

Municipality/Organization: Town of Weston

EPA NPDES Permit Number: MAR041068

MaDEP Transmittal Number: W- 035252

**Annual Report Number
& Reporting Period:** No. 4: March 06-March 07

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Stephen R. Fogg, P.E. Title: Town Engineer

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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: Donna VanderClock

Title: Town Manager

Date: April 27, 2007

Part II. Self-Assessment

The Town of Weston has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions, except for the following provisions:

Part II.B.1. BMP 1-6, Outreach to Private Ways, has not been completed as planned. An amendment to the Stormwater Regulations was passed at Town Meeting in May 2006, giving the Town authority over stormwater management on private ways. This correspondence and follow up will be scheduled for the summer of 2007.

Part II.B.2. BMP 2-2, Poster contest was not held. School will be contacted again in the spring of 2007 to encourage more participation.

Part II.B.2 BMP 2-3, Summit event not held as planned. Event will be planned for fall of 2007.

Part II.B.2 BMP 2-6, Stream survey not completed as planned, as GIS mapping was needed to aid in survey. Stream Team will be contacted again and maps provided.

Part II.B.4. BMP 4-1, Erosion and Sediment Control Bylaw, has been deferred until Special Town Meeting in the fall of 2007. A committee has been formed to establish the language of the bylaw and how it will be enforced.

Part II.B.5. BMP 5-1, Erosion and Sediment Control Bylaw, has been deferred until Special Town Meeting in the fall of 2007. A committee has been formed to establish the language of the bylaw and how it will be enforced.

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
1-1 Revised	Flyer to residents	SUASCO WCC and SRF	Distribute to 75% of residents	Completed in year 1	
1-2 Revised	Lesson Plan for Fifth Graders Plan to be taught in 4 th grade	SUASCO WCC and SRF	Lesson plan taught	Lesson plan continuing in schools	Provide support as needed
1-3 Revised	Media Campaign	SUASCO WCC and SRF	Media packet given to press	Series of articles ran in Weston Town Crier during 2006	none
1-4 Revised	Flyer to Businesses	SUASCO WCC and SRF	Distribute to 50% of businesses Distribute to 100% of businesses	Flyer produced and being mailed April 2007 to all Weston businesses, including private schools and churches	None – planned for permit year 4
1-5 Revised	Video	SUASCO WCC and SRF	Show video at public meeting	None - planned for permit year 5	None – planned for permit year 5

1a. Additions

1-6	Outreach to Private Ways	DPW	Develop and send correspondence to road trusts and private way owners about stormwater issues	None – letter to be sent this year	Send correspondence
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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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
2-1	Traveling Display	SUASCO WCC and SRF	3 months on display	None - Completed in year 1	Use display as opportunity arises
Revised					
2-2	Poster contest (5 th grade)	SUASCO WCC and SRF	Hold contest	Contest rules provided to School Dept.	None
Revised					
2-3	Summit Event*	SUASCO WCC and SRF	Hold local stormwater summit meeting	Summit materials delivered to Weston by SUASCO	hold summit meeting
Revised					
2-4	Photo contest (High School)	SUASCO WCC and SRF	Hold contest	None – planned for year 4	None – planned for year 4
Revised					
2-5	Super—summit event	SUASCO WCC and SRF	Participate in regional “super-summit”	None – planned for year 5	None – planned for year 5
Revised					

2a. Additions

2-6	Stream team survey of Seaverns Brook	SRF and stream team	Complete survey	None	Provide GIS mapping and complete survey
2-7	Catch basin stenciling program	SRF	Volunteer group(s) to install 180 storm drain markers in selected locations	Marker kits purchased through SUASCO Community Assistance Plan	

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
3-1	Stormwater System Mapping	DPW	Complete mapping of stormwater system over a 3 year period	None – completed during year 3	Completion of stormwater system mapping using GPS to construct pipe network
3-2	Dry weather screening of outfalls	DPW	Visual inspection/report of known outfalls, 33% each year	None – outfalls inspected during year 3	Re-inspect outfalls and document changes from last inspection
3-3	Illicit Discharge Elimination	DPW, Board of Health	Trace non-stormwater flows and eliminate within 1 year	none	Sample flowing outfalls using IDDE protocol
3-4	Water Quality Monitoring	Cambridge Water Supply	Obtain results of regular monitoring	Water quality data summary from CWS - See Attachment A	Same as year 4
3-5	Amend Stormwater Regulations	DPW	Amended regulations adopted at 2003 Annual town Meeting	Goal met	Prepare amendment for 2007 Special Town Meeting (fall '07) to incorporate Erosion and Sediment Control provisions
Revised			Amended regulations adopted at 2006 Annual Town Meeting	Goal met to expand coverage to include impacts from private ways and impacts to water bodies from construction	
3-6	Septic System Monitoring Program	Board of Health	Develop, implement and enforce septic pumping	BOH not planning to institute mandatory pumping	
Revised			System in place to identify frequent pumping	GIS program development task includes septic system database management tool	Database created and in use; frequent pumping locations are investigated
3-7	Dechlorination of New Water Mains	DPW - Water Div.	Use dechlorination tablets when flushing new mains	Done during installation of North Ave water main	As needed
3-8	Trench Dewatering Policy	DPW	Require siltation control on all trench dewatering projects	Siltation control specified on all capital projects; controls used on DPW projects	As needed

