



Enter your transmittal number

X255760
Transmittal Number

Your unique Transmittal Number can be accessed online: <http://mass.gov/dep/service/online/trasmfrm.shtml>

Massachusetts Department of Environmental Protection Transmittal Form for Permit Application and Payment

1. Please type or print. A separate Transmittal Form must be completed for each permit application.

A. Permit Information

MAR041202 MS4 Stormwater
1. Permit Code: 7 or 8 character code from permit instructions 2. Name of Permit Category
NPDES Phase II Small MS4 General Permit Annual Report
3. Type of Project or Activity

2. Make your check payable to the Commonwealth of Massachusetts and mail it with a copy of this form to: DEP, P.O. Box 4062, Boston, MA 02211.

B. Applicant Information – Firm or Individual

Town of Leicester, Massachusetts
1. Name of Firm - Or, if party needing this approval is an individual enter name below:
2. Last Name of Individual 3. First Name of Individual 4. MI
59 Peter Salem Road
5. Street Address
Leicester MA 01524 (508) 892-7021
6. City/Town 7. State 8. Zip Code 9. Telephone # 10. Ext. #
Tom Wood, Highway Department Supt. woodt@leicesterma.org
11. Contact Person 12. e-mail address (optional)

3. Three copies of this form will be needed.

Copy 1 - the original must accompany your permit application. Copy 2 must accompany your fee payment. Copy 3 should be retained for your records

C. Facility, Site or Individual Requiring Approval

Town of Leicester, Massachusetts
1. Name of Facility, Site Or Individual
3 Washburn Square
2. Street Address
Leicester MA 01524 (508) 892-7000
3. City/Town 4. State 5. Zip Code 6. Telephone # 7. Ext. #
8. DEP Facility Number (if Known) 9. Federal I.D. Number (if Known) 10. BWSC Tracking # (if Known)

4. Both fee-paying and exempt applicants must mail a copy of this transmittal form to:

MassDEP
P.O. Box 4062
Boston, MA
02211

D. Application Prepared by (if different from Section B)*

Tata & Howard, Inc.
1. Name of Firm Or Individual
222 St. John Street, Suite 1G
2. Address
Portland ME 04102 (207) 518-9500
3. City/Town 4. State 5. Zip Code 6. Telephone # 7. Ext. #
Aubrey L. Strause, P.E.
8. Contact Person 9. LSP Number (BWSC Permits only)

* Note:
For BWSC Permits, enter the LSP.

E. Permit - Project Coordination

1. Is this project subject to MEPA review? yes no
If yes, enter the project's EOE file number - assigned when an Environmental Notification Form is submitted to the MEPA unit:

EOEA File Number

F. Amount Due

DEP Use Only

Special Provisions:

- 1. Fee Exempt (city, town or municipal housing authority)(state agency if fee is \$100 or less).
There are no fee exemptions for BWSC permits, regardless of applicant status.
- 2. Hardship Request - payment extensions according to 310 CMR 4.04(3)(c).
- 3. Alternative Schedule Project (according to 310 CMR 4.05 and 4.10).
- 4. Homeowner (according to 310 CMR 4.02).

Permit No:

Rec'd Date:

Reviewer:

Check Number

Dollar Amount

May 1, 2013
Date

Municipality/Organization: Town of Leicester, MA
EPA NPDES Permit Number: MAR041202
MassDEP Transmittal Number: X255760
Annual Report Number & Reporting Period Year 10
April 1, 2012-March 31, 2013

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2013)

Part I. General Information

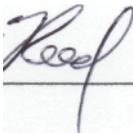
Contact Person: Thomas Wood Title: Superintendent, Highway Department

Telephone #: (508) 892-7021 Email: woodt@leicesterma.org

Mailing Address: 59 Peter Salem Road, Leicester, MA 01524-1267

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: Robert Reed

Title: Town Administrator

Date: May 1, 2013

Part II. Self-Assessment

The Town of Leicester's Highway Department continues to take the lead on compliance with the Town's MS4 Permit.

The Town of Leicester is pleased to be one of 13 MS4 municipalities participating in the Central Massachusetts Regional Stormwater Coalition ("the Coalition"), funded by the Community Innovation Challenge Grant (administered by the Massachusetts Executive Office of Administration and Finance). The Town of Spencer serves as the lead community for the Project. Leicester Stormwater Committee member Mike Knox serves on the Coalition Steering Committee, so the town plays a lead role in the development of many tasks.

The work completed under the grant, which was fully funded in the amount of \$310,000, began on May 1, 2012, and included eighteen tasks, each of which was facilitated by Tata & Howard, Inc., the consulting firm that is also providing stormwater services to the Town of Leicester. The eighteen tasks completed under this project include:

1. Develop a Methodology to Reach a Common Benchmark
2. Develop Training DVD/CD
3. Develop Educational Website
4. Develop Online Database for Data Management
5. Develop Stormwater System Mapping Integration
6. Develop a Sump Pump Discharge Policy
7. Develop a Stormwater Pollution Prevention Plan (SWPPP) Template
8. Develop a Salt/Sand Application Decision Tree
9. Develop a Stormwater BMP Toolbox
10. Develop a Request for Proposals for General Consulting Services
11. Administrative Support
12. Cost/Benefit Analysis of a Regional Stormwater Laboratory
13. Drainage Extension Approach that Mirrors Inflow Data and Priorities
14. Produce Twenty Facility Specific Figures for Incorporation into the Stormwater Pollution Prevention (SWPPP) Template
15. Illicit Discharge Detection and Elimination (IDDE) Documentation Packet
16. Purchase of Second Leica Surveying Device
17. Ongoing Website Maintenance and Development
18. Field Training with Tablets

A detailed narrative on the Coalition tasks has been provided at the end of the Part II Self-Assessment.

