Received 5/6/08

TOWN OF LINCOLN

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TOWN ADMINISTRATOR
Timothy S. Higgins

Certified Mail – Return Receipt Requested

April 25, 2008

Ann Herrick
US Environmental Protection Agency
1 Congress Street, Suite 1100 (CIP)
Boston, MA 02114-2023

EPA NPDES Permit # MAR041043
MA DEP Transmittal # W-035460

Dear Ms. Herrick:

Enclosed please find the Town of Lincoln's 2008 Annual Report, pursuant to the NPDES storm water management program.

If you have any questions, please do not hesitate to contact myself or Mr. Christian Bibbo, Highway Department Superintendent at 781-259-8999.

Sincerely,

Timothy S. Higgins
Town Administrator

CC: Christian Bibbo, Highway Superintendent
Thomas Gumbert, Conservation Director
Thelma Murphy, US EPA

Municipality/Organization: **Town of Lincoln**

EPA NPDES Permit Number: **MAR041043**

MaDEP Transmittal Number: **W- 035460**

Annual Report Number & Reporting Period: **No. 5: May 07 – May 08**

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Timothy Higgins Title: Town Administrator

Telephone #: 781-259-2600 Email: higginst@lincolntown.org

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: Timothy S. Higgins

Title: Town Administrator

Date: 4/28/08

Part II. Self-Assessment

The Town of Lincoln 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 I. C. & D. Elm Brook, that has its headwaters in Lincoln, is a State listed Water Quality Impaired Water and has TMDLs for bacterial pathogens and turbidity. The Town needs to assess the water quality of the outfalls into this system and needs to undertake education of residents within this watershed on proper septic system maintenance. The Conservation Dept. continued to work with the Minuteman National Historic Park to daylight and restore a section of Elm Brook off Sunnyside Road. The Highway, Conservation and Water Departments are working on a coordinated effort to repair Sunnyside Road and implement stormwater best management practices as part of the stream daylighting project.

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)
1-C	Lincoln Specific Stormwater Flyers	ConCom	Distribute at Town Hall and public events.	Lincoln has several brochures relating to stormwater awareness and healthy lawns and landscapes available at Town Hall.
1-D	Education via Newspaper Articles	ConCom	Write at least one article per year	Published one article on stormwater in Lincoln Journal.
1-E	Education via the Internet	ConCom	Provide stormwater information and links on Town website	General NPDES MS4 Information posted on Town Website. Links to other websites including EPA's site now posted.

1a. Additions

1-F	Open Space Plan	Open Space Committee	State approved Open Space Plan	Open Space and Recreation Plan published in March 2008. We have attached a copy of this Plan to this Report.

1-G	New Homeowner Information Packet	ConCom	Provide property information to new homeowners.	Distributed packets including Lincoln specific fliers and return postcard to new homeowners.

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)
2-B	Annual Meeting on NPDES Plan and Report	Town Administrator	Hold Committee meeting each year	NPDES meeting Including Town Planner, Conservation Director, Assistant Town Administrator and Public Works Director.
2-C	Watershed Group Involvement	ConCom Local Groups	Continue ongoing activities to protect the health of our wetlands & watersheds.	ConCom partnered with Concord for 8th consecutive year on water chestnut removal. ConCom led the Canoe Watershed with Riverfest.
2-D	Involve Lincoln Children's Groups	ConCom	Involve Lincoln Children's Groups in watershed clean-up and other activities.	Worked with various classes and groups to clear invasives and teach importance of water quality.

2a. Additions

2-E	Wetland buffer restoration through invasive species removal	ConCom	Work once per year with community and/or school group to restore wetland habitat.	Worked with LLCT to clear invasives and host Invasives Summit. Worked with Garden Club and Highway Department on Roadsides of Lincoln Project and Gateways to Lincoln.
2-F	Open Space Plan	ConCom Open Space Committee	State Approved Plan with 5-year Action Plan	Published state approved Open Space and Recreation Plan with 5-year Action Plan. See attached Plan.
2-G	Elm Brook Stream Restoration	ConCom Minuteman Nat. Historic Park	Stream daylighting with natural stream-bed construction and native plantings	Worked with Minuteman National Historic Park to daylight part of Elm Brook (impaired stream) that connects with the Shawsheen River.

