

STEPHEN S. FADER, P.E.
TOWN ENGINEER

DOUGLAS R. STEWART, P.E.
ASSISTANT TOWN ENGINEER

TOWN OF WELLESLEY
WELLESLEY, MASSACHUSETTS 02481



DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION

P.O. BOX 364
455 WORCESTER STREET
781-235-7600
FAX 781-237-0047

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May 5, 2006

Ms Thelma Murphy
U.S. Environmental Protection Agency
Water Technical Unit
P.O. Box 8127
Boston, MA 02114

**RE: NPDES Phase II Small MS4 General Permit
Annual Report
Wellesley, Massachusetts
EPA NPDES Permit Number: MA 041067
MA DEP Transmittal Number: W-036293**

Dear Ms. Murphy:

Please find enclosed herewith a copy of our annual report for the period March 2005 to March 2006 as required by our NPDES Phase II Small MS4 General Permit. The annual report highlights stormwater related activities and tasks performed during the past year.

Should you have any questions or if you require additional information, please feel free to contact me.

Very truly yours,

A handwritten signature in black ink, appearing to read "Stephen S. Fader", is written over a horizontal line.

Stephen S. Fader, P. E.
Town Engineer

Enclosure

Cc: M. Pakstis, Director
J. Curby, Assistant Director
H. Larsen, Executive Director
J. Bowser, Natural Resources Commission
R. Brown, Planning Board

Municipality/Organization: WELLESLEY

EPA NPDES Permit Number: MA041067

MaDEP Transmittal Number: W-036293

**Annual Report Number
& Reporting Period:** No. 3: March 05-March 06

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

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

Title: Town Engineer

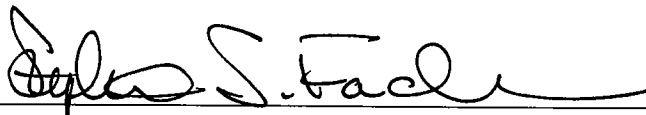
Telephone #: (781) 235-7600 ex. 310

Email: stevef@ci.wellesley.ma.us

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 5, 2006

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.

An additional BMP is being added under Public Education and Outreach to address pet waste management.

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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
1.1	Inform the general public about their role in stormwater management.	Town Engineer/ DPW	Brochures mailed to every residence by fall 2006.	SuAsCo stormwater display exhibited with informational brochures at Town Hall. Newly adopted regulations posted on Town web site.	Continue to exhibit SuAsCo display. Brochure being designed for fall 2006 mailing to residences.
1.2	Inform residents about catch basin stenciling.	Town Engineer/ DPW	Information published in at least one DPW newsletter during FY 07	No interest expressed from neighborhood groups	Prepare press release 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 distribution of resource guides. Articles in Wellesley Townsman and on CATV. 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 1, 2005.	Annual collection to be held on May 7, 2006.
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 procurement of new weed harvester equipment.	Procurement of new weed harvester and seeking of funding for phosphorus inactivation, and dredging of a limited area of Moses Pond.

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.	Did not accomplish this task.	Brochure being designed. Identify businesses to target and receive mailing.
Revised	Defer to permit year 4.				
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 currently being dredged, flow diversion pipe installed to create improved circulation and mixing in easterly lobe of pond.	Continue program. Evaluate success of Duck Pond improvements by testing Fuller Brook for fecal coliform during summer 06.
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.	No progress this year	Contact Friends of Morses Pond
1.9	Institute a program for pet waste management	Town Engineer/ DPW	Notable Reduction in measured fecal coliform from previous sampling in 2003	N/A - new BMP	Develop 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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
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.	Expect to involve neighborhood groups to perform stenciling program in residential areas.

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	Publicize hotline on town web site, CATV and in DPW Newsletter and receive information.
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3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
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 Revised	Inspect outfalls, sample and test dry weather discharges.	Town Engineer/ DPW	All 330 outfalls visually inspected by summer 2007.	Dry weather sampling conducted in streams and several outfalls. Priority areas identified for further testing.	Establish in house program using IDDE protocol. Sample priority areas.
3.4 Revised	Use water quality modeling software to identify priority areas for testing.	Town Engineer/ DPW	Software in use by fall 2006.	Water quality modeling software selected (XP-SWMM) but not yet in use. Model being calibrated.	Purchase and install software. Conduct training.
3.5	Trace identified illicit discharges.	Town Engineer/ DPW	Most illicit discharges eliminated by summer 2007	No illicit discharges detected as a result of recent sampling.	Conduct testing using IDDE protocol.
3.6 Revised	Establish catch basin stenciling program. Use plastic or cast iron markers instead of stencils.	Town Engineer/ DPW	At least one marker on every street and every 500' on major streets.	8 cast iron curb markers placed in new concrete sidewalks along Route 16 (Washington Street).	Expand to residential areas as program gains acceptance with public. Imbed cast iron curb markers in new concrete sidewalk during street reconstruction projects.