The Coalition purchased several water quality field kits and meters, most of which are focused on identifying illicit discharges and aligned with the field screening parameters expected to be listed in the pending Massachusetts Small MS4 permit. These tools are available to all 13 member communities. Leicester Stormwater Committee member Joanne Bernier has experience using these tools, and intends to implement screening of outfalls in Year 11, with the approach and plan developed in conjunction with the Highway Department and with the Town's consultant.

The Coalition applied for \$200,000 in additional funding from the CIC Grant program to continue the regional stormwater program in Fiscal Year 2013, which would allow 17 additional communities to join the Coalition. The Coalition received an award of \$115,000 in FY2013 grant funds, and is currently working to confirm which of the 30 (total) communities are willing and able to make a financial contribution of \$2,833 to fund the gap between scope of work and the grant amount. It is expected that most of the 30 communities will make this commitment- Leicester has already sent its executed Intermunicipal Agreement and payment to Spencer.

In Year 11, the expansion will include the following tasks:

1. Incorporate Expansion Community Data into Integrated Mapping
2. Implement FY2012 Tasks 1-7 for Expansion Communities
3. Implement FY2012 Addendum Tasks for Expansion Communities
4. Purchase Tablet Computer Devices for Expansion Communities
5. Provide PeopleGIS Training to Expansion Communities
6. FY2012 Support for Expansion Communities
7. Expand FY2012 Integrated Mapping for 13 Original Communities
8. Expand and Enhance the CMRSWC Website
9. Complete Field Work Using the Draft FY2012 Stormwater Field Services RFP
10. Purchase a Storage and Transport Equipment Trailer
11. Training on Water Quality Sampling
12. An Inventory of industrial facilities in each Coalition community that should have applied for coverage under the USEPA MSGP (Industrial Stormwater) Permit.
13. Facilitation and Coordination

The Leicester Water Supply Board constructed a repair project to correct an illicit discharge located at the intersection of Franklin Street and Grove Street during inspection of Outfall No. 74. The repair project permanently eliminated the illicit discharge.

In Year 10, the Leicester Stormwater Committee gained new members. Conservation Commission member Glenda Williamson stepped down, and was replaced by Conservation Commission Chair Stephen Parretti. School department liaison Thomas Buckley retired, but teacher Joanne Bernier has become involved to continue Leicester's outreach to students in the community. Ms. Bernier's background in environmental monitoring and enthusiasm for environmental education will make her an asset to the Committee in

Year 11. Stormwater Committee member Ruth Kaminski stepped down, but continues to be a strong advocate for public education and outreach, household hazardous waste collection, and other efforts that support the work of the Town toward compliance with its MS4 Permit.

Operations and Maintenance activities completed by the Town's Highway Department continue to reduce potential for pollution from stormwater. During this period, all catch basins on 131 streets in Town were cleaned, and 198 Town streets were swept. The Town uses catch basin cleaning activities as an opportunity to identify potential illicit discharges. The Highway Department also cleaned 14 miles of sidewalks in the Town, including those along Route 9, which is a State Highway.

Leicester previously submitted comments to USEPA on the Draft Interstate, Merrimack, and Southern Watershed (IMS) MS4 Permit, and continues to wait for finalization of the new Massachusetts MS4 Permit, expected sometime in 2013.

Central Massachusetts Regional Stormwater Coalition: FY2012 Progress

In the following sections, descriptions of the technical tasks and purchases made possible by the CIC grant funding have been separated into sections that mirror the six Minimum Control Measures (MCM's) in the 2003 Massachusetts Small MS4 Permit. Other specific tasks have been incorporated into the tables in Part III of this Annual Report (beginning on Page 11).

One of the more innovative tools developed by the Coalition in Year 10 supports many MCM's and has been noted separately: an integrated online mapping and inspection database. The database is cloud-based, and can be accessed by all 13 member communities through a desktop or tablet computer. Existing mapping completed by the 13 member communities was converted to a project standard format and uploaded to a single online map, so that the communities can see each other's system. This tool represents the essence of the Coalition project's message, which is that stormwater is regional- it doesn't stop at a community boundary. All mapped infrastructure is connected to inspection reports that mirror hard-copy forms developed in the 15 Standard Operating Procedures discussed under MCM 1, below: for example, outfall and catch basin inspections. The developed integrated mapping and inspection system is so comprehensive and flexible that does not fit into just one of the MCM's. It aids communities with public education and outreach (MCM 1), as surveying is a highly-visible activity that will generate questions, and would make an engaging demonstration to school groups). The integrated mapping and inspection database documents evidence of potential illicit discharges or the absence thereof (MCM 3), aids construction site stormwater control (MCM 4) by allowing for data evaluation of how much sediment is contained in a sump, and makes good housekeeping (MCM 6) easier by collecting data on how often catch basins are cleaned. Other tasks and tools of the project connect to the integrated mapping and inspection database, which was designed to serve the needs of the Coalition communities well beyond the 2003 Massachusetts Small MS4 Permit.

