

# TOWN OF LUNENBURG

BOARD OF SELECTMEN  
17 Main Street, P.O. Box 135  
Lunenburg MA 01462-0135

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978-582-4144, FAX 978-582-4148  
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Mon, Wed, Thu. 8:00 AM – 4:00 PM  
Tues. 8:00 AM - 6:30 PM  
Fri. 8:00 AM – 12:30 PM

DANIEL M. KEYES, CAFO

Laura Williams  
Chief of Staff/Chief Admin. Asst.

*f*

June 13, 2006

United State Environmental Protection Agency  
Water Technical Unit  
PO Box 8127  
Boston MA 02114

JUN 14 2006

Gentlemen:

Enclosed is the National Pollutant Discharge Elimination System (NPDES), Phase II Stormwater Management Plan, 2006 Annual Report – Year 3, Lunenburg MA.

If further information is necessary please don't hesitate call.

Sincerely,

*Laura Williams*

Laura Williams  
Chief of Staff/Chief Administrative Assistant

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cf*

**Municipality/Organization:** Town of Lunenburg

P

**EPA NPDES Permit Number:** 1206

**MaDEP Transmittal Number:** W-040561

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

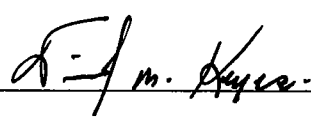
## NPDES PII Small MS4 General Permit Annual Report

### Part I. General Information

**Contact Person:** Daniel M Keyes **Title:** CAFO  
dkeyes@lunenburgonline.com  
**Telephone #:** 978 582 4144 **Email:** lwilliams@lunenburgonline.com

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:** Daniel M. Keyes

**Title:** Chief Administrative Financial Officer (CAFO)

**Date:** 6/13/06

## **F II. Self-Assessment**

**The Town of Lunenburg has successfully implemented or begun implementation of several Measurable Goals noted in Lunenburg's Notice of Intent. Prior to the development of Lunenburg's Comprehensive Stormwater Management Program, including Measurable Goals, the Town had an assessment performed of current activities, programs, and regulations that could support the NPDES Phase II Stormwater program. This assessment became the basis for modifying current activities, recommending new programs, and informing town boards and departments of their obligation toward successful implementation of Lunenburg's Comprehensive Stormwater Program.**

**In July 2005, the Lunenburg Board of Selectmen appointed Daniel Keyes Lunenburg's Chief Administrative and Financial Officer after a two year vacancy in that position. The new CAFO has provided direction and coordination to Lunenburg's stormwater program. Successes in achieving Lunenburg's measurable goals are noted in this report.**

**Lunenburg is pleased to present the following summary describing Lunenburg's success at implementing the third year of the town's Comprehensive Stormwater Management Program.**

**F 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	Create a Stormwater Program	Department of Public Works Planning Board Conservation Commission Board of Health Board of Selectmen	Lunenburg will present to the public at a public meeting Lunenburg's Comprehensive Stormwater Management Program.	Lunenburg's NPDES Phase II Stormwater program was presented at a multi-department workshop on March 6, 2006 and to the Finance Committee and May 06 Town meeting members.	Lunenburg will continue to identify opportunities to publicly review its stormwater program.
2	Create a Stormwater Program	Board of Selectmen Department of Public Works	Lunenburg will identify appropriate sources of funding assistance (SRF, 319 Grant Program, 604(b) Grant Program, Lakes & Ponds Grant Program, Source Water Protection Grant Program, Recycling Grant Program) and apply for assistance in implementing portions of Lunenburg's Comprehensive Stormwater Management Program, including public education and outreach.	The Town of Lunenburg secured approval from DEP to apply for a \$500,000 low interest State Revolving Fund loan from the Massachusetts Water Pollution Abatement Trust to implement components of Lunenburg's stormwater program, including comprehensive GIS mapping of town infrastructure. The Finance Committee and Town Meeting failed to support this effort.	Lunenburg will continue to identify funding opportunities to support its protection of local bodies of water.
3	Address specific groups	Board of Selectmen Department of Public Works	Distribute EPA and other relevant educational brochures to targeted audiences. Distribution points include Town Hall, Library, and Transfer Station.	The Town is in receipt of EPA educational materials on disc for easy printing and distribution	Brochures will be printed and made available at town buildings.
Revised					

