Municipality/Organization: **Town of Wellesley**

EPA NPDES Permit Number: **MA041067**

MassDEP Transmittal Number: **W-036293**

Annual Report Number & Reporting Period: **No. 5 April 1, 2007 – March 31, 2008**

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2008)

Part I. General Information

Contact Person: Stephen S. Fader, P.E. Title: Town Engineer

Telephone #: (781) 235-7600 ex. 3310 Email: sfader@wellesleyma.gov

Mailing Address: 455 Worcester Street, Wellesley, MA 02481

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, 2008

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 with the following exceptions:

The Town has not yet established erosion and sedimentation control regulations. In the interim, the Town does require builders, architects and engineers of their requirement to obtain coverage under the NPDES Construction General Permit. Erosion and sedimentation control requirements are a major part of many of the Town's regulatory and permitting processes and the Mass. DEP Stormwater regulations for a majority of projects implemented publicly and privately. The major issue facing establishment of the Erosion and Sedimentation Control Regulations is the enforcement of said regulations and providing adequate funding for this purpose.

The Town has not yet completed a visual inspection of all outfalls. However, it responds to all complaints of possible illicit discharges, such as Mass. DEP's sampling results along a portion of Fuller Brook and the sampling conducted by a private citizen at Cliff Road and Cold Spring Brook.

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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future Permit Years
1.1	Inform the general public about their role in stormwater management.	Town Engineer/ DPW and Natural Resources Commission	Brochures mailed to every residence by fall 2006.	Brochures were mailed to every residence, June 2007. A copy of the mailing is included as attachment (1). NRC held organic lawn care forum.	Continue to exhibit SuAsCo display in public buildings. 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	Unable to include article in prior newsletters.	Article about catch basin stenciling to be placed in 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. A copy of the mailing is included as attachment (2). Article on Town web site. Wellesley Country Club (golf course) has adopted integrated pest management program.	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 6, 2007. See PartV, Education, Involvement, and Training for additional information.	Annual collection to be held on May 4, 2008. 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 Community Preservation Act for construction and installation of a Phosphorous inactivation system for Morses Pond. Debt exclusion vote passed, May 2007 to approve funding for dredging of a portion of Morses Pond. Pond management study completed for Morses Pond	Complete design and permitting for phosphorous inactivation system. Begin operating system by June 2008. Pond manager selected and hired.

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 is under development.	Targeted businesses to be identified and brochures to be mailed
Revised	Defer to next general permit.				
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. Due to public awareness, duck population has diminished and remained consistently low.	Continue program. Evaluate success of Duck Pond improvements by testing Fuller Brook for fecal coliform during summer 08. Outfall testing was completed during summer 07.
1.8	Coordinate with local groups for assistance in outreach.	Natural Resources Commission and DPW	Participation by at least one local group in catch basin stenciling program.	Local citizen's group (Friends of Morses Pond) participating in program to reduce use of fertilizers containing phosphorous and nutrients.	Use DPW newsletter to encourage participation by neighborhood groups. Improve outreach.
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 have been placed at public locations	Continue program.

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future Permit Years
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 and NRC	Volunteer groups formed, stream clean up and stenciling in progress.	Annual stream clean up day along Charles River and Fuller Brook held, April 21, 2007. About 35 participants.	Expect to involve neighborhood groups to perform stenciling program in residential areas. 2008 clean up day scheduled April 26.