2-H	Habitat inventory and monitoring	ConCom	Conduct habitat inventories	Began preparing conservation land-management plans and site-specific habitat inventories. Received funding to treat significant hemlock stands for woolly adelgid.

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)
3-A	Illicit Discharge Bylaw	Highway Board of Health	Discussions and review of regulations	Board of Health continues to review and permit all septic system maintenance and construction.
3-B	Storm Drain Map	Highway Town Administrator	Field-verify and map storm drains and outfalls	Used GPS to field-verify and map outfalls.
3-C	Illicit Discharge Detection and Elimination Plan	Highway	Visually screen outfalls during dry weather.	Priority areas determined to be the Tower Road wellhead protection zones A and B and Flint's Pond and Cambridge Reservoir surface water protection Zones 1 and 2. Household hazardous waste coordinated with the Town of Lexington.
3-D	Illicit Discharge Education for General Public and Businesses	ConCom Planning	Include illicit discharge education information in fliers.	ConCom brochures distributed on how to reduce lawn and yard pesticide and chemical fertilizer use. Highway installed additional "Do Not Dump" catch basin castings.
3-E	Illicit Discharge Education for Municipal Employees	Highway Fire Department	Municipal training for Town.	Fire Department continued their training in spill prevention and containment. DPW employees received training on spill prevention and containment.

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)
4-A	Construction Site Runoff Bylaw	Planning ConCom	Initial Discussions and review of existing and model bylaws	Construction site runoff is adequately managed through wetlands permitting and site-plan review. Due to nature of Lincoln's character, no bylaw is necessary at this time.
4-B	BMPs for Construction Site Erosion, Sediment, and Waste Controls	Planning ConCom	Stay current with construction-site BMP's	DEP Stormwater Regulations are administered by the Conservation Commission. BMP's required through wetland and site-plan permitting.
4-C	Construction Site Plan Review Procedures	Planning ConCom	Maintain review and communication between land-use boards	Planning Board and ConCom both currently review construction site plans.
4-D	Construction Site Inspection and Enforcement Procedures	Planning ConCom	Inspect and Enforce Construction Site through local boards	Planning and Conservation staff monitor construction sites as does the Building Inspector.
4-E	Response to Public Stormwater Hotline	Highway ConCom	Maintain Stormwater Hotline	Conservation Department phone during working hours and Public Safety Dispatcher during other hours.

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)
5-A	Post-Construction Site Runoff Bylaw	Planning ConCom	Initial discussions; review current local/state regulations; review proposed samples	Post-Construction site runoff is adequately managed through wetlands permitting and site-plan review. Due to nature of Lincoln's character, no bylaw is necessary at this time.
5-B	Choose Structural and Non-structural BMPs	Planning ConCom	Stay current with construction-site BMP's	Continued enforcing current BMPs as shown on 5-year NPDES Stormwater Phase II Compliance Plan.
5-C	Long-Term BMP Operation and Maintenance Procedures	Planning ConCom	Require Operation and Maintenance Plan Procedures for single-family through Bylaw.	OMPs are required under DEP Stormwater Management Regulations for projects requiring a Stormwater Management Plan. General review provided through existing permitting.
5-D	Structural BMP Implementation Procedures	Planning ConCom	Outline structural BMP requirements in Bylaw	Review structural stormwater management controls through existing permitting process. Where possible require low-impact development strategies and non-structural components.

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)
6-A	Employee Training to Prevent/Reduce Stormwater Pollution	Highway Fire Department	Municipal training for Public Works and Fire Department employees.	Fire Department and Public Works Department continues ongoing spill prevention and cleanup training. Containment booms have been placed in the DPW garage. These booms will be available to be placed around catch basins in the event of a fluid spill.

