on BMPs toward the measurable goals, as well as quantification of some of the programs, are included in the following sections.

The Town continued its work on public education. The Town of Clinton School Department continued their program with the Nashua River Watershed Association where members of the association conduct educational programs for the middle and high school students. Classroom topics include watershed protection and pollution prevention, storm water management, protection and chemical analysis of water.

In addition the recently completed Town wide stormwater map, the Town's consulting engineering firm completed a draft Stormwater Management Plan for the Town, including an assessment of water quality and options for implementing BMPs to address identified water quality issues. Subcatchment areas have been delineated and prioritized. Potential BMPs (non-structural and structural) have been identified, with estimated phosphorus load reduction, as part of the Town's ongoing efforts to address the TMDLs established for the Nashua River.

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 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
1A	Class Room Education	School Science Department/Department of Public Works	Conduct annual activities for children.	The Town of Clinton School Department continued a program with the Nashua River Watershed Association where members of the association conduct educational programs for the middle and high school students. Classroom topics include watershed protection and pollution prevention, and storm water management. Students at the Clinton High School regularly take nature hikes along the North Dyke of the Wachusett Reservoir. Conservation and Watershed protection measures are discussed during the hikes. Sixth grade students attend Natures Classroom for a week each fall in Connecticut. Natures Classroom was weeklong, hands on, study of nature and the effects that pollution has on our watersheds and the environment.	Continue to work with school personnel and consultants. Information will be included on an annual basis in this program. At a minimum, the curriculum will include one presentation given to the students about stormwater related topics.
Revised					

1a. Additions

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
1B	Local Cable Access	Department of Public Works	# of posted bulletins, amount of run time.	The Town did not post a stormwater related bulletin during this reporting period on the Local Cable Access.	Continue to post stormwater related bulletins on the Local Cable Access channel once during the summer, with a target run time of a month.
1C	Education Displays	Department of Public Works	Public distribution, # of brochures taken, # flyers mailed, and # places poster displayed.	Surface and Ground Water Pollution Prevention Measures were posted on the Town Hall bulletin board. The planning/conservation committee displayed a poster entitled "Stormwater and the Construction Industry" in their conference room.	Continue to publish brochures, bookmarks and flyers. The postings will be updated with new information as it becomes available.
Revised					
1D	Community Website	Board of Selectman /Department of Public Works	# of hits on the website.	Copies of the stormwater by-laws are available on the website.	Continue to update the highway website with information on stormwater and add links to stormwater BMPs. Create links on the Town website advertising any hazardous waste events, and roadside cleanup. Explore the use of a hit counter to record number of hits to the website.
Revised					

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
2A	Hazardous Waste Collection Day	Recycling Committee/Department of Public Works	Track number of articles and volunteers. Coordinate with BMPs Publish results/information on collection events.	The Town was not involved in a Hazardous Waste Collection Day during this reporting period.	The Town is investigating joining the Devens Regional Household Hazardous Products Collection Center. A warrant article is to be voted on at the next Town Meeting to appropriate the funds needed to become a Devens Member
Revised					
2B	House Hold Recycling Day	Recycling Committee/Department of Public Works	Record the amount of items collected and percentage of people who participate in the program	The Town has fully implemented a curbside recycling collection program. Single stream containers were issued to all participating households. Recycling is picked up every two weeks.	Continue curbside recycling program
Revised					
2C	Yard Waste Collection Day	Recycling Committee/Department of Public Works	Track resident participation. Record the amount of yard waste collected.	The Town sponsored a series of Yard Waste Collection Days that allowed residents to drop off leaves and other yard waste at the DPW facility each Saturday in the month of November. This event was advertised in the local newspaper, DPW facility and at Town Hall. The Town added year-long yard waste drop off at the recycling facility	Continue to take yard waste at the drop off facility. Once composted, make the finished product available to Town residents
Revised					

