



COMPREHENSIVE
ENVIRONMENTAL
INCORPORATED
May 1, 2009

Glenda Velez
US EPA – CIP
One Congress Street, Suite 1100
Boston, MA 02114

**Re: NPDES Stormwater General Permit
2008-2009 Annual Report
Town of Charlton, MA**

Dear Ms. Velez:

On behalf of the Town of Charlton, MA, please find enclosed the NPDES Phase II Stormwater General Permit 2008-2009 Annual Report. The Annual Report has simultaneously been filed with the Massachusetts Department of Environmental Protection.

If you have any questions or require any additional information, please do not hesitate to call me at (800)725-2550 ext. 307.

Sincerely,

Comprehensive Environmental Inc.

Richard Niles
Project Manager

cc: Massachusetts Department of Environmental Protection, Boston Office
Karen Gauvin, Conservation Commission Agent, Town of Charlton, MA

Enclosure – NPDES Phase II Small MS4 General Permit 2008-2009 Annual Report

- Engineering
- Design
- Construction
- Inspection

Responsive
service,
cost-effective
solutions,
technical
excellence

- Water & Wastewater
- Parks & Recreation
- Drainage & Flooding
- Hazardous Waste
- Transportation
- Stormwater & LID
- Watershed Restoration

Municipality/Organization: Town of Charlton

EPA NPDES Permit Number: MAR041100

MaDEP Transmittal Number: W-036476

**Annual Report Number
& Reporting Period:** No. 6: May 1, 2008-April 30, 2009

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Karen Gauvin **Title:** Conservation Commission Agent

Telephone #: 508-248-2247 **Email:** karen.gauvin@townofcharlton.net

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: Robin Craver

Title: Town Administrator

Date: 4/30/09

Part II. Self-Assessment

The Town of Charlton has completed the required assessment and determined that our municipality is in compliance with all permit conditions.

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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
1A	Public Ed for residents.	Board of Selectmen, Town Administrator, Peter Boria, Chair, Board of Selectmen.	Annual article in the Charlton Gazette, Cable Broadcasts	Two articles were published in the Gazette (a free paper that is delivered to every address in Charlton) on Household Hazardous Waster Disposal. Articles and events were broadcast on the local cable network. Flyers detailing Hazardous Waste Collection Events were added to the Gazette twice in the year, and placed in Town Hall.	Continue publishing articles on stormwater and broadcasting related events and information on the local cable network. Update hazardous waste fliers to include additional stormwater information.
Revised					
1B	Stormwater Education for students.	Board of Selectmen, Town Administrator, Peter Boria, Chair, Board of Selectmen	Posters in Public Schools w/ permission. Student participation hours & activities completed.	A wetlands presentation and classroom education program was conducted in the Fall of 2008. The ConCom Agent held a field trip around the school this past fall. The Annual Earth Day Poster Contest was held. Students create Earth Day posters which are judged and hung in conspicuous places within the schools, Town Hall and Library.	Incorporate the use of students with stormwater education activities through community service hours. Extend the use of students through other community service events such as participation in Hazardous Waste Collection Events, Fire Station Safety Day and Earth Day: Town & Stream Clean Up, and Farm Clean Up. Continue to display posters in schools and around town.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
1C	Public Ed community reachout.	Board of Selectmen, Town Administrator, Peter Boria, Chair, Board of Selectmen	Charlton website posts stormwater info. Record # of website hits.	The Town website was expanded to include web links to EPA and other informational stormwater sites. A hit counter was added in May 2006 and a total of 916 hits were recorded on the Conservation Commission web page during the Year 6 reporting period.	Continue to update the website with information on stormwater and. Also continue to record number of hits to the website.
Revised					
1D	Stormwater Education Survey.	Board of Selectmen, Town Administrator, Peter Boria, Chair, Board of Selectmen	Conduct survey in Gazette w/ permission.	A survey was obtained and is scheduled to be published in the Gazette in May 2009.	Publish results in the Gazette as well as on website and a Press Release.
Revised					

1a. Additions.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
1E	Distribute Education Flyers	Board of Selectmen, Town Administrator, Peter Boria, Chair, Board of Selectmen	Hand out Flyers at Hazardous Waste Collection Events.	The local Boy Scout Chapter was recruited to hand out educational flyers at a Household Hazardous Waste Collection Event held in October of 2008. Flyers will be distributed by Town staff at the May 2009 collection event.	Continue to hand out/provide flyers and educational material at Household Hazardous Waste Collection Events, as well as other community events.
Revised					