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
4-1	Erosion and Sediment Control Bylaw	Planning Board, Conservation Commission, DPW	Develop, implement and enforce bylaw	Bylaw deferred until special town meeting in the fall of 2007; committee formed to establish bylaw language	Amend stormwater regulations to incorporate erosion and sediment control provisions
Revised	<i>Incorporate provisions into Stormwater Regulations as policies</i>	DPW	All construction projects subject to Building Permit reviewed for compliance with policy	DPW inspector assigned to enforce policies	Same as year 4
4-2	Planning Board review of projects	Planning Board	All projects reviewed for compliance with runoff control measures	All applicants are required to demonstrate that they are addressing stormwater runoff control during construction	Same as year 4
4-3	Conservation Commission review of projects	Conservation Commission	All projects reviewed for compliance with runoff control measures	All applicants are required to demonstrate that they are addressing stormwater runoff control during construction	Same as year 4
4-4	Street Opening permit process	DPW	Inspections conducted for compliance with Stormwater Regulations	DPW inspector assigned to this task	Inspections documented and reported in annual report
4-5	Building Permit process	Building Dept.	Appropriate applicants referred to DPW for stormwater controls	permit tracking program being developed to ensure compliance	Permit tracking continues

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
5-1	Erosion and Sediment Control ByLaw	DPW	Same as control measure 4-1	Bylaw deferred until special town meeting in the fall of 2007; committee forming to establish bylaw language	Amend stormwater regulations to incorporate erosion and sediment control provisions
Revised	<i>Incorporate provisions into Stormwater Regulations as policies</i>	DPW	All construction projects subject to Building Permit reviewed for compliance with policy	DPW inspector assigned to this task	Projects documented and reported in annual report
5-2	DPW Runoff Control Policy	DPW	Development / redevelopment projects required to handle stormwater on-site	Plan review and inspection procedure in place; estimated that 75% of potential projects are being reviewed	Goal is 100% of applicable projects are reviewed and inspected

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
6-1	Street Sweeping	DPW	Sweep all public streets annually	All public streets swept at least once per year	Same as year 4
6-2	Catch Basin Cleaning	DPW	Clean all public catch basins annually	All public catch basins cleaned at least annually	Same as year 4
6-3	Drainage Improvement Projects	DPW	Incorporate structural BMPs into each project	Two drainage projects completed (Drabington Way and Brown Street) utilizing deep sump catch basins	Church Street project planned, including approx. 3,500 lin. ft. of drainage and road improvements, incorporating stormwater BMPs
6-4	DPW Housekeeping	DPW	Conduct environmental audit, implement recc.	Completed	
<i>Revised</i>	<i>Environmental Management System</i>	<i>DPW</i>	<i>Develop and Implement Environmental Management System</i>	<i>Continual improvements to EMS and identification of new environmental aspects and impacts</i>	<i>Continual improvements to EMS and identification of new environmental aspects and impacts</i>
6-5	Roadway De-icing Program	DPW	Install computerized spreader controls; alt. dispensing equipment	Spreader controls on all equipment; further reductions of salt use achieved (590 lbs/lane mile for winter '05-06 season, down to 566 lbs/lane mile for winter '06-07)	Install and place into operation on remainder of fleet; continue to track usage to achieve optimal application rate
6-6	Waterway Maintenance	DPW	Clear waterways of debris, 3 year rotating basis	Waterway maintenance work suspended due to lack of manpower	
<i>Revised</i>	<i>Ditch maintenance</i>	<i>East Middlesex Mosquito Control Project</i>	<i>Clear sediment from ditches</i>	<i>Approx. 2,300 l.f. of ditch clearing accomplished in several trouble spots</i>	<i>Identify and clean as time and budget allows</i>

6a. Additions

6-7	Employee Training Program	DPW	Provide all departments with training	Done for DPW staff as part of EMS program	Training for other departments planned for summer '07
6-8	New DPW Facility	DPW	Incorporate Green Building Design into project	Completed feasibility study for new facility on same site	Conduct final design of new facility