2F	Volunteer Clean Up Days	Department of Public Works	# of events held, # of volunteers, amount of trash removed.	The South Meadow Pond Wildlife Association held its annual Clean-up Day. The DPW continued to utilize the Worcester County Sheriff's Department Community Service Program to clean the streets and other heavy dumping areas. The DPW participated in these events, including disposal of the items collected from these events.	Continue to hold these events. Search for additional associations to continue with clean-up.
Revised					
2G	Watershed and Wildlife Organization Meeting	Department of Public Works	Results of report findings.	The DPW and the South Meadow Pond Wildlife Association have discussed Watershed protection measures. The DPW, the Town Administrator, the DEP and the South Meadow Pond Wildlife Association continue to work together to investigate the discoloration of the water entering South Meadow Pond adjacent to the landfill. The Town has completed a corrective action alternative analysis and is working with the DEP on a suitable corrective action. As part of this corrective action, the Town is in the process of designing and permitting a pond dredging project. Monitoring wells have been added to the site, with on-going sampling.	The DPW will annually contact Town Watershed and Wildlife Organizations in an effort to facilitate a meeting to discuss stormwater related topics. DPW will contact these organizations and provide guidance and information to assist in the meeting and add programs that may be developed from these meetings to the SMP.
Revised					

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
3A	Map Stormwater Infrastructure	Department of Public Works	Locate all culverts and drainage systems within the Urbanized Area (UA). Generate system base map.	The Town and its consultant have previously developed a comprehensive Geographic Information System (GIS) program. The program included complete mapping of the storm water system with culverts, manholes, catch basins and outfalls. Structures were mapped using a GPS unit. Survey information included condition, presence of dry weather flows , location, source of flow, and receiving water body. In addition the program included the delineation of the catchment areas.	Continue to add additional outfalls, catch basins, manholes and/or culverts as constructed into the Town GIS system.
Revised					
3B	Dry Weather Outfall Screening for Illicit Discharges	Department of Public Works	Locate and determine illicit discharges. # of outfalls screened, samples collected.	Stormwater outfalls were re-inspected and re-evaluated during dry weather in Year 10, as part of the ongoing comprehensive GIS system mapping	Continue to monitor and inspect outfalls, catch basins, and manholes. If present, analyze dry weather flows from outfalls not previously sampled.
Revised					
3C	Develop an Illicit Discharge Prohibition Ordinance	Department of Public Works	Ways to effectively prohibit discharges.	An illicit discharge bylaw was voted on and approved at the June 2006 Annual Town Meeting.	Continue to enforce ordinance to prohibit illicit discharges.
Revised					

3a. Additions

3D	Assessment of Priority Catchments and Problem Catchments	Department of Public Works and Consultant	Clinton will develop and implement an Illicit Discharge Detection and Elimination (IDDE) plan	Priority catchments were established as part of the Town's Stormwater Management Plan that is currently being completed. An assessment was conducted to identify areas in the Town with problem catchments and high potential for illicit discharges.	The Town will continue the IDDE program.
Revised					
3E	Develop an IDDE Plan	Department of Public Works and Consultant	Develop a written Documentation IDDE Plan	An illicit discharge bylaw was voted on and approved at the June 2006 Annual Town Meeting. Town continued to enhance its IDDE program through the development of a draft written IDDE plan, as part of the ongoing development of its comprehensive Stormwater Management Plan.	The written IDDE plan will be revised as necessary.
Revised					
3F	Incorporate Illicit Discharge Information into Public Education BMPs	Department of Public Works and Consultant	IDDE information in public education BMPs annually.	The Town reviewed results of past IDDE activities and planned to use this information to update the public.	Provide public education information on results of Town inspection and sampling of outfalls. Inform public that all Town drainage structures were mapped. Evaluate options for incorporating into the website.
Revised					
3H	Non-Stormwater Ordinance	Department of Public Works/ Board of Selectman	Record number of approvals	The Town adopted an ordinance to prohibit non-stormwater discharges into the system at the 2006 Annual Town meeting.	Continue to enforce ordinance prohibiting non-stormwater discharges.
Revised					