Minimum Control Measure 1: Public Education and Outreach

The Coalition developed a DVD to be distributed to each member community. The DVD contained a number of materials appropriate for public education and outreach, with materials on a variety of topics. The topics included illicit discharge detection and elimination, management of pet wastes, and appropriate use of fertilizer, among others. The benefit of this delivery format is that the group members can print materials on demand. The Coalition also developed a presentation on stormwater management, with content focused on educating the general public and volunteer groups.

The Coalition purchased 13 copies of the Pennsylvania State University documentary “Liquid Assets”, and distributed a copy to each member community. Most of the Coalition communities intend to play this video on their local cable access channels and at appropriate community events in 2013.

The Coalition purchased 100 water quality monitoring kits from the World Water Monitoring Challenge program (www.worldwatermonitoringday.org), which “builds public awareness and involvement in protecting water resources around the world by engaging citizens to conduct basic monitoring of their local water bodies”. Several communities have already worked with teachers in their local school department or district to do outreach to elementary and middle-school aged students. The kits are being stored in Spencer and Shrewsbury for distribution to the Coalition members.

The Coalition purchased an Enviroscope table focused on non-point source pollution education (<http://www.enviroscopes.com/nonpoint-source.html>). This tool is a hands-on, visual trainer to demonstrate the importance of good housekeeping and low-impact development for pollution prevention, with the objective of maintaining water quality in our communities. Two communities have done demonstrations for local schools using this tool, and many additional communities plan to use it at local Earth Day or other community fairs in spring and summer 2013.

The Coalition developed an educational website, www.CentralMAStormwater.org, focused on providing information about the project to a number of audiences, including the general public, educators, and kids. Five members of the Coalition Steering Committee received training on how to update the website’s content.

Minimum Control Measure 2: Public Involvement and Participation

The Coalition developed a presentation on stormwater management, with content focused on educating elected officials and municipal department heads about the requirements of the 2003 Small MS4 Program, changes likely in the anticipated new Small MS4 Permit, and the financial impact these potential changes may have on Massachusetts communities.

Minimum Control Measure 3: Illicit Discharge Detection and Elimination

The Coalition developed SOP 10, “Locating Illicit Discharges”, intended to define the types of illicit discharges that may be observed in the Coalition communities and provide guidance on tools that can be used to identify each. SOP 10 includes an Illicit Discharge Incident Tracking Sheet.

The Coalition also developed the Illicit Discharge Detection and Elimination (IDDE) Documentation Packet, which specifies how illicit discharges are detected and what department or person is responsible for ensuring elimination remains a substantial challenge to many MS4 communities. Without documentation of the entity responsible for this task for a variety of types of illicit discharge, communities may not satisfy the requirements of the 2003 Massachusetts Small MS4 Permit and may be unprepared for increased IDDE compliance in the new Small MS4 Permit. This deliverable clarified USEPA’s minimum IDDE requirements and incorporated appropriate existing IDDE Plans and materials by reference. More importantly, the task provides a framework for people in multiple departments to understand each person’s responsibilities, encourage cooperation and communication toward a single objective, and provide templates for documenting observations, actions, and compliance.

The Coalition purchased two Leica GPS survey devices that can be used to map new structures with very high accuracy, using connection to a military-grade RTK satellite network. The Coalition also purchased 13 tablet computers, one for each member community. Both of these tools can be used to directly access the online mapping and inspection system: the Leica will be most valuable for mapping outfalls, catch basins, pipe, drain manholes, BMPs, and other components of the MS4, while the tablet computers will be most valuable for ongoing inspection of the structures. These two activities serve as the foundation of IDDE. The Coalition purchased portable wireless devices (MiFi) for each of the 13 member communities so that both Leica and tablet computers can be used in the field. Members of all Coalition communities received training on both the Leica devices and the tablet computers during Year 10.

The Coalition purchased several water quality field kits and meters, most of which are focused on identifying illicit discharges and aligned with the field screening parameters expected to be listed in the pending Massachusetts Small MS4 permit. A summary of the water quality tools purchased is below. These tools are available to all 13 member communities.

Analyte or Parameter	Manufacturer	Number Purchased	Product Type*
Ammonia	CHEMetrics	1	Colorimeter
	Hach	3	Field
Surfactants (detergents)	CHEMetrics	1	Colorimeter
	Hach	2	Colorimeter
	CHEMetrics	4	Field Kit
	Hach	3	Field Kit
Fluoride	CHEMetrics	2	Colorimeter
	Hach	1	Colorimeter
Hardness	Hach	2	Colorimeter
pH	CHEMetrics	1	Meter
	Hach	2	Colorimeter
	Hach	2	Meter
	Extech	4	Meter
Chlorine	CHEMetrics	1	Colorimeter
	CHEMetrics	4	Field Kit
Turbidity	CHEMetrics	2	Meter
Total Dissolved Solids	Hach	2	Meter
	Extech	4	Meter
Conductivity	Hach	2	Meter
	Extech	4	Meter
Salinity	Hach	2	Meter
	Extech	4	Meter
Temperature	Extech	4	Meter

*- Some meters, such as the colorimeters and Extech meter, can be used for multiple parameters.