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
2A Revised	Community participation.	Board of Selectmen /Chairman	Establish a Stormwater Panel.	The Stormwater Panel, consisting of: the Building Inspector, Planning Board Director, Conservation Commission Agent, and Highway Superintendent, met several times throughout the permit year to discuss the progress of the SWMP. ConCom and Highway meet approximately once a month to discuss stormwater issues. A Press Release will be sent out for the Public Information Session to be held at the May 5, 2009 Town Selectmen’s Meeting. This Information Session will focus on stormwater issues and will be televised.	Set up advertisements of the Panel’s meetings on the website and in the Town Gazette to increase public awareness, receive input and solicit involvement
2B Revised	SWMP recommendations.	Board of Selectmen/Members	Board of Selectmen considers the recommendations.	The Board of Selectmen, Town Administrator and public will provide comments on the Stormwater Panel’s recommendations at the May 5, 2009 meeting. The Town Administrator met with ConCom and Highway to discuss the progress of the SWMP and upcoming program needs on March 20, 2009. ConCom met with their consultant on February 5, 2009 to discuss SWMP development and next steps.	Board of Selectmen and Town Administrator will review and provide comment on the Panel’s recommendations. Broadcast the updates for the SWMP on local TV and receive public input at meeting.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
2C	Community participation/Household hazardous waste collection.	Household Hazardous Waste Committee	Annual Hazardous waste day (depends on funding).	A Hazardous Waste Collection Event was held in October of 2008 and a second event is scheduled for May of 2009. As discussed in BMP IE, the local Boy Scout Chapter was recruited to hand out educational flyers at the October 2008 event. Flyers will be distributed by Town staff at the May 2009 collection event.	Hold at least two Hazardous Waste Collection Events and recruit students to hand out educational stormwater flyers as a part of community service (also refer to BMP 1B).
Revised					
2D	Community participation.	Household Hazardous Waste Committee	Publish the results of Hazardous Waste Collection in the Gazette w/ permission.	Participation in the Hazardous Waste Collection Events was tracked by a tally of cars and resulted in 137 cars for the October 2008 event. This information was posted on the town website. The number of vehicles for the May 2009 event will be tracked.	Continue tracking community participation. Establish a method of tracking the amount of hazardous waste collected at events and post information on the Town website.
Revised			Results on website.		

2a. Additions.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
2E Revised	Earth Day: Town and Stream Clean Up Activity	BOS, Board of Health, Conservation Commission	Number of volunteers and trash/debris collected. Before and after photos.	Earth Day town clean up activities will be conducted on April 18, 2009. The Town will involve several volunteers and estimates that approx. 60 cubic yards of litter will be collected from streams and roadsides that are prone to dumping or accumulation of litter based on results from the previous two years. The Town also hosted a farm cleanup event on April 4 and 5, 2009 at the Fay Mountain Farm. Volunteers performed maintenance around the farm, including litter removal, tree pruning and debris cleanup after the December, 2008 ice storm.	Continue tracking amount of volunteers participating in the event and trash/debris collected and posting information on Town website. Identify specific streams to be cleaned, track streams cleaned and clean new areas each year.
2F Revised	Shoreline Cleanup Annual Event	BOS & Conservation Commission	Number of volunteers and trash/debris collected. Before and after photos.	Each year the Town performs a four-foot drawdown on the recreational lakes and ponds for residents to conduct shoreline cleanup activities near their property. The following ponds were cleaned: Glen Echo, S. Charlton Reservoir and Baker Pond. The Town notifies residents of the activity by posting notices and advertising on the local cable network.	Continue to advertise and support cleanup events. Encourage waterfront residents to clean up areas abutting their property.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
3A Revised	Hazardous Waste Education.	Household Hazardous Waste Committee	Annual Hazardous Waste Day (depending on funding).	A Hazardous Waste Collection Event was held in October of 2008 and a second event is scheduled for May of 2009. The events were advertised in the local paper.	Hold at least two Hazardous Waste Collection Events and distribute education handouts (refer to BMP 1E).
3B Revised	Identification of Illicit Connections.	Highway/Gerry Foskett	Will seek appropriation to train majority of DPW employees.	GPS location of 65 outfalls was completed in 2007. No obvious illicit discharges were found. Outfalls with dry weather flow are evaluated for potential illicit discharge (refer to BMP 3D). DPW staff members inspect for illicit discharges while performing regular catch basin cleanings. Inspection forms as part of Charlton's SOPs were developed to record conditions of catch basins for follow-up actions.	Annually review training program in-house and incorporate into existing inspection procedures. Use the catch basin inspection form found in the SOPs to incorporate illicit discharge inspection information.
3C Revised	Storm Drainage System Map.	Highway and Conservation Commission	Initial Base Map completed	All outfalls within the urban area were field verified using a GPS and compiled on a GIS base map in 2007. A total of 65 outfalls were mapped.	Pursue additional mapping efforts as funding allows.
3D Revised	Illicit Connection Data.	Highway/Gerry Foskett	Use data to assess progress.	Outfall inspections did not reveal any obvious illicit discharges. A 2008 study identified 9 outfalls with dry weather flow. A second study revisited all 9 outfalls and analyzed water quality data from 5 outfalls exhibiting dry weather flow.	Continue to monitor outfalls and catch basins and take necessary actions to eliminate illicit discharges.