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
4A	Construction Runoff Ordinances	Planning Board/Conservation Commission	Ordinances to address construction issues.	A Stormwater Management and Land Disturbance bylaw was voted on and approved at the June 2006 Annual Town Meeting.	Continue to enforce ordinance for construction sites.
Revised					
4B	Plan Review	Planning Board	Developer's compliance, record of plan review.	Plan reviews were completed in accordance with the newly adopted Stormwater Management and Land Disturbance bylaw	Continue to review plans per the new ordinance.
Revised					
4C	Inspection/Reporting	Building Inspector	# calls received and records of follow-up actions.	Inspections and reporting were completed as specified in the newly adopted Stormwater Management and Land Disturbance bylaw. Under the Construction Site Runoff Ordinance (or other regulatory mechanism), projects with disturbance over one acre were required to have regular inspections of sediment and erosion controls and reporting of construction activities.	Continue to be proactive in the inspection of developments that are required to file a NOI and enforce construction site runoff controls.
Revised					
4D	Building Permit Application	Building Inspector	Standardized form & record of inspections/follow-up actions.	Building permit applicants were required to comply with the newly adopted runoff ordinance. This requirement applies to applicants disturbing more than one acre of land. The Building Permit Applications triggers the notice to applicants of the new EPA Phase II Storm water Program requirements for construction activities greater than 1 acre. Applicants for projects over 1 acre in total disturbance were required to confirm that they have obtained an EPA permit number.	Continue to review Building Permit Applications per the new adopted runoff ordinance.
Revised					

5. Post-Construction Stormwater Management in New Development and Redevelopment

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
5A	Post Construction Runoff Ordinances	Planning Board	Bylaws to address Post – Construction Stormwater Management	A Post-Construction Stormwater Management bylaw was voted on and approved at the June 2006 Annual Town Meeting. The Town adopted an ordinance to address post construction runoff from projects with over 1 acre in total disturbance.	Town will continue to review new development and redevelopment plans in accordance with existing regulations.
Revised					
5B	Construction Site Plan Review	Planning Board		Stormwater Management and Land Disturbance by laws were previously adopted. Inspections and reporting were completed as specified in the new bylaws. Under the Post Construction Runoff Ordinance (or other regulatory mechanism), applicants with projects with disturbance over one acre are required to submit stormwater control plans to the Town for review and approval.	Town will continue to review new development and redevelopment plans in accordance with existing regulations.
Revised					

5a. Additions

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
5C Revised	Storm System Maintenance Plan	Board of Selectman		A Post-Construction Stormwater Management bylaw has been adopted. Operation and Maintenance of stormwater facilities was performed as required under the new bylaw. Under the Post Construction Runoff Ordinance (or other regulatory mechanism), projects with disturbance over one acre were required to include a program outlining enhanced procedures for long term operations and maintenance of stormwater facilities. Additional operation and maintenance requirements for storm water facilities constructed as part of new development and redevelopment project are being enforced.	Operation and maintenance requirements for stormwater facilities constructed as part of new development and redevelopment projects will continue to be enforced.
5D	Culvert Maintenance	Department of Public Works/	Maintain culverts and general maintenances. Records of inspections and maintenance.	All culverts were previously located and mapped as part of the Town’s development of its Stormwater Management Plan. Monitored culverts for blockages, especially during high rain flows. Removed blockages and repaired washouts as needed.	Continue to check all culverts and maintain as needed. Follow SOPs for maintenance/repair and record activities.

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 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
6A Revised	Catch Basin Cleaning Program	Department of Public Works	Clean All Catch Basins annually	The catch basin cleaning program is ongoing except in the winter season. The Town utilizes a Vactor truck. The truck has been used in conjunction with our catch basin cleaner to clean drain lines and structures. The DPW has greatly reduced its sand use in the winter months. All of the Town's catch basins are inspected and cleaned as needed.	The Town will continue the implementation of the current Catch Basin Cleaning Program. Those catch basins found to have excessive sediment will be cleaned on multiple occasions. The program starts in spring, and is completed by the fall. All of the Town's catch basins are inspected and cleaned as needed.
6B Revised	Street Sweeping Program	Department of Public Works	Sweep streets annually	The street sweeping program is ongoing except in the winter season. The DPW has greatly reduced the winter sand use. The streets and catch basins had far less sand to be cleaned than in previous years. The Town swept all of its streets at least once annually. Under this program, secondary streets were cleaned once, and major streets were cleaned on multiple occasions.	The Town will sweep all of its streets at least once annually. Under this program, secondary streets will be cleaned once, and major streets will be cleaned on multiple occasions. Develop a system to prioritize areas and streets for cleaning, as part of the Town's comprehensive Stormwater Management Plan.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
6D	Used Oil Collection	Department of Public Works	Assist with bi-annual household hazardous waste drop-off days.	The Town collected used oil from its residents with the purpose of recycling. Residents were able to drop off used oil at the DPW yard on Monday through Friday from 7:00a.m. to 3:00 p.m. There are no fees or limits associated with this program. Residents were required to label all containers with their name, address, and telephone number, and fill out an inventory log that is maintained by the DPW. The DPW has a waste oil burner at its facility on Woodlawn St. All waste oil collected is used to heat the DPW garage.	The Town will continue to collect used oil from its residents for the purpose of recycling. The used oil collection program is ongoing year round.