In February 2013, the Coalition began an evaluation of options to serve as a regional stormwater laboratory. It summarizes the estimated capital costs to retrofit an existing laboratory at the Town of Millbury's unused wastewater treatment facility, as well as annual certification, calibration, and labor costs that would be associated with operating that facility. If retrofitted, the laboratory at this site has the potential to serve as a regional stormwater laboratory that may benefit the Coalition and other adjacent communities once the new Massachusetts Small MS4 Permit is finalized, particularly as the new permits will have an increased focus on IDDE.

The Cost/Benefit Analysis calculates the approximate fee the regional laboratory would need to charge for services in order to cover the capital and annual cost(s) of maintaining the laboratory. This deliverable compares the potential Millbury regional laboratory with alternatives in the area, including commercial laboratories and the laboratory at the Upper Blackstone Water Pollution Abatement District. This report is presently being finalized.

The Coalition developed a Request for Proposals (RFP) for a third-party firm to perform many of the field or inspection services defined in the 15 SOP's, including outfall inspection (dry weather and/or wet weather), water quality monitoring, catch basin inspection, and other related tasks. These services are all vital to the effort to identify illicit discharges in the Coalition communities. The work of the RFP will be funded using FY2013 CIC monies. The scope of the RFP will be reviewed and compared to the requirements of the proposed or final Massachusetts Small MS4 Permit in effect at that time.

Minimum Control Measure 4: Construction Site Stormwater Runoff Control

The Coalition developed SOP 6, "Erosion and Sedimentation Control", intended to help communities minimize discharges from land-disturbing activities. The SOP addresses design, planning, construction, and inspection tools and activities that can serve as BMPs. The SOP also outlines inspection requirements for a variety constructed BMPs that need to serve a long-term purpose for protecting surface waters from discharge of sediments.

Minimum Control Measure 5: Post-Construction Stormwater Management in New Development and Redevelopment

The Coalition developed a Stormwater Best Management Practices (BMP) Toolbox, compiling the stormwater post-development tools currently permitted and encouraged for small development or redevelopment, specifically single-family homes and limited commercial renovations that have a small development footprint. The Stormwater BMP Toolbox provides technical data, design factors, and construction limitations with these BMPs in non-technical language. The objective was to provide the average property owner with easy-to-understand information that encourages them to select low-impact stormwater management tools for their properties, construct them safely, and maintain them for long-term benefit. The BMPs in the Toolbox are consistent with the requirements of the current Small MS4 Permit, the Massachusetts Stormwater Handbook (February 2008), and other current guidance documents.

Minimum Control Measure 6: Pollution Prevention and Good Housekeeping in Municipal Operations

The Coalition developed a Stormwater Pollution Prevention Plan (SWPPP) template in the form of a word processing document. The template addresses elements common to all SWPPPs, including storage of materials, site inspection practices, water sampling, training, spill prevention and cleanup, Standard Operating Procedures for a number of activities, and other sections. SWPPP template covers many types of municipal properties. This includes highway department garages and public works yards, where salt is stored

and vehicle maintenance or storage is completed, as well as parks, golf courses, and cemeteries, where fertilizers and pesticides may be applied and lawn mowing activities may result in small spills. The SWPPP template includes built-in instructions to make it as simple as possible for each community to develop a SWPPP for a property, simply by deleting text that doesn't apply. Each community also received at least one detailed Site Plan that shows the location of materials storage, vehicle maintenance and other SWPPP-specific activities at a municipal facility, as well as the locations of structures that discharge to the MS4 and the direction of stormwater flow.

The Coalition developed 15 Standard Operating Procedures (SOP's) intended to provide guidance on activities required or encouraged by the 2003 Massachusetts Small MS4 Permit. These SOPs addressed such diverse activities or needs as outfall inspection (both dry weather and wet weather), catch basin cleaning, erosion and sedimentation control, oil/water separator maintenance, use and storage of pesticides and fertilizers, and many more. The group developed standard forms and methodologies for these procedures, many of which were incorporated into the Integrated Online Mapping and Inspection System, described in following paragraphs.

The Coalition developed two presentations on pollution prevention in stormwater management, with content focused on educating employees of public works, engineering, conservation, planning, highway, and other similar municipal departments on the requirements of the 2003 Small MS4 Program. This includes a training presentation on the SWPPP Template and the responsibilities of municipal personnel to implement requirements of the SWPPP. A second training presentation provides explanation and insight on the 15 SOP's described previously.

The Coalition developed a Sump Pump Discharge Policy that provides a framework for the member communities to respond to needs to remove sump pumps from the sanitary sewer system without causing property damage or creating a hazardous condition for the public. The Policy discusses considerations related to potential contamination and reduction in capacity of the storm drain system when sump pumps are permitted to connect to the drainage system, and lays out a situational approach to provide flexibility in administering a policy. The Policy includes guidance for when such a connection should be considered, what information the municipality can request from a residential or commercial property to guide in its decision, and outlines the responsibilities of the property owner.

The Coalition developed a Salt/Sand Benchmarking tool to guide member communities in determining the present loading rate of chloride (per lane-mile) presently applied by its salt trucks and other municipal vehicles, regardless of the compound (e.g.: sodium chloride, green salt, calcium chloride) or form (e.g., solid or liquid, mixed with sand), and in evaluating alternative application methods and materials to current practices. The deliverable guides communities through an equipment calibration process and suggests a target reduction rate that is coupled to and appropriate for the benchmarked loading rate. The objective of this task is to reduce the overall loading of chlorides to surface waters in the region while maintaining safe conditions on roadways.

