

Municipality/Organization: Town of Leicester, MA

EPA NPDES Permit Number: MAR041202

MassDEP Transmittal Number: W-X270896

Annual Report Number Year 13
& Reporting Period: April 1, 2015 – March 31, 2016

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2016)

Part I. General Information

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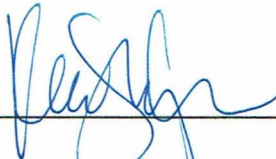
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Certification:

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: Kevin Mizikar

Title: Town Administrator

Date: May 24, 2016

Part II. Self-Assessment

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

Leicester continued moving forward in its illicit discharge program in Year 13. Highway Department staff has continued catchment delineation and confirming drainage connections. The Town has also continued work on its written IDDE program. The Town passed an illicit connection bylaw in Year 12 which continues to be in effect.

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.

Central Massachusetts Regional Stormwater Coalition

Summary of Activities

Year 13: April 1, 2015 – March 31, 2016

In Year 13, the Town of Leicester continued to be an active participant in the Central Massachusetts Regional Stormwater Coalition (the Coalition). The Coalition's work in Year 13 (which overlaps municipal fiscal years 2014 and 2015) was funded entirely by contributions of approximately \$4,000 from each of the 28 participating Towns, including Leicester.

Overview of the Coalition

The FY2014/2015 Coalition included 28 towns: Auburn, Boylston, Charlton, Dudley, Grafton, Hardwick, - Holden, Hopkinton, Leicester, Millbury, Northborough, Northbridge, Oxford, Palmer, Paxton, Rutland, Shrewsbury, Southbridge, - Spencer, Sterling, Sturbridge, Upton, Uxbridge, Ware, Webster, West Boylston, Westborough, and Wilbraham. The Coalition was - officially formed in FY2012 with 13 members, expanding to 30 in FY2013. The FY2016 Coalition will be comprised of 31 towns - with the recent additions of Framingham, Lunenburg, and Marlborough. -

The Year 13 work of the Coalition focused on implementation and preparation. -

- The implementation aspects included eight hours of one-on-one time, in which each member was provided with dedicated time from consultants that could be used for whatever was most needed. Many towns asked for a review and update of their Illicit

Discharge Detection and Elimination (IDDE) Plans, while others chose to have a “Field Day” training, where they received refresher training on the use of the field screening kits and/or the online mapping and inspection system.

- The preparation aspects included work to both understand the technical components of the pending (at the time) Massachusetts MS4 Permit as well as how they will continue to afford the new Permit.
 - The group hosted a September 3, 2015 workshop by Keith Readling of Raftelis Financial Consultants, who has assisted more communities develop a stream of dedicated funding for stormwater management than anyone else. The objective was not to force the concept of a “stormwater utility”, but to get community leaders thinking of stormwater funding as an enterprise, similar to how many already manage sanitary sewer funds.
 - The Coalition continues work on a Stormwater Program cost assessment for member towns, with most already being delivered. This task looks at what the community is actually spending on stormwater management, including staff labor (across many departments and positions), operations and maintenance, equipment costs (rental and depreciation), and third party vendors and consultants.

On April 15, 2015, a meeting of all member communities was held in Charlton, MA to develop a potential scope for FY2016 and determine how the group would be funded and administered going forward.

An update for all member communities was also presented at a meeting on September 3, 2015 prior to the stormwater funding workshop.

Coalition members themselves continue to be responsible for putting to use the tools developed by the Coalition.

The Coalition’s Partnerships in Central Massachusetts

The Coalition continues to be actively engaged with many water quality agencies and organizations and is committed to sharing the knowledge it has developed for the benefit of other communities. These efforts are discussed in following sections as they relate to the following organizations:

- Massachusetts Department of Environmental Protection (MassDEP)
- United States Environmental Protection Agency (USEPA)
- Other Massachusetts Stormwater Coalitions
- New England Water Environment Association (NEWEA)

- Massachusetts Municipal Association (MMA)

Additional organizations and entities are mentioned elsewhere throughout this Annual Report, reflecting the wide network of knowledge and experience that the Coalition has tapped into.

Massachusetts Department of Environmental Protection (MassDEP)

The Coalition continued its partnership with the MassDEP in FY2014/2015, most recently announcing the receipt of a \$50,000 Stormwater Technical Assistance grant from the department. This grant will be used to develop training elements and outreach tools that target new or expanded elements in the new permit, and that can be used by communities across the Commonwealth.

MassDEP staff continue to attend CMRSWC Steering Committee events and make themselves available for technical assistance. The Coalition appreciates the ongoing dedication of MassDEP to work with our members so closely and collaboratively.

In FY2016, the CMRSWC hopes to develop another Interactive Qualifying Project (IQP) with students from the Worcester Polytechnic Institute (WPI). One potential concept for a FY2016 project is to work with MassDEP stormwater and solid waste staff to develop a streamlined method to determine appropriate beneficial reuse of street sweepings and/or grit from catch basin cleaning activities, thereby turning a material that can be costly to dispose into a source of revenue to our members.