3a. Additions.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
3E	Illicit Discharge Ordinance	Planning Board/Alan Gordon & Consultant	Plan to seek Town meeting approval.	A meeting was held on February 5, 2009 to discuss the status of regulatory measures to meet the Phase II requirements. A draft bylaw for illicit discharge prohibition was reviewed.	A draft bylaw will be presented at the Fall 2009 Town Meeting.
Revised					
3F	Outfall Screening Strategy and Inspections for Illicit Discharges.	DPW/ Conservation Commission, Consultant	All outfalls inspected for illicit discharges by end of permit term.	A subwatershed prioritization and approach for IDDE activities was developed in 2007. Outfalls were inspected and dry weather flows sampled as outlined in BMPs 3B and 3D.	Incorporate outfalls in non-urbanized areas as budget is available.
Revised		Consultant			

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
4A Revised	Construction Site Runoff Inspection Checklist.	Building Inspector/ Curt Meskus	Seek approval to develop SW quality checklist.	The checklist developed for the building inspector was used for numerous inspections.	Continue to revise checklist as needed with introduction of new stormwater ordinance or bylaw amendments.
4B Revised	Construction Site Runoff Inspection Checklist. Develop Erosion Control Regulation	Building Inspector/ Curt Meskus, Planning Board	Seek approval to implement the checklist. Regulation at Town Meeting.	A meeting was held on February 5, 2009 to discuss the status of regulatory measures to meet the Phase II requirements. A consultant was retained for regulatory assistance and options to meet the Phase II requirements were discussed.	A draft bylaw and/or regulatory amendments will be presented at the Fall 2009 Town Meeting.
4C Revised	Construction Site Runoff Control Education. Procedure for Public Input	Planning Board/Alan Gordon, Highway & Conservation Commission	Require Erosion Control. Record number of calls regarding site runoff	Developers use the checklist as a reference for inspections of sites. The Highway Dept. and Conservation Commission handle complaints for construction site issues in Town. 5 calls were received by the Conservation Commission and all issues were addressed.	Encourage public involvement by updating the website as deemed necessary. Continue to handle complaints that are received.
4D Revised	Construction Site Runoff - Site Plan.	Planning Board/Alan Gordon	Require Construction in Phases.	The Site Plan regulations were amended in June 2006 to address construction phasing.	None at this time.

4a. No additions at this time.

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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
5A Revised	Assess Existing Post Construction Runoff Program	Planning Board/Building Inspector	Meet with Board & Inspector to Review	Existing regulatory controls were reviewed in Year 1. The Subdivision regulations were amended in June 2006 to address construction phasing.	None at this time.
5B Revised	Develop stormwater ordinance	Planning Board/Building Inspector	Seek Approval to review Subdivision bylaws	A meeting was held on February 5, 2009 to discuss the status of regulatory measures to meet the Phase II requirements. Options to meet the Phase II requirements were discussed.	A draft bylaw and/or regulatory amendments will be presented at the Fall 2009 Town Meeting.
5C Revised	Review stormwater ordinance	Planning Board/ Building Inspector/BOS	Plan to Seek Town Meeting Approval	Options to meet the Phase II requirements were discussed.	This BMP will be addressed as part of BMP 5B.
5D Revised	Revisit stormwater ordinance	Planning Board/Building Inspector/BOS	Review for any Changes	Options to meet the Phase II requirements were discussed.	The schedule for this BMP will be evaluated based on the progress of BMP 5B.