6-B	Maintenance/Inspection of Storm Sewers and Structural/Non-Structural Controls	Highway	Assess existing controls, maintenance activities, schedules, and long-term inspection procedures	The Town of Lincoln annually cleans approx. 510 catchbasins. Continued assessment of existing maintenance/inspection of storm drainage system.
6-C	Pollutant Source Reduction/Elimination from Municipal Facilities and Activities	Highway	Assess existing facilities, activities, and BMPs and continue additional or improved BMPs	• The Highway Department has been given permission to begin collecting data for review of a 1971 Town regulation that restricts the snow & ice removal procedures to 10% salt and 90% sand • Continue Public Works Roadside Maintenance Program • Continue Public Works materials handling procedures • Continue roadside sweeping activities Continue sweeping and maintenance of Public Works Barn
6-D	Waste Disposal Procedures from Storm Sewers and Municipal Facilities/Activities	Highway	Assess existing waste disposal procedures, review MA guidelines, brainstorm improved and new procedures	• Testing on the DPW stockpile has been completed and submitted to DEP under a BUD. • Proper disposal methods as approved by DEP on the stockpile will be undertaken. • All catch basin cleanings will be handled in an approved DEP manner.

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

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)
Revised			

Revised			

Part IV. Summary of Information Collected and Analyzed

Incorporation of watershed, stream, wetland and other water related layers in GIS database	yes	
GPS identification of storm drains, outfalls and other water-related information	(60%)	
Water quality data	(10%)	Cambridge

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	no	
Annual program budget/expenditures	($0)	

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(80%)	
Stormwater management committee established	(no)	
Stream teams established or supported	supported	
Household Hazardous Waste Collection Days		
▪ days sponsored	(8)	
▪ community participation	(65%+/-)	
▪ material collected	(25 tons)	
School curricula implemented	(yes)	
On-going open space and watershed planning, education and outreach	(yes)	
Habitat, wetland, stream and biological inventory and monitoring	(yes)	

Legal/Regulatory

	In Place Prior to Phase II	Under Review	Drafted	Adopted
Regulatory Mechanism Status (indicate with "**X**")				

▪ Illicit Discharge Detection & Elimination				
▪ Erosion & Sediment Control	**X**			**Wetlands**
▪ Post-Development Stormwater Management	**X**			**Wetlands/ Site-Plan**
Accompanying Regulation Status (indicate with "**X**")				

Mapping and Illicit Discharges

Outfall mapping complete	(80%)	
Estimated or actual number of outfalls	(200)	
System-wide mapping complete	(80%)	
Mapping method(s)		
▪ Paper/Mylar	(80%)	
▪ CADD	(0%)	
▪ GIS	(80%)	
Outfalls inspected/screened	(40)	
Illicit discharges identified	(1)	Sunnyside Ln.
Illicit connections removed	(0)	
% of population on sewer	(0)	
% of population on septic systems	(100%)	

Construction

Number of construction starts (>1-acre)	(#)	
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(80%)	all w/wetlands
Site inspections completed	(100%)	
Tickets/Stop work orders issued	(# or %)	
Fines collected	(0)	
Complaints/concerns received from public	()	

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(100%)	

Site inspections completed	100%)	
Estimated volume of stormwater recharged	(gpy)	

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(1 time/yr)	
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(1 time/yr)	
Total number of structures cleaned	(510)	
Storm drain cleaned	(500 LF)	
Qty. of screenings/debris removed from storm sewer infrastructure	(0)	
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)	Off site	
Cost of screenings disposal	$5,000	

Average frequency of street sweeping (non-commercial/non-arterial streets)	(1 time/yr)	
Average frequency of street sweeping (commercial/arterial or other critical streets)	(1 time/yr)	
Qty. of sand/debris collected by sweeping	(2,300 tons)	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	Hwy yard	
Cost of sweepings disposal	$25,000	
Vacuum street sweepers purchased/leased	0	
Vacuum street sweepers specified in contracts	No	

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	Not used	

▪ Herbicides	Minimal use according to DEP approved methods	
▪ Pesticides	Not used	
Elimination of chemical pesticides and fertilizers on lawn	All OOC's	Wetlands
Require organic practices on leased conservation lands	initiated	

Anti-/De-Icing products and ratios	% NaCl % $CaCl_2$ % $MgCl_2$ % CMA % Kac % KCl % Sand	
Pre-wetting techniques utilized	(y/n)	
Manual control spreaders used	(y/n)	
Automatic or Zero-velocity spreaders used	(y/n)	
Estimated net reduction in typical year salt application	(lbs. or %)	
Salt pile(s) covered in storage shed(s)	(yes)	
Storage shed(s) in design or under construction	(y/n)	