2.4	Establish hot line to report illegal dumping.	Department of Public Works.	Number of incidents of illegal dumping being reported.	BMP COMPLETED	Continue to publicize hotline.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future Permit Years
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		34 outfalls were inspected during dry weather. 6 were tested for e-coli. Two surfactant tests were conducted in accordance with the IDDE protocol	Continue implementation of IDDE in areas of suspected problems.
Revised			All 330 outfalls visually inspected by summer 2008.		
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 2008.		
3.5	Trace identified illicit discharges.	Town Engineer/ DPW	Most illicit discharges eliminated by summer 2007	6 outfalls were tested for e-coli. No significant illicit discharges detected during dry weather sampling in 2007.	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 5.	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.	Video training conducted for DPW managers.	Expand training capabilities to include DPW highway maintenance employees.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future Permit Years
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 2009		
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.	No mechanism for formal inspection. However,as part of permitting process for various projects, inspection of erosion and sedimentation control measures is provided.	SOP for inspections to be established after new Erosion and Sedimentation Control Regulations are adopted.
Revised			Establish by Winter 2009.		

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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future Permit Years

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/Wetlands Protection Committee/ZBA	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	Ongoing under site plan review and Project of Significant Impact review	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 5** (Reliance on non-municipal partners indicated, if any)	**Planned Activities – Future Permit Years**
6.1	Evaluate existing controls for preventing runoff from municipal operations.	Department of Public Works	Storage facilities constructed and employees trained in spill prevention.	Funding was secured for new DPW facilities and construction has begun. Measures to treat stormwater runoff are being installed.	Continue to implement recommendations from SWPPP.
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.	Mechanical weed harvesting conducted at Morses Pond and Longfellow Pond. Hand removal of water chestnuts at Rockridge Pond. Two weed harvesters are operating. An aggressive weed harvesting plan was implemented, developed by pond manager.	Continue program, summer 2008. Continue hand removal of water chestnuts at Rockridge Pond. Continue mechanical harvesting at Morses Pond and Longfellow Pond.
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.	Funding for dredging of northerly basin of Morses Pond was obtained.	Dredging project expected to be designed, permitted and implemented 2009-2010.
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.	Training and deployment exercise was conducted, May 2007.	Schedule future training for new employees as required.
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 2009.
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 5 due to ongoing design of new DPW Water and Sewer Division facility.	Training to be conducted after construction of new facility. Estimated completion date – Spring 2009.
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 approved by DEP and material was transported to landfill to use as a cover.	Continue with catch basin program.

6.11	Continue ongoing program for street sweeping.	Department of Public Works	Sweep commercial areas weekly, residential streets annually.	Ongoing program.	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 completed.	Operation and maintenance plan to be implemented when construction of new facility is completed in spring 2009. Plan will be revised as needed.
6.13	Inventory, inspect and maintain town owned structural controls.	Department of Public Works	Volume of material being removed.	Town owned structural BMP's and oil – water separators have been inventoried, inspected and placed on periodic maintenance schedules. 13 BMP's and 9 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>>*

AS OF DATE OF THIS REPORT A TMDL HAS BEEN ESTABLISHED FOR THE CHARLES RIVER WATERSHED FOR PATHOGENS

BMP ID #	**BMP Description**	**Responsible Dept./Person Name**	**Measurable Goal(s)**	**Progress on Goal(s) – Permit Year 5** (Reliance on non-municipal partners indicated, if any)	**Planned Activities – Future Permit Years**
7.1	Monitor Mass. DEP web site for 303D list, draft TMDL's and final TMDL's	Town Engineer	The Town is aware of its requirements under the TMDL report and has established BMP's for meeting the WLA.	Ongoing, EPA has established TMDL for pathogens	ongoing
7.2	Perform analytical testing for e-coli at various outfalls	Town Engineer	WLA are not being exceeded	Certain outfalls tested during Permit Year 5.	Review data, establish additional BMP's to insure WLA compliance
7.3	Continue T.V. inspection of sanitary sewer system	DPW Water & Sewer Division	100% inspection of system by 2012, all leaks repaired.	50% of system now inspected.	Inspect 10% per year until completion.