Miscellaneous

The Sump Pump Policy as well as a Private Drainage Connection SOP (SOP 15) documents both include technical criteria for a member community to evaluate when considering granting approval to residential and/or commercial users to connect such private drainage into engineered storm drain systems within the MS4. However, this approach is not effective in areas where no engineered storm drain system exists. In February 2013, the Coalition began to develop a process to connect pieces of data managed by multiple departments within a community for the benefit of all departments. Specifically, the task merges knowledge of areas where high inflow (i.e., sump pumps and drainage connections) to the sanitary sewer has been identified but where no engineered storm drain system exists. This knowledge includes drainage Capital Improvement Plan (CIP) categories and fields to prioritize the extension of the engineered drain system, within the parameters of the Sump Pump Policy and the Private Drainage Standard Operating Procedure, to reduce inflow to the sanitary sewer while protecting surface water quality. This report is presently being finalized.

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 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1	Create a stormwater program	Highway Department; Planning Board; Conservation Commission; Board of Health; Board of Selectmen	Leicester will present its Comprehensive Stormwater Management Program to the public at a public meeting.	This goal was completed in previous Permit years.	Continue to educate the public about the Stormwater Management Program. The Town continues to await the finalization of the new MA MS4 Permit, anticipated in Year 11.
Revised					
2	Create a stormwater program	Highway Department	Leicester will identify appropriate sources of funding assistance (SRF, 319 Grant Program, Lakes & Ponds Grant Program, Source Water Protection Grant Program, Recycling Grant Program) and apply for assistance in implementing portions of Leicester’s Comprehensive Stormwater Management Program, including public education and outreach.	As of March 2013, MassDEP will allow Section 319 grant funding to be used for work within the Town’s urbanized areas or to meet the requirements of the federal MS4 Permit. This use was not permitted in Year 10. Leicester was an active participant in the Coalition project.	Leicester will consider applying for Section 319 grant funding to support implementation of nonpoint source pollution projects. Leicester will continue to participate in the Coalition project.
Revised					
3	Address specific groups	Highway Department	Distribute EPA and other relevant educational brochures to targeted audiences. Distribution points include Town Hall, Library, and Transfer Station.	Leicester continued involvement in local community events. Outreach	Continue to implement and evaluate outreach programs to educate the specific groups of the public, particularly materials

Revised				materials continue to be available on the Town's website. Leicester's Stormwater Committee provides information at Founder's Day activities, which were held on June 16, 2012 in Year 10.	developed by the Coalition project. Information will be provided at the Founder's Day event on June 15, 2013. Leicester will link its Town website to the Coalition website.
4	Target groups likely to impact stormwater	Highway Department	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.	Revised	
5	Identify alternative information sources	Board of Selectmen; MIS Department	Leicester will post links to stormwater BMPs and other water quality education resources, including EPA and DEP, on its website. http://www.ci.leicester.ma.us/	Outreach materials continue to be available on the Town's website.	Continue to identify and implement alternative information sources for public outreach and evaluate the program. Stream the Pennsylvania State University documentary "Liquid Assets" on the Leicester local cable access channel.
Revised					
6	Identify alternative information sources	Highway Department	Leicester will also post links on its website to the Blackstone River Watershed Association at www.thebrwa.org , the Blackstone River Watershed Council at www.BVTourism.com , the Nashua River Watershed Association at http://www.nashuariverwatershed.org , the French River Watershed Basin Team at http://www.state.ma.us/envir/water/frenchquinebaug/frenchquinebaug.htm and the Chicopee River Watershed at www.chicopeeriver.org .	Leicester continues to maintain these links on its website.	Continue to identify and implement alternative information sources for public outreach and evaluate the program. Promote Coalition developed educational website, www.CentralMAStormwater.org .
Revised					

7	Utilize local website	Highway Department	Public meeting notice and the meeting reviewing Leicester's Comprehensive Stormwater Management Program will be posted on Leicester's local access channel.	Leicester held several meetings of the Stormwater Committee in Year 10.	Continue to utilize the local website for public outreach and evaluate its use.
Revised				All meetings are published in advance on the Town website and open to the public.	Upload Coalition developed public education and outreach materials on topics including illicit discharge detection and elimination, appropriate fertilizer use and pet waste management.
8	Develop, conduct and document educational programs.	Highway Department Liaison	The Town of Leicester will appoint a liaison to the Blackstone River Watershed Association and the Nashua River Watershed Association to disseminate information to the Town on programs and activities.	Leicester's participation in the Coalition project included substantial communication with multiple watershed groups.	Continue to evaluate connections with watershed groups.
Revised					
9	Promote Household Waste Recycling	Highway Department; Board of Health	The Town of Leicester will work with the Town's contracted waste hauler and the Board of Health to continue to sponsor Hazardous Waste Collection Days.	Leicester uses its Town website to host a "FAQ" on hazardous waste disposal, to promote and evaluate household waste recycling programs and encourage residents to utilize services available at the Recycling Center.	Continue to promote and evaluate Household Waste Recycling programs. A HHHW Collection Event is scheduled in Year 11 for October 19, 2013. Leicester will continue to participate in Drug Take-Back events.
Revised					

