

Municipality/Organization: Town of Lincoln

EPA NPDES Permit Number: MAR041043

MaDEP Transmittal Number: W-035460

**Annual Report Number
& Reporting Period:**

No. 6: May 08 – May 09

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Timothy Higgins

Title: Town Administrator

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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: Timothy S. Higgins

Title: Town Administrator

Date:

01/25/11

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:

The initial 5-year NPDES MS4 General Permit has expired and the Town is anticipating the renewal of this permit. Clearly when this is issued it will help determine future action items for Lincoln to implement to stay in compliance with the permit. Revisions will be needed but the guidance resulting from the new permit is necessary for this.

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 6 (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. These are also made available at the annual Town Meeting
1-D	Education via Newspaper Articles	ConCom	Write at least one article per year	Article on stormwater in Lincoln Journal.
1-E	Education via the Internet	ConCom	Provide stormwater information and links on Town website	NPDES MS4 Information posted on Town Website. Links to other websites including EPA's site also posted.

1a. Additions

1-F	Open Space Plan	Open Space Committee	State approved Open Space Plan	Preservation of 20 acres of the Booth Property completed in the Suasco watershed. 3.5 acres of land including Outstanding Resource Water to the Cambridge Water Supply protected.
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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.
1-H	Municipal GIS Website	ConCom	Offer public free GIS website with datalayers for Town.	New initiative provides GIS resource to residents and others. Layers include wetlands, buffer zone, & floodplain.
1-I	Conservation Walk Series	ConCom	Provide educational outings for the public.	Spring and fall series of walks to get people on land and educated about conservation issues with a concentration on watershed activities.

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (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 representatives joined Suasco River Stewardship Council. We also are active participants in the newly formed Suasco Cooperative Invasives Species Management Area (CISMA). ConCom partnered with Concord for 9 th consecutive year on water chestnut removal. ConCom led Canoe the 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 on local ecological issues, including teaching importance of stormwater management for drinking 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.	First annual Garlic Mustard pull day held with excellent community participation. This is critical work for maintaining the health of native plant ecosystems. Worked with Scout troop on stream trash cleanup.
2-F	Open Space Plan	ConCom Open Space Committee	State Approved Plan with 5-year Action Plan	Following through with 5-year Action Plan for the Open Space and Recreation Plan.
2-G	Elm Brook Stream Restoration	ConCom Minute Man National Historical Park	Stream daylighting with natural stream bed construction and native plantings	This is a Shawsheen River watershed project. Success is heavily with native plants and abundant macro-invertebrate and amphibian life.
2-H	Habitat inventory and monitoring	ConCom	Conduct habitat inventories	Baseline monitoring of all conservation lands and holdings is completed.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) -- Permit Year 6 (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. Conservation permitting is done for all systems within 100 feet of wetlands or 200 feet to perennial streams.
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.

3a. Additions

3-F	Annual Monitoring of all public and private Conservation Land.	ConCom Lincoln Land Conservation Trust	Inspect boundaries and interiors of all permanently protected open space	Work completed by LLCT interns and ConCom staff. Any violations, including illicit discharges, are searched for. This includes 2859 acres which is 31% of the Town.
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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 6 (Reliance on non-municipal partners indicated, if any)
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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 is the Hotline 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 6 (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.	OMP's 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.

5a. Additions

5-E	Permits Issued for Major Projects with Drainage Improvements	ConCom	Work with applicants to ensure proper stormwater BMPs are used during and after construction.	Major projects during this project included Walden Pond State Reservation upgrades and MA Highway improvements to Route 2 drainage system.
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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 6 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 7
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.	Continue Fire and Public Works Dept. training to prevent any stormwater pollution.

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 catch basins. Continued assessment of existing maintenance/inspection of storm drainage system. - The Public Works Department also continued to clean the Town's road shoulder areas to remove built-up material and improve natural drainage runoff.	Continue to develop new and improved activities, schedules, and procedures. Cleaning of a limited amount of storm drains is scheduled.
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 Public Works Dept. has begun review of a 1971 Town regulation that restricts the snow & ice removal to 10% salt, 90% sand. See attached Draft Presentation on Snow & Ice Removal. - Completed Sunnyside Lane Drainage Improvement Project. Improvements included deep sump catch basins as well as improvements to a retention basin. Please refer to information on these improvements.	- Review of 1971 Town regulation that restricts the snow & ice removal procedures to 10% salt and 90% sand - Public Works Roadside Maintenance Program - Commence 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	A comprehensive materials handling program will be developed for the Public Works site.

Part IV. Summary of Information Collected and Analyzed

Incorporation of watershed, stream, wetland and other water related layers in GIS database	yes	Now accessible to public via web-based GIS viewer
GPS identification of storm drains, outfalls and other water-related information	(80%)	
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)	(75%)	
Stormwater management committee established	(no)	
Stream teams established or supported	non active	
Household Hazardous Waste Collection Days		
▪ days sponsored	(8)	
▪ community participation	(65%+/-)	
▪ material collected	(~25 tons)	
School curricula implemented	(provided)	
On-going open space and watershed planning, education and outreach	(yes)	
Habitat, wetland, stream and biological inventory and monitoring	(yes)	

Legal/Regulatory

Regulatory Mechanism Status (indicate with "X")		In Place Prior to Phase II	Under Review	Drafted	Adopted
▪ 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		(0)	
Illicit connections removed		(0)	
% of population on sewer		(0)	
% of population on septic systems		(100%)	

Construction

Number of construction starts (>1-acre)	(1)	
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(75%)	all w/wetlands
Site inspections completed	(100%)	
Tickets/Stop work orders issued	(2)	
Fines collected	(0)	
Complaints/concerns received from public	(3)	

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.)	Hwy yard	
Cost of screenings disposal	TBD	

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	TBD	
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	Not used	
▪ Pesticides	Not used	
Elimination of chemical pesticides and fertilizers on lawn	All OOC's	Wetlands
Require organic practices on licensed conservation lands	initiated	
Anti-/De-Icing products and ratios	100% NaCl	
	90% Sand	
Pre-wetting techniques utilized	no	
Manual control spreaders used	yes	
Automatic or Zero-velocity spreaders used	no	
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	n/a	