**1. Public Education and Outreach Cont.**

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3	Planned Activities – Permit Year 4
4	Target groups likely to impact storm water	Board of Selectmen Department of Public Works	Brochures targeting specific audiences and activities will be available. These target groups include homeowner and lawn maintenance activities, disposal of household waste, and pet maintenance.	See BMP 3	See BMP3
5	Identify alternative information sources	Board of Selectmen MIS Department	Lunenburg will post links to stormwater BMPs and other water quality education resources, including EPA and DEP on its website: <a href="mailto:www.Lunenburg@net1plus.com">www.Lunenburg@net1plus.com</a>	<a href="http://www.lunenburg.com">www.lunenburg.com</a>	Links to EPA and DEP will be added to website.
6	Identify alternative information sources	Board of Selectmen MIS Department	Lunenburg will also post links on its website to the Nashua River Watershed Association @ <a href="http://www.nashuariverwatershed.org">www.nashuariverwatershed.org</a> , and the Lake Shirley Improvements Corporation @ <a href="http://www.lakeshirley.com">www.lakeshirley.com</a>	Lunenburg’s website <a href="http://www.lunenburg.com">www.lunenburg.com</a> contains links to the following: the Lake Shirley Improvements Corporation, Friends of Willard Brook and Environmental Education for Kids.	Additional links will be reviewed for relevancy.
7	Utilize local website	Board of Selectmen	Public meeting notice for the meeting reviewing Lunenburg’s Comprehensive Stormwater Management Program will be posted on Lunenburg’s website.		Lunenburg will review opportunity to post Power Point presentation of Lunenburg’s Stormwater Program.
8	Develop, conduct and document educational programs	Board of Selectmen Liaison	The Town of Lunenburg will appoint a liaison to the Nashua River Watershed Association, and the Lake Shirley Improvements Corporation to disseminate information to the Town on programs and activities.		Finalize decision of liaison.
Revised					

**1. Public Education and Outreach Cont.**

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3	Planned Activities – Permit Year 4
9	Promote Household Waste Recycling	Department of Public Works Board of Health	The Town of Lunenburg will work with the Town’s contracted waste hauler and the Board of Health to continue to promote recycling.	Lunenburg has mandatory recycling. Schedule is posted at <a href="http://www.lunenburg.com">www.lunenburg.com</a>	The Town of Lunenburg will continue to promote recycling.
Revised					

**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
10	Storm drain stenciling	Department of Public Works	Lunenburg will work with local lake and Scout groups to develop a stenciling program. Stenciling will target Lunenburg’s subwatersheds.	Town wide infrastructure improvements, including sanitary sewer extensions, have delayed stenciling.	Town will identify partners in developing and implementing a storm drain stenciling project.
Revised					
11	Community clean-ups	Department of Public Works Lunenburg Conservation Commission	Town of Lunenburg will encourage local stream team cleanups with local residents and area Scout groups. Town will provide solicitation of sponsors and notice of events on local access channel and website.	Hickory Hills Landowners, Inc. perform regular clean-up and maintenance activities around Hickory Hills Lake.  Lunenburg Little League performs spring cleanups of playing fields.	Hickory Hills and Lake Shirley Improvements Corporation will continue cleanups. Expansion of cleanups to include scouts, students, and other civic groups will be welcome.
Revised				Local Boy Scouts assist Lunenburg’s Conservation Commission in maintaining and improving town owned conservation lands.	

## 2. Public Involvement and Participation Cont.

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
12	Community clean-ups	Department of Public Works	Town will provide trucks and other material to support cleanup efforts and disposal of materials.	Lunenburg Little League organized trash cleanup of town ball-fields, Spring 06. DPW picked up and disposed of collected trash.	Little League performs cleanup every spring.

## 3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 3	Planned Activities – Permit Year 4
13	Inventory and mapping of storm drain system	Department of Public Works	Lunenburg will identify appropriate sources of funding assistance (SRF, 319 Grant Program, 604(b) Grant Program, Lakes & Ponds Grant Program, Source Water Protection Grant Program, Recycling Grant Program) and apply for assistance in implementing portions of Lunenburg's Comprehensive Stormwater Management Program, including public education and outreach.	The Town of Lunenburg secured approval from DEP to apply for a \$500,000 low interest State Revolving Fund loan from the Massachusetts Water Pollution Abatement Trust to implement components of Lunenburg's stormwater program, including comprehensive GIS mapping of town infrastructure. The Finance Committee and Town Meeting failed to support this effort.	Lunenburg will continue to identify funding opportunities to support its protection of local bodies of water.