				<p>The Highway Department recycles its used oil and serves as a drop-off location for used oil from residents, with all materials collected and processed regularly by the Recycling Center.</p> <p>Leicester participates in all DrugTake-Back programs sponsored nationally by the federal government, and provides notice of these events locally.</p>	
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2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities
10 Revised	Storm drain stenciling	Highway Department	Leicester will work with local Scout groups to develop a stenciling program. Stenciling will target Leicester’s sub-watersheds.	Leicester continues to maintain catch basin stencils, but does not involve the public in this activity for safety reasons.	Continue to maintain catch basin stencils, as needed.
11 Revised	Community clean-ups	Highway Department; Leicester Conservation Commission	Town of Leicester 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.	As it does each year, Leicester Highway Department provided transportation and coordination of trash collected during Earth Day cleanup events in April 2012.	Continue to hold community clean-ups in the Town, including Earth Day events in Year 11, and evaluate the program.
12 Revised	Community clean-ups	Highway Department	Town will provide trucks and other material to support cleanup efforts and disposal of materials.	The Highway Department continues to support local cleanup efforts with staff and equipment.	Continue to hold community clean-ups in the Town and evaluate the program.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities
13	Inventory and mapping of storm drain system	Highway Department	Leicester will identify appropriate sources of funding assistance (SRF, 319 Grant Program, Lakes & Ponds Grant Program, Source Water Protection Grant Program, Recycling Grant Program) and apply for assistance in implementing portions of Leicester’s Comprehensive Stormwater Management Program, including public education and outreach.	In Year 10, members of Leicester’s Highway Department received training on the integrated mapping and inspection database, which will serve as a major tool to map structures and components of the storm drain system and monitor discharges.	Continue to inspect mapped outfalls, and update mapping as new outfalls are added. Utilize the Coalition purchased Leica GPS device to map catch basins during Permit Year 11. Already in Year 11, Leicester has mapped over 450 catch basin structures.
Revised				The Town received training on using both the Leica GPS devices and the tablet computer, both of which were purchased as part of the Coalition project.	Utilize the Coalition purchased tablet computer to complete outfall and catch basin inspections.
14	Mapping and identification of outfalls and receiving waters.	Highway Department	Leicester will develop and implement a plan to map all outfalls and receiving bodies of water, contingent on Town Meeting approval of funding.	Leicester has mapped all known outfalls in the Urbanized Area to date.	The Town will continue to locate new outfalls that are added and to screen high priority outfalls.
Revised					Utilize the Coalition purchased water quality field test kits to test and monitor priority outfalls.
15	Identification/description of problem areas	Highway Department	Leicester will develop and implement an Illicit Discharge Detection and Elimination (IDDE) plan, contingent on Town Meeting approval of funding.	The Leicester Water Supply Board designed new sewer infrastructure at the intersection	Continue to implement and be proactive with the IDDE plan from data from the consultant and

Revised				<p>of Franklin Street and Grove Street to eliminate an illicit discharge located previously. The construction contract was completed during the summer of 2012, permanently eliminating this illicit discharge.</p> <p>The Town received training on the IDDE Documentation Packet materials, developed as part of the Coalition project. The objective of this task was to educate people in multiple Town departments on illicit discharges and define how these people (and departments) will work together to eliminate them.</p>	<p>evaluate the progress.</p> <p>Review and evaluate the Coalition developed standard operating procedure (SOP) for locating and identifying illicit discharges.</p> <p>The Highway Department will host a meeting of multiple departments in Year 11 to review the IDDE Documentation Packet and define responsibilities.</p>
16	Enforcement procedures addressing illicit discharges.	Planning Board Town Counsel Board of Health	Leicester 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.	The Town received training on the IDDE Documentation Packet materials, developed as part of the Coalition project. The objective of this task was to educate people in multiple Town departments on illicit discharges and define how these people (and departments) will work together to eliminate them.	Continue to implement and evaluate the current policy.
Revised				<p>of this task was to educate people in multiple Town departments on illicit discharges and define how these people (and departments) will work together to eliminate them.</p>	Review and evaluate the Coalition developed IDDE Documentation Packet.
17	Public information program regarding hazardous wastes and dumping.	Highway Department; Board of Health	Leicester will provide educational brochures to residents promoting proper disposal of household hazardous wastes.	Leicester has continued to prioritize education about hazardous wastes and appropriate material disposal. Its website continues to be a powerful tool for residents.	Continue to implement and evaluate the current policy.
Revised					
18	Initiation of recycling programs	Planning Board Board of Health	Leicester will apply for funding assistance from DEP's Recycling Grant Program for assistance in public education and the purchase of recycling materials.	Leicester continues to actively seek recycling grants, most recently to implement a program to provide low-cost composting	Continue to implement and evaluate the current policy.

