

**Municipality/Organization:** Lexington - #1426

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**EPA NPDES Permit Number:** BRP-WM-08A

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**MaDEP Transmittal Number:** W-083843

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**Annual Report Number**

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

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## NPDES Phase II Small MS4 General Permit Annual Report

### Part I. General Information

Contact Person: William P. Hadley

Title: DPW Director

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Telephone #: 781-862-0500

Email: whadley@ci.lexington.ma.us

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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:

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Printed Name: William P. Hadley

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Title: Director of Public Works

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Date:

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## **Part II. Self-Assessment**

The Town of Lexington is in compliance with its NPDES Phase II Stormwater General Permit. During the next permit year, efforts will be increased. Staff has been supplemented with consulting engineers for specific tasks related to illicit discharge detection and elimination.

**Part III. Summary of Minimum Control Measures**

**1. Public Education and Outreach**

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 3</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – Permit Year 4</b>
1C	Household hazardous waste collection days	Health Dept.	Schedule, publicize and execute collections of household hazardous waste	Completed 8 drop collection days.	Repeat in 06-07 year.
Revised		D. Fullerton			
1D	Educational Pamphlets	DPW	Handout leaflets and answer questions at DPW table at Town Business Street Sales	Completed	Repeat in 06-07 year.
Revised		D. Meehan			
1 A	Classroom Education	Engineering	Design and present pre-school level session explaining stormwater system	Other presenters were prepared. No classroom presentations done in 2005-06.	Expand to include other presenters and present 4 times
Revised		D. Cannon			

**1a. Additions**

1E	Article in local newspaper	Engineering and Conservation	Write and publish article of general interest on stormwater	Article has been researched and drafted	Publish article in Lexington Minuteman
		M. Flamang and K. Mullins			

## 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
2B	Water quality monitoring Old Res	Health Dept.	Sanitary survey of drain outlets in to Old Res Recreation Area	In Progress	Continued water quality monitoring
Revised		D. Fullerton			
2B	Water Quality Monitoring Town wide	Engineering	Meet with Watershed caretakers to support sampling programs	Issued purchase orders to Tutela Engineering Associates to conduct water quality sampling in Vine and Mill Brook tributaries. Provided copies of sampling program to watershed groups, EPA and DEP.	Implement stream sampling with intention of locating sources of bacterial contamination. Initiate action to address issues discovered.
Revised		M. Flamang			
2D	Septic Systems Tracking Management	Health Dept	Transfer data to electronic media, maintain and upgrade data	Transfer of data to electronic base is complete	Maintain database
Revised		D. Fullerton			
Revised					
Revised					

### 2a. Additions


### 3. Illicit Discharge Detection and Elimination

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 3</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – Permit Year 4</b>
3A	Locate and map outfalls	Engineering	Complete GIS mapping of 25% of town	Approximately 50% completed. Outfall maps are done.	Begin next 25%
Revised		M. Flamang			
3A	Locate outfalls	Engineering	Review existing plans, interpret and transfer data to digital form	Plans have been reviewed and there is a plan for putting the plans onto digital format.	
Revised		M. Flamang			
3C	Stormwater Bylaw	Conservation	Educate staff on framework for bylaw	In process.	Complete
		K. Mullins			
3C	Stormwater Bylaw	Conservation	Form working group and draft bylaw	Working group has met. Sample bylaws are being reviewed by representatives of Selectmen.	Complete draft of bylaw for consideration by Town Meeting.
Revised		K. Mullins			

**4. Construction Site Stormwater Runoff Control**

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 3</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – Permit Year 4</b>
4C	Inspection and reporting	Building and Engineering	Train personnel to inspect for runoff issues	Training is in process. Complete training must await final bylaw.	Continue training.
Revised		S. Frederickson and M. Flamang			
4C	Inspection and reporting	Engineering and Conservation	Design and distribute handout for permits	Permitting process is pending. Engineering permits have been annotated to required as-builts of privately owned treatment facilities.	Implement for Building Permits
Revised		M. Flamang and K. Mullen			
Revised					
Revised					
Revised					

**4a. Additions**

Revised					
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### 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
5B	Develop BMP's list	Engineering	Develop list of BMP's that are appropriate for Lexington public and private projects	Data on BMP's has been studied.	Insure that BMP's are incorporated into town stormwater bylaw.
Revised		M. Flamang			
5D	Runoff Operation and Maintenance Plan	Conservation	Require in-house reviewers to screen permit applications for O&M plans	Review process is being refined.	Insure that review process is incorporated into town stormwater bylaw.
Revised		K. Mullen			
Revised					

#### 5a. Additions


## 6. Pollution Prevention and Good Housekeeping in Municipal Operations

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 3</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – Permit Year 4</b>
6A	Employee training	Public Works	Conduct toolbox session to refresh on BMP's	Curriculum is being developed.	Discuss housekeeping procedures with crews.
Revised		W. Brooks			
6B	Municipal pollution prevention	Public Works	Schedule street cleaning	Continued program	Continue program
Revised		W. Brooks			
6C	Vehicle washing	Public Works	Wash indoors to keep solids from stream	Continued program	Continue program
Revised		D. Adams			
6D	Used oil recycling	Health Dept	Collect used oil at drop off facility and dispose of properly	Continued program	Continue program
Revised		D. Fullerton			

### 6a. Additions

6B	Municipal pollution prevention	Public Works	Incorporate BMP's into design of new PW garage facility	New activity.	Insure incorporation of BMP's into design of new PW facility.
		M. Flamang			

### **Part III Summary of Minimum Control Measures- (continued)**

Additional comments regarding Item 6B.

At this time, the town is planning a new public works facility. The designer has been directed to select and apply technology for the facility to minimize adverse environmental effects in all possible ways.

Measures that are being considered in the design include the following.

- Encourage infiltration of stormwater through porous materials, including porous paving and bioretention swales and basins
- Reduce quantity of runoff and reduce peak rates by minimizing paved areas
- Harvest and reuse rooftop rainwater, if possible
- Riparian restoration, including selected removal of invasive plant species and supplemental planting
- Stream bank restoration, including stabilizing North Lexington Brook stream banks through regrading and revegetating
- Introduce stream daylighting, if feasible, including removal of approximately 200 linear feet of culverted section of North Lexington Brook into a natural stream channel
- Improve quality of open space by selectively removing unhealthy/invasive tree species and replacing with non-invasive specimen trees thereby easily creating a kind of Town arboretum
- Reduce glare, spillover, and atmospheric light pollution onto adjacent properties and natural areas
- Increase lighting efficiency, where feasible; opportunities include compact fluorescent lamps, motion-sensitive systems

#### **Part IV. Summary of Information Collected and Analyzed**

Lexington Health Department samples Old Reservoir Town Beach twice weekly for enteric organisms primarily to insure suitability for recreation.

No beach closings were necessary in 2005.

The Town has received reports of sampling from the Mystic River Watershed Association. The results show variable results with one persistent area of high bacteria counts. That sample point is a town drain that discharges from the Bow Street area into Mill Brook. Within the next two months, the town will inspect the line with TV cameras and contact all abutting property owners to look for possible sources of the contamination. Remedial action will be taken.

The Town received and responded to a request for information from Region 1 USEPA. A stream sampling program was proposed. The sampling program is being implemented. Information generated by this program will be reported to DEP and EPA when available.