### 3. Illicit Discharge Detection and Elimination Cont.

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
14	Mapping and identification of outfalls and receiving waters	Department of Public Works Board of Assessors	Lunenburg will develop and implement a plan to map all outfalls and receiving bodies of water, contingent on Town Meeting approval of funding.	Lunenburg has GPS mapped 556 outfalls in Permit Year 3.	May 06 Town Meeting approved funding to continue Lunenburg's outfall mapping program for Permit Year 4.
15	Identification/description of problem areas	Department of Public Works	Lunenburg will develop and implement an Illicit Discharge Detection and Elimination (IDDE) plan, contingent on Town Meeting approval of funding.	Of the 556 outfalls mapped 172 showed evidence of sediment, one outfall showed sheen, ten outfalls contained vegetated growth, and 40 require follow-up on structural problems.	May 06 Town Meeting approved funding for Permit Year 4 to perform dry weather inspections of outfalls and to follow-up on suspected problems identified in Permit Year 3.
16	Enforcement procedures addressing illicit discharges	Planning Board Town Counsel Board of Health	Lunenburg will review whether local authority is appropriate and able to respond to potential illicit discharges. New by-laws, if necessary, will be proposed to Town Meeting.	This requirement was reviewed at a Lunenburg Stormwater Workshop held on March 6, 2006.	Lunenburg will review whether local authority is appropriate and able to respond to potential illicit discharges. New by-laws, if necessary, will be proposed to Town Meeting.
17	Public information program regarding hazardous wastes and dumping	Department of Public Works Board of Health	Lunenburg will provide educational brochures to residents promoting proper disposal of household hazardous wastes and conditions for regional collections.	Lunenburg's website contains information regarding separation of trash and schedule for collections.  Brochures on recycling and hazardous waste collection days are available at Town Hall.	Continue to maintain web info – develop brochures or handouts.
Revised					



**3. Illicit Discharge Detection and Elimination Cont.**

<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>
18	Initiation of recycling programs	Planning Board Board of Health	Lunenburg will apply for funding assistance from DEP's Recycling Grant Program for assistance in public education and the purchase of recycling materials.	The Town of Lunenburg received \$420 for the purchase of 1—set-out containers.	The Town of Lunenburg will apply for assistance from 2006/2007 program.
19	Watershed assessments and studies	Department of Public Works Conservation Commission Board of Health	Lunenburg will identify opportunities for funding assistance from DEP's 604(b) and 319 grant programs and the Department of environmental Management's Lakes and Ponds Grant Program to support watershed assessment and implementation activities. Tasks can include design and installation of stormwater BMPs and public outreach including storm drain stenciling. Emphasis will be on assessments and remediation of stormwater related problems.	The Town of Lunenburg received \$87,370 for Lake Shirley LID from the FFY2006 c.319 Nonpoint Source Competitive Grants Program.	Lunenburg will continue to identify funding opportunities to support its protection of local bodies of water.

### 3. Illicit Discharge Detection and Elimination Cont.

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
20	Watershed assessments and studies	Department of Public Works Water Department	The Town of Lunenburg will apply for funding assistance from DEP's Source Water Protection Program for grant assistance to develop wellhead protection plans and stormwater management plans within Zones II in Lunenburg.	<p>DEP's Source Water Protection Grant Program unavailable in third permit year.</p> <p>Lunenburg has received notification of grant/loan assistance from USDA's Rural Utilities Services to improve drinking water and wastewater services at Meadow Woods Mobile Home Park. Current conditions at the facility require residents to import bottled drinking water. Failure of septic systems causes routine breakouts. Tight tank requires pump-out several times a month.</p>	Lunenburg will continue to identify opportunities for funding assistance to protect local drinking water supplies.

### 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
21	Bylaw: Storm water management regulations for construction sites 1 acre or larger	Planning Board Conservation Commission Town Counsel Board of Health Zoning Board of Appeals	Lunenburg will review model by-law developed by DEP in consultation with the Attorney General's Office.	<p>This requirement was reviewed at a Lunenburg Stormwater Workshop held on March 6, 2006.</p> <p>Lunenburg Planning Board is working on achieving a 40R status for a Smart Growth District.</p> <p>Lunenburg Planning Board is currently reviewing Lunenburg's Master Plan.</p>	Through the Board of Selectmen's Office, a multi-department work session will be scheduled to review requirements of Lunenburg's Comprehensive Stormwater Management Program, including new by-laws and regulations.

