

Municipality/Organization: Town of Wellesley

EPA NPDES Permit Number: MA041067

MassDEP Transmittal Number: W-036293

Annual Report Number

& Reporting Period:

No. 4 April 1, 2006 – March 31, 2007

**NPDES PII Small MS4 General Permit
Annual Report
(Due: May 1, 2007)**

Part I. General Information

Contact Person: Stephen S. Fader, P.E.

Title: Town Engineer

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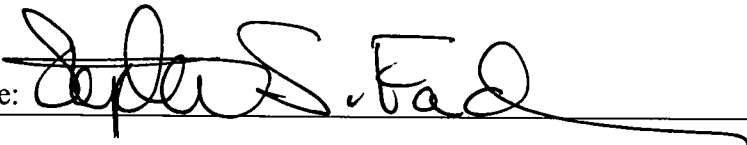
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Certification:

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: Stephen S. Fader, P.E.

Title: Town Engineer

Date: May 1, 2007

Part II. Self-Assessment

The Town of Wellesley has completed the required self-assessment and has 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
1.1	Inform the general public about their role in stormwater management.	Town Engineer/DPW	Brochures mailed to every residence by fall 2006.	Informational brochure designed and being reviewed internally. A draft copy is included as attachment (4).	Continue to exhibit SuAsCo display in public buildings Brochure to be mailed to residences. Prepare article about stormwater management in next DPW newsletter.
1.2	Inform residents about catch basin stenciling.	Town Engineer/DPW	Information published in at least one DPW newsletter during FY 07	1 neighborhood group contacted. (Friends of Morses Pond Association). They have expressed a willingness to perform stenciling around Morses Pond.	Prepare article about catch basin stenciling for next available DPW newsletter.
1.3	Continue ongoing pesticide awareness campaign.	Natural Resources Commission	Reach 1000 residences	Brochures mailed out to residences and local landscapers. Articles in Wellesley Townsman and on Town web site. Presentations at local events.	Continue with outreach program.
1.4	Continue annual household hazardous waste collection day.	DPW Recycling & Disposal Division	Significant amounts of materials collected and number of vehicles entering site.	Annual collection was held on May 7, 2006. See PartV, Education, Involvement, and Training for additional information.	Annual collection to be held on May 6, 2007. Waste oil is accepted on a daily basis.
1.5	Pond Restoration Program - Public Awareness	Town Engineer/DPW and Natural Resources Commission	Notable reduction of nutrient concentrations in ponds, particularly P and N.	Funding approved under CPA for construction and installation of a Phosphorous/sedimentation inactivation system for Morses Pond. Funding approved for dredging of a portion of Morses Pond. (subject to debt exclusion vote, May 2007)	Complete design and permitting for phosphorous inactivation system. Begin operating system by spring 2008.
1.6	Brochures mailed to businesses to promote good housekeeping measures at commercial and industrial activities.	Town Engineer/DPW	Brochures mailed to selected businesses by fall 2006.	Informational brochure targeting businesses was developed.	Targeted businesses to be identified and brochures to be mailed
Revised	Defer to permit year 5.				

1.7	Continue program to discourage feeding of waterfowl at Town Hall Duck Pond.	Natural Resources Commission and DPW	Reduction in duck population to 8 breeding pairs, reduction of fecal coliform measured in Fuller Brook.	Signs are posted at feeding areas. Pond was dredged and flow diversion pipe installed to create improved circulation and mixing in easterly lobe of pond. Please refer to data collected in Part IV.	Continue program. Evaluate success of Duck Pond improvements by testing Fuller Brook for fecal coliform during summer 07.
1.8	Coordinate with local groups for assistance in outreach.	Town Engineer/DPW	Participation by at least one local group in catch basin stenciling program.	Friends of Morses Pond contacted to assist with catch basin marking.	Use publicity to encourage participation by additional neighborhood groups.
1.9	Institute a program for pet waste management	Town Engineer/DPW	Notable Reduction in measured fecal coliform from previous sampling in 2003	Pet waste containers and signs were placed at three public parks. Two pet waste containers were placed at another public park by a citizen group. A photo of a typical placement is included as attachment (5).	Continue program. Place containers, plastic bags and signs in public parks as a short term solution.