5a. Additions.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
5E Revised	Develop and implement inspection program, public input procedure	Planning Board/Building Inspector, Conservation Commission	Checklist and O&M Plan by end of year 4. Records of inspections completed and results.	The checklist developed for the building inspector was used for numerous inspections..	Continue to conduct site inspections to ensure BMPs are constructed as designed. Encourage public involvement by updating the website as deemed necessary. Continue to handle complaints that are received.

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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
6A	Municipal Good Housekeeping: Highway, Storm Drain System Inspection and Maintenance	Highway Gerry Foskett	Catch Basin & Street Sweeping Schedule, Inspect and maintain storm drain system at least annually	All catch basins in Town were cleaned at least once and some areas prone to sediment build up were cleaned twice. All streets were swept one to two times base on accumulation of sediment. DPW maintained a record of cleanings and storm drain system maintenance needs with an inspection form that was completed at the time of cleaning. The Town has developed Standard Operating Procedures (SOPs) to track cleaning and inspection activities.	Utilize SOPs and continue storm drain system inspection and maintenance.
Revised					
6B	Municipal Good Housekeeping: Earth Day	Board of Selectmen, Board of Health Conservation Commission	Seek approval to provide assistance with Earth Day & Stream Clean Up.	Earth Day town clean up activities were conducted on April 18, 2009. The Town involved several volunteers and estimates that approx. 60 cubic yards of litter were collected from streams and roadsides that are prone to dumping or accumulation of litter. The Town also hosted a farm cleanup event on April 4 and 5, 2009 at the Fay Mountain Farm. Volunteers performed maintenance around the farm, including litter removal, tree pruning and debris cleanup after the December, 2008 ice storm.	Continue soliciting and tracking number of volunteers participating in event and trash/debris collected and post on Town website (refer to BMP 2E). Target streams and other areas known for problems.
Revised					
6C	Municipal Good Housekeeping: Highway	Highway Gerry Foskett	Review Cleaning Schedule & Revise if needed.	The Town received DEP approval for reuse of catch basin cleanings as landfill capping material. Maintenance needs at stormwater outfall locations were identified as part of the illicit discharge screening effort (refer to BMP 3B and see also BMP 6H).	Continue to review the results of the stormwater outfall inspections and conduct follow-up maintenance activities and/or revise cleaning schedules as appropriate.
Revised			Storm drain system cleaning review.		

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
6D	Municipal Highway	Highway Gerry Foskett	Meet with Highway to talk about any updates. Phase II Training Update	ConCom and Highway meet approximately once a month, as well as the Town's consultant on February 5, 2009, to discuss the progress of the SWMP and results of outfall inspections. Methods to enhance storm drain system maintenance were also discussed. ConCom provides updates to the Town Administrator at department meetings.	Incorporate new information regarding storm drain system maintenance (e.g., BMP 6C) and incorporate any modifications into training sessions (see BMP 6F below).
Revised					

6a. Additions.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
6E	Evaluate Municipal Facilities for Stormwater impacts	Highway Gerry Foskett, Consultant	Pollution Prevention Inspection Checklist, Record of Inspections and Maintenance.	Stormwater recommendations outlined in October 14, 2005 report are largely complete. Funding for a new Highway Dept. and Fire Dept. building was defeated at the October, 2008 town meeting, but will be resubmitted as part of the economic stimulus package. The remaining tasks will be completed and/or addressed with the construction of the new building.	Continue to inspect municipal facilities on a regular basis. Clean stormwater structures as per the SOPs.
Revised					
6F	Conduct Town Employee Stormwater Training.	Highway Gerry Foskett	Attendance sheet and copy of program	DPW staff were trained in-house on a monthly basis for spill prevention and cleanup techniques and other pollution prevention practices.	Continue/update training program and track attendance annually.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
6G	Develop and implement a SPCC Plan for the Fueling Station.	Highway Gerry Foskett	Copy of SPCC Plan & Records	Compliance with the SPCC Plan for the Town Fueling Station is ongoing.	Continue compliance with the SPCC Plan requirements.
Revised					
6H	BMP evaluation and O&M Plan	Highway Gerry Foskett		The Town maintained 17 detention basins, the majority of them were: mowed, brush cut, outfalls cleaned and inspected, and trash removed. All Basins were inspected; some were relatively new and needed little maintenance. Basins will be maintained and inspected each year. 15 Town-owned BMPs were inspected and evaluated for retrofits to improve water quality. The Town has developed Standard Operating Procedures (SOPs) to track cleaning and inspection activities, as well as an Operation and Maintenance Plan. The Town is working to implement an O&M tracking program for privately owned BMPs.	Continue to track BMP maintenance. Utilize SOPs and O&M Plan when maintaining BMPs.
Revised					

