

Municipality/Organization: Town of Charlton

EPA NPDES Permit Number: MAR041100

MaDEP Transmittal Number: W- 036476

Annual Report Number  
& Reporting Period: No. 4: May 1, 2006-April 30, 2007



## NPDES PII Small MS4 General Permit Annual Report

### Part I. General Information

Contact Person: Karen Gauvin

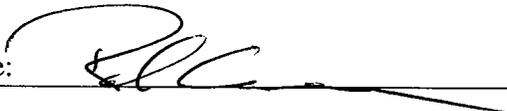
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### Certification:

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: Robin Craver

Title: Town Administrator

Date: 4-26-07

**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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
1A	Public Ed for residents.	Board of Selectmen, Town Administrator	Annual article in the Charlton Gazette	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.
Revised		Peter Boria, Chair, Board of Selectmen	Cable Broadcasts		
1B	Stormwater Education for students.	Board of Selectmen, Town Administrator	Posters in Public Schools w/ permission.	Posters were hung in conspicuous places within the schools, Town Hall and Library. The wetlands presentation and classroom education program were not conducted due to staff workload and budget cuts. However, additional education opportunities were evaluated for students outside of the classroom, such as community service hours that are required for high school students.	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 and Stream Clean Up. Continue to display posters in schools and around town
Revised		Same as 1A	Student participation hours & activities completed		
1C	Public Ed community reachout.	Board of Selectmen, Town Administrator	Charlton website posts stormwater info.	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 847 hits were recorded on the Conservation Commission web page.	Continue to update the website with information on stormwater and. Also continue to record number of hits to the website.
Revised		Same as 1A	Record # of website hits.		

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
1D	Stormwater Education Survey.	Board of Selectmen, Town Administrator	Conduct survey in Gazette w/ permission.	A survey was obtained and is scheduled to be published in the Gazette in May 2007.	Publish results in the Gazette as well as on local TV station.
Revised		Same as 1A			

**1a. One addition at this time.**

1E	Distribute Education Flyers	Board of Selectmen, Town Administrator	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 Events held on October 6, 2006. Flyers will be distributed by Town staff at the April 28, 2007 collection event.	Continue to hand out/provide flyers and educational material at Household Hazardous Waste Collection Events, as well as other community events.
Revised		Same as 1A			

**2. Public Involvement and Participation**

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
2A	Community participation.	Board of Selectmen /Chairman	Establish a Stormwater Panel.	The Stormwater Panel met on March 20, 2007 to discuss the progress of the SWMP and upcoming Year 5 activities. ConCom and Highway meet on a regular basis to discuss stormwater issues.	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
Revised					
2B	SWMP recommendations.	Board of Selectmen/Members	Board of Selectmen considers the recommendations.	The Board of Selectmen and Town Administrator reviewed and provided comments on the Stormwater Panel's recommendations. Charlton recently acquired a new Town Administrator and meetings were held to discuss the progress of the SWMP and upcoming program needs.	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.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
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 on October 6, 2006 and a second event is scheduled for April 28, 2007. As discussed in BMP IE, the local Boy Scout Chapter was recruited to hand out educational flyers at the October 2006 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. Results on website.	Participation in the Hazardous Waste Collection Events was tracked by a tally of cars and resulted in 118 cars for the October 2006 event. This information was posted on the town website. The # of vehicles for the April 2007 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					

**2a. Two additions at this time.**

2E	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 were conducted on April 21, 2007. The Town involved several volunteers and approx. 60 cubic yards of litter was collected from streams and roadsides that are prone to dumping or accumulation of litter.	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.
Revised					
2F	Shoreline Cleanup Annual Event	BOS & Conservation Commission	Number of volunteers and trash/debris collected. Before and after photos.	Each year the Town draws down 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. Begin tracking participation and material collected, if possible.
Revised					

### 3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
3A	Hazardous Waste Education.	Household Hazardous Waste Committee	Annual Hazardous Waste Day (depending on funding).	Hazardous Waste Collection Events were held in October 2006 and April 2007. The events were advertised in the local paper.	Hold at least two Hazardous Waste Collection Events and distribute education handouts (refer to BMP 1E).
Revised					
3B	Identification of Illicit Connections.	Highway/Gerry Foscett	Will seek appropriation to train employees.	A DPW staff member participated in the inspections under BMP 3F and received training by the Town's consultant in the identification of illicit discharges. Inspection forms are used to record conditions of catch basins for follow-up actions.	Annually review training program in-house and incorporate into existing inspection procedures. Use the existing catch basin inspection form to incorporate illicit discharge inspection information.
Revised			Majority of DPW employees trained		
3C	Storm Drainage System Map.	Highway and Conservation Commission	Begin mapping (depending on funding).	All outfalls within the urban area were field verified using a GPS and compiled on a GIS base map. A total of 65 outfalls were mapped.	Pursue additional mapping efforts as funding allows.
Revised			Initial base map by end of year 4		
3D	Illicit Connection Data.	Highway/Gerry Foscett	Use data to assess progress.	Data from the outfall inspections was evaluated to identify any potential illicit discharges and no obvious illicit discharges were found.	Pursue funding to conduct laboratory testing of identified dry weather flows and continue to monitor outfalls and catch basins and take necessary actions to eliminate illicit discharges.
Revised					
3E	Illicit Discharge Ordinance	Planning Board/Alan Gordon & Consultant	Plan to seek Town meeting approval.	A meeting was held on March 20, 2007 to discuss the status of regulatory measures to meet the Phase II requirements. A consultant was retained for regulatory assistance and a draft bylaw for illicit discharge prohibition was reviewed.	A draft bylaw will be presented at the Fall 2007 Town Meeting.
Revised					