7b. WLA Assessment

The 2008 303(d) list identifies three waterbodies within the jurisdiction of the Town of Wellesley that are impaired by pathogens. Portions of two impaired segments of the Charles River, MA72-06 and MA 72-07, form the boundary between Wellesley and several other towns. Fuller Brook, MA72-18, has headwaters in Needham, but its confluence with Waban Brook is in Wellesley about 250' yards upstream from the Charles River at mile 40. It was noted that pathogens were no longer listed as an impairment for Rosemary Brook, MA72-25.

Based on the guidance provided in Section 5 of the TMDL, the town has focused on stormwater runoff, leaking sewer pipes, illicit sanitary sewer connections, pet waste and waterfowl contamination as potential sources of pathogens. Due to the urbanized nature of the Town, failing septic systems and agriculture are not considered to be significant sources of pathogens. There are no known CSOs in the Town. Nor are there any wastewater treatments plants operating within the Town. During Permit Year 5, 34 outfalls were inspected and 6 dry weather discharges were tested for e-coli. The Town has completed about 50% of a program to inspect its sanitary sewer system and repair leaking pipes and manholes. Pet waste is being addressed in BMP 1.9. It is suspected that pet waste is a significant cause of pathogens in storm water runoff. The Town will need to provide more pet waste containers and increase public awareness of the problem.

Waterfowl has been identified as the primary source of bacterial impairment in Fuller Brook. To this end, the town has taken steps to improve the water quality at the Town Hall Duck Pond by removing sediment, increasing flow through the stagnated basins of the pond and reducing the duck population. See BMP 1.7 .

Progress will be closely tracked and modifications and improvements will be implemented as required.

Part IV. Summary of Information Collected and Analyzed

Dry weather outfall inspection and testing for e-coli was conducted at various locations in the town. The results are included as attachment (3).

Sampling for e-coli was conducted at various tributaries of the Charles River by a private citizen (Roger Frymire) and made available to the Town. The results are included as attachment (4).

Water quality monitoring was conducted at 4 locations in Morses Pond as part of a program to control invasive aquatic plants. The results are included as attachment (5)

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, 2007 through March 31, 2008)

Education, Involvement, and Training

	(Preferred Units)	Response
Household Hazardous Waste Collection Days		
▪ days sponsored**	(#)	1
▪ community participation**	(# or %)	4.6%
▪ material collected**	(tons or gal)	10.97 tons
Waste oil collected FY07		12 tons
Hazardous material collected FY07		131 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 %)	34
Outfalls inspected/screened (Since beginning of permit coverage) (includes waterways and retesting)	(# or %)	132
Illicit discharges identified **	(#)	0
Illicit discharges identified (Since beginning of permit coverage)	(#)	1
Illicit connections removed **	(%); est.gpd	0
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 **	(#)	128
Qty. of storm drain cleaned **	(l.f.)	1614 l.f.
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	293 c.y.
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Crapo Hill Landfill

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	($)	$25,000
• Hourly or per basin contract rate **	($/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 vactor **	(%)	50%

	(Preferred Units)	Response
Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	Every year
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)	955 c.y.
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Landfill
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	($)	$81,048.00
• Hourly or lane mile contract rate **	($/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 stormwarer structural BMP's cleaned.		13
Tons of sludge and sediment removed		10
Gallons of oily water removed		100

Number of municipal oil-water separators cleaned.		9
Tons of sludge and sediment removed		10
Gallons of oily water removed		200

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		
Pre-wetting techniques utilized **	(y/n or #)	yes
Manual control spreaders used **	(y/n or #)	yes
Zero-velocity spreaders used **	(y/n or #)	no
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/ln mi. or %)	indeterminate
Estimated net reduction or increase in typical year sand application rate **	(±lbs/ln mi. or %)	indeterminate
% of salt/chemical pile(s) covered in storage shed. Some mixed sand/salt stored outside under cover.	(%)	100% covered
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

Does stormwater pollution affect me?

When left uncontrolled, stormwater pollution can result in the destruction of habitats for fish, wildlife, and aquatic life; a loss in aesthetic value; and threats to public health because of contaminated food, drinking water, and recreational waterways.