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) <<if applicable>>

7A	Map outfalls to TMDL Waters	Highway, Conservation Commission	All outfalls mapped to TMDL waters by end of year 4.	All outfalls within the urban area were field verified using a GPS and compiled on a GIS base map.	Continue mapping outfalls with priority to those which contribute to TMDL waters, as budget is available.
Revised					
7B	Evaluate existing data for TMDL waters to develop BMPs	Conservation Commission	Data sheets , list of potential BMP recommendations	No specific illicit discharges have been identified. A previous study identified 9 outfalls with dry weather flow. A second study revisited all 9 outfalls and analyzed water quality data from 5 outfalls exhibiting dry weather flow. Outfall inspections are ongoing. 15 Town-owned BMPs were inspected and evaluated for retrofits to improve water quality.	Evaluate outfall and other water quality data and develop BMPs to address water quality of the TMDL waters, as budget is available.
Revised					

7b. WLA Assessment

While several water bodies in Charlton have TMDLs, it is necessary to locate outfalls and determine their ownership and drainage collection areas before it will be possible to assess waste loads for which the Town of Charlton is responsible and to devise appropriate BMPs. Charlton has mapped the stormwater outfalls within the urban area and the remaining outfall evaluation is pending available funds. The Town is pursuing funding to evaluate water quality at specific outfall locations, which will assist in the evaluation of water quality data related to TMDL waters. At this time, further evaluation is needed to determine what BMPs will be both effective and feasible.

Part IV. Summary of Information Collected and Analyzed

65 stormwater outfalls have been mapped and screened for potential illicit discharges. Field observations and monitoring data for non-stormwater discharges did not reveal any obvious illicit discharges. The study revealed 9 outfalls with dry weather flows. A second study revisited all 9 outfalls and analyzed water quality data from 5 outfalls with dry weather flow. Results for e.coli, fecal coliform, ammonia, surfactants, fluoride and chlorine did not reveal elevated concentrations at any outfall. Additional outfall inspections are ongoing; laboratory testing will be performed as needed.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	No
Annual program budget/expenditures	(\$)	

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	100% homes
Stormwater management committee established	(y/n)	Yes
Stream teams established or supported	(# or y/n)	Yes
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	Yes
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	2
▪ community participation	(%)	137* cars
▪ material collected	(tons or gal)	
School curricula implemented	(y/n)	No
*This car count is from the October 2008 collection event. The car count for the upcoming May, 2009 event will be included in next year's annual report.		

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	(#)	65
System-Wide mapping complete	(%)	
Mapping method(s)		
▪ Paper/Mylar	(%)	-
▪ CADD	(%)	-
▪ GIS	(%)	100%
Outfalls inspected/screened	(# or %)	65
Illicit discharges identified	(#)	0
Illicit connections removed	(#) (est. gpd)	N/A
% of population on sewer	(%)	11.8 %
% of population on septic systems	(%)	88.2 %

*100% of outfalls within the urban area have been mapped.

Construction

Number of construction starts (>1-acre)	(#)	
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	
Site inspections completed	(# or %)	Numerous
Tickets/Stop work orders issued	(# or %)	4
Fines collected	(# and \$)	0
Complaints/concerns received from public	(#)	5

Post-Development Stormwater Management

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

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)	1-2
Total number of structures cleaned	(#)	
Storm drain cleaned	(LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Landfill
Cost of screenings disposal	(\$)	
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)	1-2
Qty. of sand/debris collected by sweeping	(lbs. or tons)	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Landfill
Cost of sweepings disposal	(\$)	
Vacuum street sweepers purchased/leased	(#)	1 owned
Vacuum street sweepers specified in contracts	(y/n)	
Reduction in application on public land of: (“N/A” = never used; “100%” = elimination)		
▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	
Anti-/De-Icing products and ratios	% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand	
Pre-wetting techniques utilized	(y/n)	
Manual control spreaders used	(y/n)	
Automatic or Zero-velocity spreaders used	(y/n)	
Estimated net reduction in typical year salt application	(lbs. or %)	
Salt pile(s) covered in storage shed(s)	(y/n)	Yes
Storage shed(s) in design or under construction	(y/n)	