6a. Additions

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
6E	Vehicle Washing Program	Department of Public Works	Operation of the maintained Washing Program System.	In 2006, several catch basins inside the Department of Public Works building were sealed to provide containment for truck washing water. Pressure washers are used to minimize the amount of water used.	Continue to follow the Vehicle Washing Program. The system will be maintained and if necessary, improved.
Revised					
6F	Illegal Dumping	Department of Public Works	# of reports, # of inspections, amount debris removed.	In an effort to reduce illegal dumping of waste materials, the Town previously posted signage at common dumping areas indicating the dumping of waste is illegal and prohibited. The DPW removed furniture, tires, appliances, and other rubbish as soon as it was reported or noticed.	The DPW will clean up and dispose of illegally dumped waste materials as they are identified. Continue to search for areas used as common dumping sites.
Revised					
6G	Dumpster Recycling Programs	Recycling Committee		The recycling program continued this year. Glass, plastic, paper products, cardboard and cans were collected on site at the Recycling Center and curbside. Approximately 600 tons of recycled items were collected.	The Town will continue to collect single stream recyclables curbside. The Town will also continue to offer the ongoing Dumpster Recycling Program to its residents in an effort to reduce pollution and promote recycling.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
6H Revised	Curbside Trash Removal	Department of Public Works		The curbside trash pick-up program continued this past year. Monthly bills for trash and recycling pick up are included on the Water/sewer/trash bills. Residents are allowed on bag of trash that is included in the monthly fee. Overflow bags require trash stickers. Approximately 1850 tons of trash was removed from the town. The trash was picked-up with the rubbish compactor and delivered to Waste Management in Fitchburg MA. And E.L Harvey in Hopkinton. The DPW also picks up trash at the schools, the fire department, the police department, the Parks and Recreation Department, and from public trash barrels in the downtown commercial district.	The Town will continue to offer curbside removal of solid waste to its residents annually through this program.
6G Revised	Water Testing	Department of Public Works and Consultant	Water testing of drainage outfalls. Record # of samples collected and results.	The Town's engineering firm sampled and evaluated the water quality at 100% of the stormwater outfalls with observed dry weather flows in Year 10, as part of the ongoing development of a Stormwater Management Plan.	Review results and continue to monitor outfalls and perform testing if a suspect discharge is found.

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 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
7A	Develop a Water Quality Strategy for 303d Waters			Initial assessment of available strategies and potential benefits for BMPs to address water quality issues was conducted as part of the Town’s ongoing development of a Stormwater Management Plan.	Continue development of strategies to address identified water quality issues, specifically with recommended BMPs and estimated benefit or waste load reduction.
Revised					

7a. Additions

No additions at this time

7b. WLA Assessment

Massachusetts Division of Watershed Management released the 2012 Proposed 303d Integrated List of Waters in January of 2012. The following updated 303d list outlines several water bodies in Clinton that are impaired:

- 1) Category 5 Nashua River (8143500) MA81-09 Clinton WWTP Clinton to confluence with North Nashua River, Lancaster("South Branch" Nashua River).
- 2) Category 4A Wachusett Reservoir (81147) MA81147 Boylston/West Boylston/Clinton/Sterling 3966 acres -Mercury in Fish Tissue [12/20/2007-NEHgTMDL] (Non-Native Aquatic Plants*) -(Eurasian Water Milfoil, Myriophyllum spicatum*)

Although a portion of Wachusett Reservoir is physically located within the Town’s boundaries, only a limited portion of the Town’s stormwater runoff discharges to this water body due to topography.

Once a final TMDL is developed for the Nashua River (8143500) MA81-09, section 7 of the annual report will be updated to reflect changes associated with each TMDL. Water quality concerns associated with the draft TMDL for the Nashua River focus on pathogens and phosphorus. A preliminary Water Quality Response Plan (for pathogens) and a preliminary Phosphorus Control Plan have been developed in response to the draft TMDL for the Nashua River, as part of the Town’s ongoing development of a Stormwater Management Plan. These draft response/control plans are based on the draft permit requirements and the draft TMDL.