Revised				<p>containers to residents and another program to serve as a drop-off location for unused herbicides and pesticides.</p> <p>The Recycling Center website maintains a large amount of information for residents to guide and encourage recycling and proper disposal of wastes.</p>	Continue to see grants that encourage residents to drop off materials that otherwise may result in pollution.
19	Watershed assessments and studies	Highway Department; Conservation Commission; Board of Health	Leicester 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 impacting water quality in Smiths Pond, Southwick Meadow, Bouchard Pond, Greenville Pond West, Rochdale Pond, and Greenville Pond. These water bodies have been identified as impaired and are on DEP's 303d list.	Leicester received great benefit in Year 10 from the Coalition project. Most of the Coalition tasks were developed with a "regionalization" focus, and address multiple watersheds.	Continue to implement and evaluate the current policy with the Stormwater Committee in place.
Revised					
20	Watershed assessments and studies	Highway Department Leicester Water Supply Districts	The Town of Leicester will encourage cooperation with Leicester's Public Drinking Water Supply Districts to apply for funding assistance from DEP's Source Water Protection Program for grant assistance to develop wellhead protection plans and stormwater management plans within Leicester's Zones II in Leicester.	Leicester's Stormwater Committee continues to have a strong relationship with local public drinking water districts.	Continue to implement and evaluate the current policy.
Revised					

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities
21	Bylaw: Stormwater managements for construction sites 1 acre or larger	Planning Board; Conservation Commission; Town Counsel; Board of Health; Zoning Board of Appeals	Leicester will review model by-law developed by DEP in consultation with the Attorney General’s Office.	Stormwater bylaw was developed in previous permit years. The Town received construction inspection SOPs developed as part of the Coalition project in Year 10.	Continue to implement and evaluate the current policy with the stormwater committee in place. Review and evaluate the Coalition developed SOP for erosion and sedimentation control. The SOP was developed to minimize sediment discharges from land disturbing activities.
Revised					

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 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities
22	Bylaw: Require post-construction runoff controls	Planning Board; Conservation Commission; Town Counsel; Board of Health; Zoning Board of Appeals	Leicester will review model by-law developed by DEP in consultation with the Attorney General’s Office.	Stormwater bylaw was developed in previous permit years. The Town received structural Best Management Practice (BMP) inspection SOPs developed as part of the Coalition project in Year 10.	Continue to implement and evaluate the current policy with the stormwater committee in place. Review and evaluate for potential implementation or incorporation into existing policy the Coalition

Revised					<p>developed Stormwater Best Management Practices (BMP) Toolbox , which was developed to provide property owners with information about low impact stormwater management tools.</p> <p>The Town will consider using porous pavers in a project being considered in the Town Common area, if that project moves forward.</p>
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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 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities
23	Develop a municipal Operations and Maintenance Plan	Highway Department	Using regulations and recommendation from DEP and EPA, Leicester will develop and update an operations and maintenance plan to include proper disposal of street sweepings, catch basin cleanout, snow disposal, roadway deicing procedures, vehicle washing, and outside storage of materials.	<p>The Town continues to maintain compliance at facilities it owns and operates. A Highway Department SWPPP was developed in previous years.</p> <p>Catch basin screening forms and a maintenance schedule were implemented prior to Year 10. All basins were cleaned at least once in</p>	<p>Review and evaluate the Coalition developed Stormwater Pollution Prevention Plan (SWPPP) template. The template may be customized to produce a fully developed SWPPP for individual properties.</p> <p>Review and evaluate the Coalition developed Sump Pump Discharge</p>

Revised				<p>Year 10, with approximately 100 basins cleaned a second time.</p> <p>The Town received SOPs on wet and dry weather outfall inspection, IDDE, and other actions that were developed as part of the Coalition project in Year 10. These forms and inspections were incorporated in the integrated mapping and inspection database, on which several Highway Department staff members received training.</p>	<p>Policy, which may be used to provide guidance on the removal of sump pumps from the sanitary sewer system and subsequent incorporation into the drainage system.</p>
24	Develop a municipal Operations and Maintenance Plan	Highway Department	Leicester will implement a formal inspection program, including maintenance logs and scheduling, for catch basin cleaning, repairs, and new installation.	<p>Catch basin screening forms and a maintenance schedule were implemented prior to Year 10.</p> <p>The Town received SOPs on wet and dry weather outfall inspection, IDDE, and other actions that were developed as part of the Coalition project in Year 10. These forms and inspections were incorporated in the integrated mapping and inspection database, on which several Highway Department staff members received training.</p> <p>Catch basin screening forms were implemented prior to Year 10.</p>	<p>Continue to implement this project and evaluate the progress.</p> <p>Review, evaluate and implement the Coalition developed 15 SOP's, which provide guidance on activities including but not limited to outfall inspection (both dry and wet weather), catch basin cleaning, erosion and sedimentation control, oil/water separator maintenance and use and storage of pesticides and fertilizers.</p> <p>Review and evaluate the Coalition developed Salt/Sand Benchmarking tool, which may be used to determine the current chloride loading rate and evaluate alternative application methods and materials. This may aid in the reduction of chlorides to surface waters while maintaining safe roadway conditions.</p>
Revised					

25	Develop and implement training programs for municipal employees.	Highway Department	Leicester will send a minimum of 3 public works employees annually to training seminars sponsored by MassHighway, BayState Roads, and other relevant agencies or vendors.	<p>Training in Year 10 included several events provided by the Coalition, including training on how to use the Leica GPS unit and training on how to use the tablet computer.</p> <p>Highway Department employee Derek Keats is licensed in Massachusetts for gas dispensing. The training required for this certification involves efforts toward spill prevention and cleanup and pollution prevention, both of which benefit the Highway Department facility and are consistent with goals in its SWPPP.</p> <p>Four Highway Department employees received training from Town insurance provider Mier Insurance on safe driving practices, which reduce the potential for accidents.</p>	<p>Continue to implement this project and evaluate the progress.</p> <p>Provide Coalition-developed education and training to municipal employees about the responsibilities of municipal personnel to implement requirements of a SWPPP and provide explanation of the previously mentioned 15 SOP's.</p>
Revised					
26	Review storm drainage infrastructure needs.	Highway Department	Leicester will incorporate storm drain infrastructure review in Leicester's Chapter 90 project utilizations.	This storm drain evaluation is incorporated into project reviews.	Continue to implement this project and evaluate the progress.
Revised					