Something else you should know.

The following are considered illegal discharges into the Town's municipal stormwater drainage system: any solid waste, construction debris, paint or painting product, antifreeze, hazardous waste, oil, gasoline, grease and all other automotive and petroleum products, solvents and degreasers, drain cleaners, commercial and household cleaners; soap, detergent, ammonia, food and food waste, grass or yard waste, leaves, animal feces, dirt, sand, gravel, or other pollutant.

Any questions?

If you have any questions or need additional information please feel free to call the following phone number for assistance.

STORMWATER HOTLINE
Call: 781-235-7000 ext. 3313
Email: stormwater@wellesleyma.gov

Wellesley Waterways

LAKES
- Lake Waban
- Sabrina Lake

PONDS
- Abbott's Pond
- Town Hall Duck Pond
- Longfellow Pond
- Morses Pond
- Paintshop Pond
- Reed's Pond
- Rockridge Pond
- Skating Pond
- Farms Station Pond
- Wight's Pond

BROOKS
- Abbott Brook
- Academy Brook
- Bogle Brook
- Caroline Brook
- Cold Spring Brook
- Cold Stream Brook
- Fuller Brook
- Hurd Brook
- Indian Spring Brook
- Pollock Brook
- Rosemary Brook
- Sunnyside Brook
- Waban Brook

Stormwater Rules & Regulations
http://wellesleyma.virtualtownhall.net/Pages/WellesleyMA_DPW/1engStormwaterRegs.pdf

Town of Wellesley
Engineering Division
455 Worcester Street
Wellesley Hills, MA 02481
Phone (781) 235-7600
Fax (781) 237-0047

WHAT IS STORMWATER POLLUTION?

Why should I care about it? Does it really affect me?

Town of Wellesley

ATTACHMENT (1)

ATTACHMENT (2)

TOWN OF WELLESLEY *MASSACHUSETTS*

NATURAL RESOURCES COMMISSION

Town Hall, 525 Washington Street, Wellesley, Massachusetts 02482-5992

Heidi Gross, Chairman
Paul A. Cramer, Vice Chairman
Joan E. Gaughan, Secretary
Richard H. Bashian
Neal Seaborn

Telephone: (781) 431-1019, Ext. 2290
Facsimile: (781) 237-6495
Janet Hartke Bowser, Director
(781) 431-1019 Ext. 2290
Website: www.wellesleyma.gov/NRC

December 10, 2007

TO: Landscaping and Lawn Care Companies Doing Business in Wellesley

RE: The NRC Encourages You to Provide Organic Landscaping & Lawn Care Services and Notice of Upcoming NOFA Organic Land Care Professional Courses

The Natural Resources Commission (NRC) is committed to encouraging residents, landscapers and lawn care professionals to reduce and eliminate the use of herbicides and pesticides in order to protect public health, our natural resources and the Town's drinking water supply. Growing public awareness of the hazards associated with the use of herbicides and pesticides, plus new legislation mandating least toxic and non-toxic alternatives is fueling a new market opportunity for professionals knowledgeable in organic land care. The demand for organic landscaping and lawn care services has increased dramatically over the last several years, and the NRC strongly encourages you to offer organic landscaping and land care services to your clients. The NRC encourages you to learn more about organic land care by attending the upcoming **NOFA Organic Land Care Courses** that are described in more detail in the enclosed brochure. In addition, you are encouraged to become a NOFA Accredited Organic Land Care Professional (see www.nofa.org, phone- 978) 355-2853) and to become a member of the Ecological Landscaping Association (see www.ecolandscaping.org, 617-436-5838).

The NRC looks forward to developing a partnership with landscaping and lawn care professionals in order to create a healthy and sustainable environment by using safe and ecologically sound suburban lawn care practices. The NRC's Pesticide Awareness Campaign, which is a collaborative effort with the Town's Dept. of Public Works and Health Dept., has been very effective in reducing the amount of pesticides used by the Town and its residents, and we hope you will join the Town in this important effort. Please contact me at 781-431-1019, ext. 2290 or visit the NRC's web site at www.wellesleyma.gov/NRC for more information.