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	Hold public hearings for new regulations.	Town Engineer/DPW	BMP COMPLETED		
2.2	Hold public hearings for new site plan bylaw.	Planning Board/DPW	BMP COMPLETED		
2.3	Seek volunteers for catch basin stenciling program and stream clean up.	Town Engineer/DPW	Volunteer groups formed, stream clean up and stenciling in progress.	Annual stream clean up day along Charles River held, April 2006. 50 participants.	Expect to involve neighborhood groups to perform stenciling program in residential areas. 2007 clean up day scheduled April 21.
2.4	Establish hot line to report illegal dumping.	Department of Public Works.	Number of incidents of illegal dumping being reported.	Hot line established email address: stormwater@wellesleyma.gov and publicized on Town's web site.	No incidents reported using hot line to date. Publicize in DPW newsletter and stormwater brochure.

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	Develop stormwater system layer on GIS.	Town Engineer/DPW	Map completed and showing 100% of outfalls.	BMP COMPLETED	Update as required.
3.2	Develop stormwater regulations.	Town Engineer/DPW	Regulations adopted and 100% permit compliance.	BMP COMPLETED	Use regulations to control discharges into the Town's stormwater collection system.
3.3	Inspect outfalls, sample and test dry weather discharges.	Town Engineer/DPW		Wet weather sampling conducted in streams and several outfalls. Priority areas identified for further testing. In house program established using IDDE protocol. One complaint was investigated using protocol.	Continue implementation of IDDE in areas of suspected problems.
Revised			All 330 outfalls visually inspected by summer 2007.		
3.4	Use water quality modeling software to identify priority areas for testing.	Town Engineer/DPW		Funding for water quality modeling software (XP-SWMM) was obtained.	Purchase and install software. Conduct training.
Revised			Software in use by fall 2007.		
3.5	Trace identified illicit discharges.	Town Engineer/DPW	Most illicit discharges eliminated by summer 2007	No significant illicit discharges detected during wet weather sampling in 2006. One discharge from a commercial boiler was discovered and reconnected to sanitary sewers.	Continue implementation of IDDE in areas of suspected problems.
3.6	Establish catch basin stenciling program.	Town Engineer/DPW		No markers or stencils placed in Permit Year 4.	Expand to residential areas as program gains acceptance with volunteer groups and the public. Imbed cast iron curb markers in new concrete sidewalk during street reconstruction projects.
Revised	Use plastic or cast iron markers instead of stencils.		At least one marker on every street and every 500' on major streets.		
3.7	Training for public employees to report illicit discharges.	Town Engineer/DPW	Public employees observing and reporting illegal dumping.	Did not accomplish this task.	DPW Engineering Division to arrange with on call professional engineering consultant to prepare and conduct training program.

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	Develop erosion and sedimentation control measures.	Town Engineer/DPW	Regulations adopted and 95% permitting compliance.	Erosion and Sedimentation Control Regulations have been drafted and were reviewed by technical consultant.	Finalize and adopt regulations after public hearing and comment.
Revised			Adopt during winter 2008		
4.2	Require erosion and sedimentation controls in site plan review.	Planning Board	Amendment to zoning bylaw adopted and 100% permitting compliance.	Amendment to zoning bylaw to require review of drainage and erosion and sedimentation controls for residential projects disturbing 1 acre or more was adopted.	Compliance with BMP 4.1 will be incorporated into site plan review.
4.3	Establish procedures for inspections and enforcement of regulations.	Town Engineer/DPW	Inspections being conducted, achieve 80% compliance rate.	Did not accomplish this task.	SOP for inspections to be established after new Erosion and Sedimentation Control Regulations are adopted.
Revised			Establish by Winter 2008.		

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	Amend zoning bylaw (Site Plan Review) to address post construction runoff.	Planning Board	Amendment to zoning bylaw adopted and 100% permitting compliance.	BMP COMPLETED	Implementation of regulations.