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 prepare lesson plan for training. Schedule training for Winter 07.
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4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
4.1 Revised	Develop erosion and sedimentation control measures.	Town Engineer/ DPW	Regulations adopted and 95% permitting compliance. Adopt by Spring 2007	Erosion and Sedimentation Control Regulations have been drafted and are undergoing review by technical consultant.	Finalize and adopt regulations after public hearing and comment.
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 Revised	Establish procedures for inspections and enforcement of regulations.	Town Engineer/ DPW	Inspections being conducted, achieve 80% compliance rate. Establish by Spring 2007.	Scheduled to be addressed Fall 2006.	Establish after new Erosion and Sedimentation Control Regulations are adopted.

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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
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.	Regulations adopted to require BMP's on sites disturbing one acre or more.	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 3 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 4
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 being designed including measures to treat stormwater runoff.	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.	Training was conducted in prior years.	Training to be conducted winter 2007
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 in progress, summer 2005. Funding approved to purchase new equipment.	Continue program, summer 2006. Procure new weed harvesting equipment.
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 progress, winter 2006. Management plan established for Morses Pond.	Seek funding for dredging and phosphorous inactivation at Morses Pond fall 2006 or spring 2007.
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.	Did not accomplish this task.	Training to be conducted late spring or summer 2006
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.	Did not accomplish this task.	Hazardous materials Standard Operating Procedure (SOP) to be prepared spring 2006.

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 3.	Training to be conducted in Year 4.
6.10	Continue ongoing program to clean catch basins.	Department of Public Works	Clean critical catch basins annually, others when 60% full.	Ongoing program. Town has applied to DEP for BUD to reuse solid waste generated by this activity for the manufacture of a soil amendment product using compost.	Continue seeking BUD as per DEP comments and guidelines.
6.11	Continue ongoing program for street sweeping.	Department of Public Works	Sweep commercial areas weekly, residential streets annually.	Ongoing program. Town has applied to DEP for BUD to reuse solid waste generated by this activity for the manufacture of a soil amendment product using compost.	Continue seeking BUD as per DEP comments and guidelines.
6.12	Review and revise schedules for municipal maintenance activities.	Department of Public Works	Revised schedules have improved efficiency of operations.	Schedules under review by DPW management.	Revise as necessary.
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.	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

(see attachments)

Sampling for fecal coliform was conducted at various locations in the town. However, none of the results exceeded the state standard of 200col/100ml. The results are attached.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Education, Involvement, and Training

Household Hazardous Waste Collection Days	
▪ days sponsored	1
▪ community participation	5%
▪ material collected	22.45 tons
School curricula implemented	no

Legal/Regulatory

Regulatory Mechanism Status (indicate with "X")	In Place Prior to Phase II	Under Review	Drafted	Adopted
▪ 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	330		
System-Wide mapping complete	100%		
Mapping method(s)			
▪ Paper/Mylar	yes		
▪ CADD	no		
▪ GIS	yes		
Outfalls inspected/screened	23		
Illicit discharges identified	0		
Illicit connections removed	0		
% of population on sewer	96%		
% of population on septic systems	4%		

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	Every 2 years	
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	Every year	
Total number of structures cleaned	150	
Storm drain cleaned	4803 LF	
Qty. of screenings/debris removed from storm sewer infrastructure	167 c.y.	
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)	4710 c.y.	
Cost of screenings disposal	\$45.00/c.y.	

Number of municipal oil-water separators cleaned.	14	
Tons of sludge and sediment removed	10.46	
Gallons of oily water removed	7500	

Average frequency of street sweeping (non-commercial/non-arterial streets)	Every year	
Average frequency of street sweeping (commercial/arterial or other critical streets)	2/week	
Qty. of sand/debris collected by sweeping	496 c.y.	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	Landfill, BUD pending	
Cost of sweepings disposal	\$45.00/c.y.	
Vacuum street sweepers purchased/leased	none	
Vacuum street sweepers specified in contracts	none	
Anti-/De-Icing products and ratios	% NaCl % CaCl ₂ % MgCl ₂ % CMA % K _{ac} % KCl % Sand	
Calcium Chloride 37% - 39% CaCl ₂ Solution		
Sodium Chloride 98% - 99% NaCl Solution		

Pre-wetting techniques utilized	yes	
Manual control spreaders used	no	
Automatic or Zero-velocity spreaders used	yes	
Estimated net reduction in typical year salt application	indeterminate	
Salt pile(s) covered in storage shed(s)	yes	
Storage shed(s) in design or under construction	In use	