Very truly yours,

Janet Hartke Bowser

Janet Hartke Bowser
NRC Director

cc: NRC Members
Wetlands Protection Committee Members
Mike Pakstis, Director, Dept. of Public Works
Mike Quinn, Assistant Supt. for Parks, DPW
Wellesley Health Dept.

F:\nrc\Letters & Memos\Landscape Letter.doc

Benefits of NOFA Accreditation:

- Recognition as a NOFA Accredited Organic Land Care Professional
- Use of NOFA Accredited Professional logo and marketing materials
- Listing on www.organiclandcare.net
- Listing in the annual publication *NOFA Guide to Organic Land Care*, with 18,000 distributed free each year
- Listing on *The Underground* (optional)
- Networking with hundreds of other organic landscape professionals
- Access to NOFA staff for referrals and additional marketing opportunities

Don't miss the 4th annual, one-day, intensive **NOFA Organic Lawn and Turf Course in August of 2008**

NOFA Organic Land Care Program Publications:

Standards for Organic Land Care: Practices for Design and Maintenance of Ecological Landscapes ($20)
NOFA Guide to Organic Land Care (free)
A Citizen's Guide to Organic Land Care ($1)
The NOFA Organic Lawn and Turf Handbook: Beautiful Grass Naturally ($25)
Organic Land Care informational brochure for potential clients (free)

For more information about the NOFA Organic Land Care Program, to order any of the above publications, or to register online:

www.organiclandcare.net

ORGANIC LAND CARE
NOFA
www.organiclandcare.net
NATURALLY BEAUTIFUL

NORTHEAST ORGANIC FARMING ASSOCIATION
CONNECTICUT & MASSACHUSETTS CHAPTERS

7TH ANNUAL

NOFA Course in Organic Land Care

A 5-day professional course offered in
(choose one location)

Leominster, MA

January 16, 17, 18, 22 & 23, 2008
Doyle Conservation Center, 464 Abbott St.
SNOW DATES: Jan. 24 and 25

New Haven, CT

January 23, 24, 25, 28 & 29, 2008
CT Agricultural Experiment Station, 123 Huntington St.
SNOW DATE: Jan. 30

Narragansett, RI

February 27, 28, 29, March 3 & 4, 2008
URI Coastal Institute, Bay Campus, 36 South Ferry Rd.
SNOW DATE: March 5

What is the NOFA Organic Land Care Program?

Eight years ago, a group of landscape professionals, scientists, educators and concerned citizens formed the NOFA Organic Land Care Committee to extend the vision and principles of organic agriculture to the care of landscapes. The Committee drafted the first organic land care standards in the United States and offered the first organic land care accreditation course.

The Course

Growing public awareness of pesticide use hazards and new legislation mandating least toxic and non-toxic alternatives are fueling a new market opportunity for professionals with knowledge of organic land care. This 30-hour course for professionals will provide the education needed for an understanding of organic landscape design and maintenance. The curriculum is based on NOFA's *Standards for Organic Land Care: Practices for Design and Maintenance of Ecological Landscapes*, written by NOFA's Organic Land Care Committee. These Standards, published in 2001, extend the vision of organic agriculture to the care of the entire landscape, both private and public. At the end of them course, attendees will be able to incorporate methods and materials that respect natural ecology and the long-term health of the environment.

Accreditation

An optional exam will be given at the conclusion of the course. Those who pass the exam can become NOFA Accredited Organic Land Care Professionals. A list of these professionals and their services is widely distributed throughout the region in NOFA's *Guide to Organic Land Care* and on its website. Annual re-accreditation is granted based on continuing education and competence in organic land care.