6a. Additions

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)	Progress on Goal(s) – Permit Year 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities
Revised	Not Applicable	Not Applicable	Not Applicable	<p>The following Leicester water bodies are considered impaired per the current Integrated List of Waters. Several water bodies are currently Category 2 (being assessed for one or more designated uses) which may require TMDLs in the future. Other water bodies have never been assessed (Category 3), but may require TMDLs in the future. Leicester will continue to watch for these TMDLs to be published and will evaluate published Waste Load Allocations, accordingly.</p>	Evaluate any TMDLs developed for Leicester impaired waters.
				<p>TMDLs have been developed for several water bodies (Category 4a), including: Cedar Meadow Pond (aquatic plants); Smiths Pond, Southwick Pond (aquatic plants); Waite Pond (mercury in fish tissue); Dutton Pond (total phosphorus and “Nutrient/Eutrophication Biological Indicators”), Greenville Pond (turbidity), and Rochdale Pond (“Nutrient/Eutrophication Biological Indicators”). Most of these impairments do not require actions under the MS4.</p> <p>TMDLs for Burncoat Brook (<i>E. coli</i> and aquatic macroinvertebrate), Grindstone Brook (<i>E. coli</i>), and French River (total phosphorus, mercury in fish tissue, turbidity, and aquatic plants) will be developed in the future.</p>	

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

Other than the information presented in Part III, above, no information was collected or analyzed. The Town of Leicester maintains that it continues to be in compliance with the 2003 Massachusetts Small MS4 Permit.

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, 2012 through March 31, 2013)

Programmatic

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	
Annual program budget/expenditures **	(\$)	\$20,000
Total program expenditures since beginning of permit coverage	(\$)	
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		

Education, Involvement, and Training

Estimated number of property owners 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.)	
Shoreline cleaned since beginning of permit coverage	(mi.)	
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	
▪ community participation **	(# or %)	
▪ material collected **	(tons or gal)	
School curricula implemented	(y/n)	

Legal/Regulatory

	In Place Prior to Phase II	Reviewing Existing Authorities	Drafted	Draft in Review	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	(#)	89
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	100
Outfalls inspected/screened **	(# or %)	89
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	
Illicit discharges identified **	(#)	1
Illicit discharges identified (Since beginning of permit coverage)	(#)	1
Illicit connections removed **	(#); and (est. gpd)	1
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	1
% of population on sewer	(%)	
% of population on septic systems	(%)	

Construction

(Preferred Units) Response

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 **	(#)	0

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	
Site inspections (for proper BMP installation & operation) completed **	(# or %)	
BMP maintenance required through covenants, escrow, deed restrictions, etc.	(y/n)	
Low-impact development (LID) practices permitted and encouraged	(y/n)	

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets) **	(times/yr)	1
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	2
Qty of structures cleaned **	(#)	131 streets with catch basins
Qty. of storm drain cleaned **	(%, LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	
• Hourly or per basin contract rate **	(\$/hr or \$ per basin)	
• Disposal cost**	(\$)	
Cleaning Equipment		
• Clam shell truck(s) owned/leased	(#)	
• Vacuum truck(s) owned/leased	(#)	
• Vacuum trucks specified in contracts	(y/n)	
• % Structures cleaned with clam shells **	(%)	
• % Structures cleaned with vector **	(%)	
	(Preferred Units)	Response
Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	1
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	1
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	
• Hourly or lane mile contract rate **	(\$/hr. or ln mi.)	
• Disposal cost**	(\$)	
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	
• Vacuum street sweepers owned/leased	(#)	
• Vacuum street sweepers specified in contracts	(y/n)	
• % Roads swept with rotary brush sweepers **	%	
• % Roads swept with vacuum sweepers **	%	
Reduction (since beginning of permit coverage) in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	

Integrated Pest Management (IPM) Practices Implemented	(y/n)	

	(Preferred Units)	Response
Average Ratio of Anti-/De-Icing products used ** (also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)	% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand Treated salt (NaCl/ MgCl ₂ mix)	400 tons (goal for Year 11= none) 1,900 tons
Pre-wetting techniques utilized **	(y/n or %)	No
Manual control spreaders used **	(y/n or %)	
Zero-velocity spreaders used **	(y/n or %)	
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/l _n mi. or %)	
Estimated net reduction or increase in typical year sand application rate **	(±lbs/l _n mi. or %)	
% of salt/chemical pile(s) covered in storage shed(s)	(%)	
Storage shed(s) in design or under construction	(y/n or #)	
100% of salt/chemical pile(s) covered in storage shed(s) by May 2008	(y/n)	

Water Supply Protection

Storm water outfalls to public water supplies eliminated or relocated	# or y/n	
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	
<ul style="list-style-type: none"> Treatment units induce infiltration within 500-feet of a wellhead protection area 	# or y/n	