5.2	Monitor inspections and maintenance of privately owned BMP's.	Town Engineer/DPW	Inspection and maintenance of BMP's being performed, town receiving annual reports.	Inspections and maintenance of private BMP's were performed. A mechanism to monitor inspections and receive annual reports was not initiated.	Set up mechanism to receive and maintain annual reports.
5.3	Review and approve selected water quality BMP's and supervise installation.	Planning Board	Approved water quality BMP's installed and functioning	Regulations adopted to require BMP's on sites disturbing one acre or more.	Ongoing

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	Evaluate existing controls for preventing runoff from municipal operations.	Department of Public Works	Storage facilities constructed and employees trained in spill prevention.	New DPW facilities were designed to include measures to treat stormwater runoff. Funding not secured as of end of this reporting period.	Seek and obtain funding and begin construction of new facilities. Incorporate recommendations from SWPPP by consultant.
6.2	Conduct employee training for hazardous materials, vehicle refueling and washing, and preventative maintenance.	Department of Public Works	100% attendance by DPW employees.	Right to Know training was conducted for DPW employees. Training for vehicle refueling and washing, and preventive maintenance is ongoing as per DPW SOP.	Continue training.
6.3	Remove aquatic weeds from Morses Pond.	Department of Public Works and Natural Resources Commission	Visual observation of reduction in invasive and nuisance aquatic weeds.	Weed harvesting conducted by machine at Morses Pond and Longfellow Pond. Hand removal of water chestnuts at Rockridge Pond. A new weed harvester was purchased. Delivery and training expected May 2007. An aggressive weed harvesting plan was designed by the Town's lake management consultant.	Continue program, summer 2007. Continue hand removal of water chestnuts at Rockridge Pond. Continue mechanical harvesting at Morses Pond and Longfellow Pond. Implement aggressive weed harvesting program.
Revised	Expand weed harvesting to other ponds				

6.4	Dredge and remove silt, organic sediments and aquatic weeds from selected ponds.	Department of Public Works and Natural Resources Commission	Reduction in nutrients and elimination of algal blooms and fish kills.	Dredging of Town Hall Duck Pond in completed 2006. Funding for phosphorous inactivation at Morses Pond obtained spring 2007. Funding for dredging subject to debt exclusion vote.	Complete design and permitting for phosphorous inactivation system. Begin operating system by spring 2008.
6.5	Conduct training in spill prevention procedures and conduct annual deployment exercise.	Department of Public Works and Fire Department.	All spill response personnel are trained and have participated in at least one deployment exercise.	Consultant hired to plan and conduct training and deployment exercise.	Training and deployment exercise to be conducted in May 2007.
Revised	Defer to permit year 4				
6.6	Construct vehicle washing facility at the DPW highway yard.	Department of Public Works	BMP COMPLETED		
6.7	Conduct training for Park & Tree workers on reduced pesticide use.	Department of Public Works and Pesticide Awareness Coordinator (NRC)	Workers are trained and toxic chemicals are not being detected in water bodies.	Periodic training ongoing	Continue Town's (Natural Resources Commission) Integrated Pest Management Policy
6.8	Review procedures for handling and storage of hazardous materials.	Department of Public Works	Minimize exposure of hazardous materials to stormwater.	Right to Know training was conducted for DPW employees.	Hazardous materials Standard Operating Procedure (SOP) to be prepared spring 2007.
6.9	Conduct training for DPW employees on new construction and land disturbance.	Department of Public Works	Training is conducted every other year. 100% attendance by DPW employees.	Not scheduled permit year 4 due to ongoing design of new DPW Water and Sewer Division facility.	Training to be conducted after construction of new facility.
6.10	Continue ongoing program to clean catch basins.	Department of Public Works	Clean critical catch basins annually, others when 60% full.	Ongoing program. BUD was drafted to use catch basin cleanings as a landfill cover.	Continue seeking BUD as per DEP comments and guidelines. Obtain BUD approval.
6.11	Continue ongoing program for street sweeping.	Department of Public Works	Sweep commercial areas weekly, residential streets annually.	Ongoing program. BUD to reuse street sweepings was determined not to be feasible at this time.	Continue with street sweeping program.

6.12	Review and revise schedules for municipal maintenance activities.	Department of Public Works	Revised schedules have improved efficiency of operations.	Operation and maintenance plan for new facility was drafted	Revise as necessary with construction of new facility.
6.13	Inventory, inspect and maintain town owned structural controls.	Department of Public Works	Volume of material being removed.	Town owned oil – water separators have been inventoried, inspected and placed on periodic maintenance schedules. 11 Oil –water separators cleaned this year.	Continue periodic inspection and cleaning.