Part IV. Summary of ongoing Information Collected and Analyzed

During the permit year, the Town continued to work with their consulting engineering firm and developed a draft comprehensive Stormwater Management Plan, funded through the Massachusetts Clean Water State Revolving Fund (SRF) program. The Stormwater Management Plan includes development of a town-wide stormwater system map that is being used as a basis for illicit discharge detection. Stormwater outfalls, catch basins, manholes and culverts have been mapped via GPS coordinates. Structure locations were imported into a GIS base map to form a complete map depicting all structures in the Town limits.

Town outfalls were screened for potential illicit discharges, as part of the Town's ongoing IDDE program. If dry weather flow was observed, then samples were sent to the laboratory to test for e.coli, ammonia, surfactants (as MBAS), conductivity.

Subcatchment areas have been delineated and prioritized, relative to the potential impact on the draft pathogen TMDL and draft phosphorus TMDL established for the Nashua River. Potential BMPs (non-structural and structural) have been identified, with estimated phosphorus load reduction, as part of the Town's ongoing efforts to address these TMDLs.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

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

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	60%
Stormwater management committee established	(y/n)	N
Stream teams established or supported	(# or y/n)	Y
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	Y
Shoreline cleaned since beginning of permit coverage	(mi)	6 mi
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	0
▪ community participation	(%)	
▪ material collected	(tons or gal)	
School curricula implemented	(y/n)	Y

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 % of town
Estimated or actual number of outfalls	(#)	150
System-Wide mapping complete	(%)	100 % of Town
Mapping method(s)		
▪ Paper/Mylar	(%)	-
▪ CADD	(%)	-
▪ GIS	(%)	100%
Outfalls inspected/screened	(# or %)	100%
Illicit discharges identified	(#)	0
Illicit connections removed	(#) (est. gpd)	N/A
% of population on sewer	(%)	98%
% of population on septic systems	(%)	2 %

Construction

Number of construction starts (>1-acre)	(#)	2
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	2
Site inspections completed	(# or %)	4
Tickets/Stop work orders issued	(# or %)	1
Fines collected	(# and \$)	0
Complaints/concerns received from public	(#)	4

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
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	2
Total number of structures cleaned	(#)	Approx 280
Storm drain cleaned	(LF)	1,200
Qty. of screenings/debris removed from storm sewer infrastructure	(tons)	Approx 100
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Beneficial use
Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)	(\$)	10,000
• Hourly or per basin contract rate	(\$/hr or \$ per basin)	N/A
• Disposal cost	(\$)	N/A
Cleaning Equipment		
• Clam shell truck(s) owned/leased	(#)	1 owned
• Vacuum truck(s) owned/leased	(#)	1 owned
• Vacuum trucks specified in contracts	(y/n)	N/A
• % Structures cleaned with clam shells	(%)	80
• % Structures cleaned with vector	(%)	20
Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	1
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	2
Qty. of sand/debris collected by sweeping	(tons)	Approx 200
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Beneficial
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)	(\$)	10,000

• Hourly or lane mile contract rate	(\$/hr or per lane mile)	
• Disposal cost	(\$)	
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	2 owned
• Vacuum street sweepers purchased/leased	(#)	
• Vacuum street sweepers specified in contracts	(y/n)	
• % Roads swept with rotary brush sweepers	(%)	100
• % Roads swept with vacuum sweepers	(%)	
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
Integrated Pest Management (IPM) practices implemented		
Anti-/De-Icing products and ratios	% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand	75% 5% 20%
Pre-wetting techniques utilized	(y/n)	Y
Manual control spreaders used	(y/n)	N
Zero-velocity spreaders used	(y/n)	N
Estimated net reduction or increase in typical year salt/chemical application rate	(lbs. or %)	0%
Estimated net reduction or increase in typical year sand application rate	(lbs. or %)	
% of salt/chemical pile(s) covered in storage shed(s)	%	100%
Storage shed(s) in design or under construction	(y/n)	N
100% of salt/chemical pile(s) covered in storage shed(s) by 2010	(y/n)	Y