**3a. One addition at this time.**

3F	Outfall Screening Strategy and Inspections for Illicit Discharges.	DPW/ Conservation Commission	All outfalls inspected for illicit discharges by end of permit term.	A subwatershed prioritization and approach was developed for IDDE activities. Outfall inspections were performed in the urbanized areas to identify any potential illicit discharges. 65 outfalls were inspected and no obvious illicit discharges were found.	Pursue funding to conduct laboratory testing of identified dry weather flows. 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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
4A	Construction Site Runoff Inspection Checklist.	Building Inspector/ Curt Meskus	Seek approval to develop SW quality checklist.	The checklist used by the building inspector was updated to incorporate amendments to the subdivision regulations that occurred in June 2006.	Continue to revise checklist as needed with introduction of new stormwater ordinance or bylaw amendments.
Revised					
4B	Construction Site Runoff Inspection Checklist.	Building Inspector/ Curt Meskus	Seek approval to implement the checklist.	A meeting was held on March 20, 2007 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 2007 Town Meeting.
Revised	Develop Erosion Control Regulation	Planning Board	Regulation at Town Meeting in Year 3		
4C	Construction Site Runoff Control Education.	Planning Board/Alan Gordon	Require Erosion Control.	Developers use the checklist as a reference for inspections of sites. Information was posted on the Conservation Commission web page for residents to call regarding erosion problems. The Highway Dept. and Conservations Commission handle complaints for construction site issues in Town. 4 calls were received by the Conservation Commission and all issues were addressed.	Encourage public involvement by displaying the complaint phone number on the website. Continue to handle complaints that are received.
Revised	Procedure for Public Input	Highway & Conservation Commission	Record number of calls regarding site runoff		
4D	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.
Revised					

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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
5A	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.
Revised					
5B	Develop stormwater ordinance	Planning Board/Building Inspector	Seek Approval to review Subdivision bylaws	A meeting was held on March 20, 2007 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 2007 Town Meeting.
Revised					
5C	Review stormwater ordinance	Planning Board/ Building Inspector/BOS	Plan to Seek Town Meeting Approval	The Town has retained a consultant to assist with Phase II regulatory compliance.	This BMP will be addressed as part of BMP 5B.
Revised					
5D	Revisit stormwater ordinance	Planning Board/Building Inspector/BOS	Review for any Changes	Planned for year 5.	The schedule for this BMP will be evaluated based on the progress of BMP 5B.
Revised					

5a. One addition at this time.

5E	Develop and implement inspection program	Planning Board/Building Inspector	Checklist and O&M Plan by end of year 4. Records of inspections completed and results.	The checklist used by the building inspector was updated to incorporate amendments to the subdivision regulations that occurred in June 2006. Information was posted on the Conservation Commission web page for residents to call regarding stormwater problems.	Continue to conduct site inspections to ensure BMPs are constructed as designed. Encourage public involvement by displaying the complaint phone number on the website. Continue to handle complaints that are received.
Revised	Public Input Procedure	Conservation Commission			

## 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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
6A	Municipal Good Housekeeping: Highway	Highway Gerry Foskett	Catch Basin & Street Sweeping Schedule	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.	Continue existing practices for storm drain system inspection and maintenance.
Revised	Storm Drain System Inspection and Maintenance		Inspect and maintain storm drain system at least annually		
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 21, 2007. The Town involved several volunteers and approx. 60 cubic yards of litter was collected from streams and roadsides that are prone to dumping or accumulation of litter.	Continue soliciting and tracking number of volunteers participating in event and trash/debris collected and post on Town website (see 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 3F).	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.		
6D	Municipal Highway	Highway Gerry Foskett	Meet with Highway to talk about any updates.	The Highway Department met several times with ConCom, as well as the Town's consultant on March 20, 2007, to discuss the progress of the SWMP and results of outfall inspections. Methods to enhance storm drain system maintenance were also discussed.	Incorporate new information regarding storm drain system maintenance (e.g., BMP 6C) and incorporate any modifications into training sessions (see BMP 6F below).
Revised			Phase II Training Update		

**6a. Four additions at this time.**

6E	Evaluate Municipal Facilities for Stormwater impacts	Highway Gerry Foskett	Pollution Prevention Inspection Checklist, Record of Inspections and Maintenance.	Stormwater recommendations outlined in October 14, 2005 report are nearly complete. Funding for a new Highway Dept. and Fire Dept. building is expected to be approved, pending the Town Meeting in May '07, which will assist in the completion of these tasks.	Continue to inspect municipal facilities on a regular basis.
Revised		Consultant			
6F	Conduct Town Employee Stormwater Training.	Highway Gerry Foskett	Attendance sheet and copy of program	A DPW staff member participated in the inspections under BMP 3F and received training in the identification of illicit discharges. 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					
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 is pursuing funding to evaluate Town-owned BMPs to evaluate maintenance needs and develop an appropriate O&M Plan.	O&M Plan for BMPs in Town, if budget is approved.
Revised					

**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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
Revised					

**7a. Two additions at this time.**

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			End of year 4		
7B	Evaluate existing data for TMDL waters to develop BMPs	Conservation Commission	Data sheets , list of potential BMP recommendations	No progress has been made for this task since the final outfall inspection data was not available until March 2007.	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, sufficient data does not exist and 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. However, the Town is pursuing funding to conduct laboratory testing of identified dry weather flows. This effort also resulted in additional data to enhance the Town’s storm drain system maintenance program.

**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	(%)	118* cars
▪ material collected	(tons or gal)	
School curricula implemented	(y/n)	No
*This car count is from the October 2006 collection event. The car count for the upcoming April 28, 2007 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)	
% 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 %)	3
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	(%)	
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 <sub>2</sub> % MgCl <sub>2</sub> % 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)	