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

NO TMDL'S ESTABLISHED FOR CHARLES RIVER WATERSHED AS OF DATE OF REPORT

Part IV. Summary of Information Collected and Analyzed

Sampling and testing was conducted during permit year 4 at the Town's recycling and disposal facility. The results are included as attachment (1).

Wet weather sampling for fecal coliform was conducted at various locations in the town. The results are included as attachment (2).

Sampling for E.coli was conducted on the Charles River by Roger Frymire at two locations and made available to the Town. The results are included as attachment (3).

Part V. Program Outputs & Accomplishments (OPTIONAL)

(Since beginning of permit coverage unless specified otherwise by a **, which indicates response is for period covering April 1, 2006 through March 31, 2007)

Education, Involvement, and Training

	(Preferred Units)	Response
Household Hazardous Waste Collection Days		
▪ days sponsored**	(#)	1
▪ community participation**	(# or %)	6%
▪ material collected**	(tons or gal)	13.22 tons
School curricula implemented	(y/n)	no

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

	(Preferred Units)	Response
Outfall mapping complete	(%)	100%
Estimated or actual number of outfalls	(#)	330
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	100%
Mapping method(s)		
▪ Paper/Mylar	(%)	100
▪ CADD	(%)	0
▪ GIS	(%)	100
Outfalls inspected/screened ** (including in waterways)	(# or %)	27
Outfalls inspected/screened (Since beginning of permit coverage) (includes waterways and retesting)	(# or %)	98
Illicit discharges identified **	(#)	1
Illicit discharges identified (Since beginning of permit coverage)	(#)	1
Illicit connections removed **	(%); est.gpd	1; 25 gpd
Illicit connections removed (Since beginning of permit coverage)	(%); est.gpd	1; 25 gpd
% of population on sewer	(%)	96%
% of population on septic systems	(%)	4%

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	80%
Site inspections (for proper BMP installation & operation) completed **	(# or %)	100%
BMP maintenance required through covenants, escrow, deed restrictions, etc.	(y/n)	yes
Low-impact development (LID) practices permitted and encouraged	(y/n)	no

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets) **	(times/yr)	Every 2 years
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	Every year
Qty of structures cleaned **	(#)	308
Qty. of storm drain cleaned **	(l.f.)	4219 l.f.
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	345 c.y.
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Landfill, BUD pending

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	\$21,200.00
• Hourly or per basin contract rate **	(\$/hr or \$ per basin)	In house – not contracted
• Disposal cost**	(\$)	\$80.00/ton
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 **	(%)	50%
• % Structures cleaned with vacuor **	(%)	50%

(Preferred Units) Response

Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	Every year
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Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	2 per week
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	1070 c.y.
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Landfill
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	\$53,650.00
• Hourly or lane mile contract rate **	(\$/hr. or ln mi.)	In house – not contracted
• Disposal cost**	(\$)	\$80.00/ton
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	2 owned
• Vacuum street sweepers owned/leased	(#)	none
• Vacuum street sweepers specified in contracts	(y/n)	n/a
• % Roads swept with rotary brush sweepers **	%	100%
• % Roads swept with vacuum sweepers **	%	

Number of municipal oil-water separators cleaned.		14
Tons of sludge and sediment removed		6.1
Gallons of oily water removed		4079

Reduction (since beginning of permit coverage) in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	10%
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	
Integrated Pest Management (IPM) Practices Implemented	(y/n)	yes

Average Ratio of Anti-/De-Icing products used ** (also identify chemicals and ratios used in specific areas, e.g., water supply protection areas) Calcium Chloride 37% - 39% CaCl ₂ Solution Sodium Chloride 98% - 99% NaCl Solution		
Pre-wetting techniques utilized **	(y/n or #)	yes
Manual control spreaders used **	(y/n or #)	no
Zero-velocity spreaders used **	(y/n or #)	yes
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/lb mi. or %)	indeterminate
Estimated net reduction or increase in typical year sand application rate **	(±lbs/lb mi. or %)	indeterminate
% of salt/chemical pile(s) covered in storage shed(s)	(%)	100%
Storage shed(s) in design or under construction	(y/n or #)	In use
100% of salt/chemical pile(s) covered in storage shed(s) by May 2008	(y/n)	yes

Water Supply Protection

Storm water outfalls to public water supplies eliminated or relocated	# or y/n	no
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	no
Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	no