ATTACHMENT (2)

Fuller Brook
Stormwater Outfall Sampling
Dry Weater Conditions
November 20, 2007

Outfall ID	Description	Outfall Flowing (Yes/No)	Nearest MH/CB flowing?	Sample Taken?	Comments	Fluoride Results (mg/L)	E.Coli Results (MPN/100mL)
OF1	Near Cameron Street eastbound	No	No	No			
OF2	Cameron Street- west side	No	No	No			
OF3	Cameron Street- west side	No	No	No			
OF4	Fuller Brook Park	No	No	No			
OF5	North side of Brook - Next to Grove St.	No	No	No			
OF6	Behind 65-75-85 Grove Street	No	No	No			
OF7	Behind 65-75-85 Grove Street	No	No	No			
OF8	Behind 65-75-85 Grove Street	No	No	No			
OF9	Behind 65-75-85 Grove Street	No	No	No			
OF10	Behind 65-75-85 Grove Street	No	No	No			
OF11	Behind 65-75-85 Grove Street	No	No	No			
OF12	Could Not be Found	NA	NA	NA	GIS map does not show outfall connected to MH or CB		
OF13	18" Pipe (Drains from Dana Hall)	Yes	NA	Yes	Flow appx: 1 gal/ 40 sec	0.04	330
OF14	30" Pipe (Drains from Dana Hall)	Yes	NA	Yes	Flow appx: 1 gal/ 30 sec	0.05	ND
OF15	Could Not be Found	NA	NA	NA	GIS map does not show outfall connected to MH or CB		

ATTACHMENT (3)

Fuller Brook
Stormwater Outfall Sampling
Dry Weater Conditions
November 20, 2007

Outfall ID	Description	Outfall Flowing (Yes/No)	Nearest MH/CB flowing?	Sample Taken?	Comments	Fluoride Results (mg/L)	E.Coli Results (MPN/100mL)
OF16	Drainage from Denton Road	Yes	NA	Yes	Flow appx: 100 ml/20 sec	0.04	ND
OF17	Drainage from Wildwood Circle	No	No	No			
OF18	Next to Cottage Steet	No	No	No			
OF19	Next to Cottage Steet	No	No	No			
OF20	Next to Cottage Steet	No	No	No			
OF21	Drainage from Appleby Road	No	No	No			
OF22	Could Not be Found	NA	NA	NA	GIS map does not show outfall connected to MH or CB		
OF23	Drainage from Tappan Road	No	No	No			
OF24	Drainage from Benton Street	No	No	No			
OF25	Drainage from Leighton Road	No	No	No			
OF26	Drainage from Leighton Road	Yes	NA	Yes	Flow appx: 100ml/8 sec.	0.03	2.0
OF27	Drainage from Winthrop Riad	No	No	No			
OF28	Drainage from Vane Street	No	No	No			
OF29	Drainage from Vane Street	No	No	No			
OF30	Drainage from Ingraham Road	No	No	No			

ATTACHMENT (3)

Fuller Brook
Stormwater Outfall Sampling
Dry Weater Conditions
November 20, 2007

Outfall ID	Description	Outfall Flowing (Yes/No)	Nearest MH/CB flowing?	Sample Taken?	Comments	Fluoride Results (mg/L)	E.Coli Results (MPN/100mL)
OF31	Drainage from Dover Road	No	No	No			
OF32	Drainage from Dover Road	No	No	No			

ATTACHMENT (3)

Charles River Dry Weather Hot Spot Monitoring Data collected 10/17/07 - Wellesley