Part IV. Summary of Information Collected and Analyzed

A summary of water quality monitoring results from Cambridge Water Supply (CWS) is attached (Attachment B). In general the most recent data shows very low levels of fecal coliform bacteria compared to the range of concentrations measured at stream locations in prior sampling rounds. Weston has received no indication of specific water quality concerns from staff in the Watershed Protection Division of CWS. This agency has staff dedicated to monitoring water quality within the watershed on a daily basis.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

		2005-2006	2006-2007
Stormwater management position created/staffed	(y/n)	Y	Y
Annual program budget/expenditures	(\$)	\$305,000	\$341,000

Education, Involvement, and Training

		2005-2006	2006-2007
Estimated number of residents reached by education program(s)	(# or %)	200 households via 4 th grade lesson plan	200 households via 4 th grade lesson plan
Stormwater management committee established	(y/n)	n	y
Stream teams established or supported	(# or y/n)	n	n
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	n	n
Household Hazardous Waste Collection Days			Scheduled for 4/28/07
▪ days sponsored	(#)	1	1
▪ community participation	(%)	239 cars (est. 7% of pop.)	TBD
▪ material collected	(tons or gal)	3,130 lbs	TBD
School curricula implemented	(y/n)	y	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
Estimated or actual number of outfalls	(#)	310
System-Wide mapping complete	(%)	100
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS / GPS	(%)	100
Outfalls inspected/screened	(# or %)	100
Illicit discharges identified	(#)	0
Illicit connections removed	(#) (est. gpd)	NA
% of population on sewer	(%)	0.3*
% of population on septic systems	(%)	99.7

* residents at Regis College, which is sewerred to the MWRA via private force main.

Construction

		2005-2006	2006-2007
Number of construction starts (>1-acre)	(#)	32	22
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	100%	100%
Site inspections completed	(# or %)	100%	100%
Tickets/Stop work orders issued*	(# or %)	2	0
Fines collected	(# and \$)	0	0
Complaints/concerns received from public	(#)	2	0
* letters sent to developers with corrective action requests re: stormwater management			

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	50%
Site inspections completed	(# or %)	50%
Estimated volume of stormwater recharged	(gpy)	unknown

Operations and Maintenance

		2005-2006	2006-2007
Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	1	1
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	1	1
Number of drainage structures repaired or rebuilt	#	41	12
Total number of structures cleaned	(#)	587	587
Storm drain cleaned	(LF or mi.)	25 systems (length unk.)	300 l.f. approx.
Ditches cleaned by East Middlesex Mosquito Control	l.f.	1,000-1,500	2,300

Operations and Maintenance (cont)

Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	570 tons*	250 tons
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		landfill	landfill
Cost of screenings disposal (including trucking and disposal)	(\$)	\$23/ton	\$27/ton
*Total hauled off-site in early 2006 was 1,041 tons, including material accumulated from ½ of town in 2004, all of town in 2005 and 1/3 of town in 2006. Calculated amount from 2005 is 570 tons.			

		2005-2006	2006-2007
Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	2	2
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	2	2
Qty. of sand/debris collected by sweeping	(lbs. or tons)	2,200 tons*	2,100 tons
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	landfill cover	landfill cover
Cost of sweepings disposal	(\$)	\$9/ton	\$16/ton
Vacuum street sweepers purchased/leased	(#)	0	0
Vacuum street sweepers specified in contracts	(y/n)	N	N
* 3,372 tons hauled out in late 2005, represented all of 2005 sweepings plus some from 2004. In 2004, only 1,000 tons of accumulated material was hauled off-site. Two year total estimated sweepings was 4,400 tons, therefore one year amount is half, or 2,200 tons.			

		2005-2006	2006-2007
Reduction in application on public land of: (“N/A” = never used; “100%” = elimination)			
▪ Fertilizers (reductions on Recreation Dept. fields only)	(lbs. or %)	0%	
▪ Herbicides (reductions on Recreation Dept. fields only)	(lbs. or %)	0%*	
▪ Pesticides (reductions on Recreation Dept. fields only)	(lbs. or %)	0%*	
* organic products being used at Memorial Pool			

Operations and Maintenance (cont)

		2005-2006	2006-2007
Anti-/De-Icing products and ratios Weston has expanded salt-only usage to cover approx. 1/3 of Town for winter '06-07 season	% NaCl	25-50%	25-50%
	% CaCl ₂	5% pre-wet	5% pre-wet
	% MgCl ₂	0	0
	% CMA	0	0
	% Kac	0	0
	% KCl	0	0
	% Sand	75-50%	75-50%
Pre-wetting techniques utilized	(y/n)	Y	Y
Manual control spreaders used	(y/n)	Y	Y
Automatic or Zero-velocity spreaders used	(y/n)	Y	Y
Estimated net reduction in typical year salt application	(lbs. or %)	33%	4%
Salt pile(s) covered in storage shed(s)	(y/n)	Y	Y
Storage shed(s) in design or under construction	(y/n)	NA	NA