## 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
22	Bylaw: Require post-construction runoff controls	Planning Board Conservation Commission Town Counsel Board of Health Zoning Board of Appeals	Lunenburg will review model by-law developed by DEP in consultation with the Attorney General's Office.	This requirement was reviewed at a Lunenburg Stormwater Workshop held on March 6, 2006.	Through the Board of Selectmen's Office, a multi-department work session will be scheduled to review requirements of Lunenburg's Comprehensive Stormwater Management Program, including new by-laws and regulations.

## 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
23	Develop a municipal Operations and Maintenance Plan	Department of Public Works	Using regulations and recommendations from DEP and EPA, Lunenburg will develop and update an operations and maintenance plan to include proper disposal of street sweepings, catchbasin cleanout, snow disposal, roadway de-icing procedures, vehicle washing, and outside storage of materials.	Lunenburg has adopted a Stormwater Pollution Prevention Plan (SWPPP) for its highway facilities. Plan includes BMPs for reference by all public works employees.	Lunenburg follows DEP and EPA guidelines.
Revised					

**6. Pollution Prevention and Good Housekeeping in Municipal Operations Cont.**

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
24	Develop a Municipal Operations and Maintenance Plan	Department of Public Works	Lunenburg will implement a formal inspection program, including maintenance logs and scheduling, for catchbasin cleaning, repairs, and new installation.	Lunenburg DPW has purchased a truck to perform catchbasin cleanouts.  In Permit Year 3 the DPW repaired several culverts and catchbasins.	Lunenburg will routinely cleanout catchbasins. Structural conditions or suspected illicit discharges will be noted for future follow-up or maintenance.
25	Develop and implement training programs for municipal employees	Department of Public Works	Lunenburg will send a minimum of 3 public works employees annually to training seminars sponsored by MassHighway, BayState Roads, and other relevant agencies or vendors.	Educational literature available at DPW headquarters.	Town will strive to send employees to relevant seminars and forums.
26	Review storm drainage infrastructure needs	Department of Public Works	Lunenburg will incorporate storm drain infrastructure review in Lunenburg's Chapter 90 project utilizations.	Roadway improvements in Permit Year 3 included installation and repairs of roadway drainage systems.	The DPW FY07 budget includes funds for inspection and improvements of storm drain infrastructure.
Revised					

**7. BMPs for Meeting Total Maximum Daily Load (TMDL) Water Load Allocations (WLA) – NOT APPLICABLE**

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
Revised				No TMDLs in the Town of Lunenburg	

**7a. Additions**


**7b. WLA Assessment**

**F. IV. Summary of Information Collected and Analyzed**

**Part V. Program Outputs & Accomplishments (OPTIONAL)**

**Programmatic**

Stormwater management position created/staffed	N	
Annual program budget/expenditures	\$25,000	

**Education, Involvement, and Training**

Estimated number of residents reached by education program(s)	(# or %)	
Stormwater management committee established	(y/n)	
Stream teams established or supported	(# or y/n)	
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	
▪ community participation	(%)	
▪ material collected	(tons or gal)	
School curricula implemented	(y/n)	

**Legal/Regulatory**

	In Place Prior to Phase II	Under Review	Drafted	Adopted
<b>Regulatory Mechanism Status (indicate with "X")</b>				
▪ Illicit Discharge Detection & Elimination				
▪ Erosion & Sediment Control				
▪ Post-Development Stormwater Management				
<b>Accompanying Regulation Status (indicate with "X")</b>				
▪ Illicit Discharge Detection & Elimination				
▪ Erosion & Sediment Control				
▪ Post-Development Stormwater Management				

**Mapping and Illicit Discharges**

Outfall mapping complete	(%)	
Estimated or actual number of outfalls	556	
System-Wide mapping complete	100 %\	
<b>Mapping method(s)</b>		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	100 %	
Outfalls inspected/screened	(# or %)	
Illicit discharges identified	(#)	
Illicit connections removed	(#) (est. gpd)	
% of population on sewer	(%)	
% of population on septic systems	(%)	

## Construction

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

## Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	
Site inspections completed	(# or %)	
Estimated volume of stormwater recharged	(gpy)	

## Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	
Total number of structures cleaned	(#)	
Storm drain cleaned	(LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		
Cost of screenings disposal	(\$)	

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	
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Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	
Qty. of sand/debris collected by sweeping	(lbs. or tons)	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	
Cost of sweepings disposal	(\$)	
Vacuum street sweepers purchased/leased	(#)	
Vacuum street sweepers specified in contracts	(y/n)	

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	

Anti-/De-Icing products and ratios	% NaCl % CaCl <sub>2</sub> % MgCl <sub>2</sub> % 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)	(y/n)	
Storage shed(s) in design or under construction	(y/n)	