No.	Date	Time	Site	Town	E. coli (col/100ml)	Temp ©	DO % sat (%)	DO (mg/l)	Spcond (uS/cm)	Dry or Wet Weather	Comments/Description (Field notes)	Notes
687	10/17/2007	6:44	ROCKRI	Wellesley	3255	10.4	30.2	3.37	195	dry	pipe to RockRidge Pond off Cliff Road	
688	10/17/2007	6:57	CLIFF	Wellesley	12997	10	92	10.38	319	dry	Hillside stream entering culvert under Cliff Road	
689	10/17/2007	7:16	STEEP	Wellesley	63	9.7	45.5	5.16	403	dry	stream along commuter tracks by Woodlawn Av	
690	10/17/2007	7:31	WIGHT	Wellesley	86	10.9	89.9	9.92	392	dry	outlet from Wights Pond	Water Chestnut plants in Wights Pond
691	10/17/2007	7:39	WIGHTT	Wellesley	63	10.8	88.5	9.79	390	dry	Commuter Rail platform after Hundreds Road	
692	10/17/2007	7:50	COLDBK	Wellesley	20	7.7	100	11.88	1157	dry	Cold Spring Brook at Ledyard St	
693	10/17/2007	8:06	INDIAN	Wellesley	84	9	92	10.6	1181	dry	Cold Spring Brook at Glen Rd	
694	10/17/2007	8:15	CSGLEN	Wellesley	435	9.4	86.8	9.92	379	dry	Indian Springs Brook at Glen Rd	
695	10/17/2007	8:23	ISWAY	Wellesley	74	10.1	78.5	8.83	381	dry	Indian Springs Brook at Indian Springs Way	
696	10/17/2007	8:33	ISHILL	Wellesley	20	9.9	96.6	10.89	1202	dry	Cold Spring Brook at Hillside Rd	
697	10/17/2007	8:44	CSTOP	Wellesley	10	12.5	80.9	8.61	383	dry	Glen Brook outlet from under Glen Brook Rd	
698	10/17/2007	8:53	WESTON	Wellesley	223	NA	NA	NA	NA	dry	Glen Brook North branch at Weston Line	mainly stagnant - tiny flow

Notes

Samples, field measurments, and GPS collected By Roger Frymire and Fecal and E.coli samples analyzed by EPA's New England Regional Lab

< = not detected above the associated detection limit

NA = Not analyzed

Site and sample numbers, times, fecal & Ecoli data Qaed - TF

Field Data Qaed - RF

ATTACHMENT (4)

Table 2. Field Data for Morses Pond Study, 2007.

Site	Date	Temperature (°C)	Dissolved Oxygen (mg/L)	Dissolved Oxygen (% Saturation)	Turbidity (NTU)	pH (SU)	Conductivity (µmhos/cm)	Flow (cfs)
M-1S	6/26/2007	24.5	9.5	116.7	1.8	8.3	484	NA
M-1S	8/16/2007	22.5	9.5	115.0	3.4	7.4	477	NA
M-1B	6/26/2007	8.9	2.6	24.1	8.2	6.7	487	NA
M-1B	8/16/2007	10.4	2.8	24.6	11.6	6.9	490	NA
M-2	6/26/2007	23.4	8.0	88.4	2.3	7.9	510	9.2
M-2	8/16/2007	23.5	8.8	109.5	1.8	7.2	556	12.3

NA = Not applicable

ATTACHMENT (5)

Table 3. Laboratory Data for Morses Pond Study, 2007.

Site	Date	Total Phosphorus (mg/L)	Dissolved Phosphorus (mg/L)	Nitrate Nitrogen (mg/L)	Ammonia Nitrogen (mg/L)	Total Kjeldahl Nitrogen (mg/L)
MP-1S	6/26/2007	0.026	0.015	0.82	0.13	<0.50
MP-1S	8/16/2007	0.050	<0.01	<0.01	0.13	0.32
MP-1B	6/26/2007	0.054	0.032	0.87	0.33	0.58
MP-1B	8/16/2007	0.040	0.040	0.75	0.08	0.46
MP-2	6/26/2007	0.056	0.039	0.95	0.30	0.40
MP-2	8/16/2007	0.060	0.050	0.75	0.06	0.60

ATTACHMENT (5)