United States Environmental Protection Agency

The Coalition continued collaboration with technical assistance staff in USEPA Region 1, with the goal of benefiting from knowledge and experience of the agency's staff and from its network. We appreciate the support of these agency staff, and believe this positive communication resulted in some modifications to the new MA MS4 permit (released on April 4, 2016) that make it more reasonable while still benefiting and protecting water quality.

Other Massachusetts Stormwater Coalitions

The Coalition continues to coordinate with "sister" groups with a similar stormwater focus. These include:

- The Merrimack Valley Stormwater Collaborative (coordinated by the Merrimack Valley Regional Planning Commission);

- The Neponset Stormwater Partnership (coordinated by the Metropolitan Area Planning Council and the Neponset River Watershed Association);
- The Northern Middlesex Stormwater Collaborative (coordinated by the Northern Middlesex Council of Governments);
- The Connecticut River Stormwater Committee (through the Pioneer Valley Planning Commission); and
- The Southeastern Massachusetts Stormwater Collaborative (coordinated by the Southeastern Regional Services Group)

Many members of these groups were invited to attend the September 2015 stormwater funding workshop, and the facilitators of these different collaboratives have made the effort to inform the other groups of events they're hosting.

Importantly, these separate regional groups met twice in Year 13- on June 23, 2015 and September 17, 2015- to compare notes on activities in progress and share ideas on future collaborations. This statewide partnership will be expanding in Year 14.

Massachusetts Municipal Association (MMA)

Members of the Coalition have been active in the MMA for years, including Robin Craver, Town Administrator for Charlton, MA and an active Coalition leader, who is the Chair of MMA's Policy Committee on Energy and the Environment. This Committee formulates policy related to stormwater, water quality, water supply, wetlands, coastal areas, and other related environmental issues and represents a way for the Coalition to learn from (and share) ideas around the Commonwealth.

Tasks Included in this Annual Report

In the following sections, descriptions of the technical tasks and resources performed by the CMRSWC in Year 13 have been separated into sections that mirror the six Minimum Control Measures (MCM's) in the 2003 Massachusetts Small MS4 Permit.

One of the more innovative tools developed by the Coalition- one that spans across multiple MCM's- is the integrated online mapping and inspection database, hosted by PeopleGIS. The database is cloud-based, and can be accessed by all 28 member communities through a desktop or tablet computer.

In Year 13, we observed that Coalition members expanded use of this resource, primarily by beginning the process of mapping linear infrastructure (like pipes and culverts) and doing more catch basin inspections using the tools. Both of these tasks are key to preparing to increase mapping and to perform the catchment evaluation process included in the 2016 MA MS4 Permit.

As noted in last year's report, this platform 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 is 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 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. Each of the online forms is fluid- they will continue to be revised, as needed, to meet the goals of the Coalition members and future Massachusetts MS4 Permit requirements.

Minimum Control Measure 1: Public Education and Outreach

Year 13 activities included routine meetings of the Coalition's Steering Committee.

In Year 13, the Coalition purchased copies of the "Water Blues, Green Solutions" documentary (<http://waterblues.org/about>) for each member town, on DVD.

An exciting tool for public education continues to be the Coalition's Twitter account, [@MAStormH2O](#). As of the date of this report, the Coalition's account has 96 followers, including other stormwater coalitions around the country. Information tweeted (or retweeted) by the Coalition in Year 13 addressed such water quality topics and issues as:

- Stormwater infrastructure funding
- Nutrient credits and trading
- Sharing public service announcements (PSA's) developed by our member communities and partners
- Impact of leaking sanitary sewers on stormwater and water quality
- Low Impact Development (LID) workshops and training courses held by partners in or near our member communities

Many of our member communities and regional agencies follow [@MAStormH2O](#) and retweet our information, greatly expanding the audience reached by the message. We anticipate using this tool in the future to quantify the size of the audience reached by each message, and evaluating the success of the message.

In Year 13, the Coalition expanded its efforts to educate the public and other communities about its work. This includes the following presentations and events, listed in chronological order:

- On May 12, 2015, Robin Craver (Charlton, MA) presented at the 6th Annual Water Resources Strategies Symposium, hosted by the Massachusetts Coalition for Water Resources Stewardship, sharing information on stormwater program costs and ways to create regional efficiencies.
- On May 15, 2015, a Coalition consultant did a presentation to the New England Interstate Water Pollution Control Commission (NEIWPCC) at its Board meeting in Bolton, MA.
- On June 26, 2015, Robin Craver (Charlton, MA) and a Coalition consultant did a presentation to the Central Massachusetts Regional Planning Commission at its Summer Legislative Breakfast, in Worcester, MA.
- On July 13, 2015, a Coalition consultant did a presentation to the National Association of Clean Water Agencies at its Summer Conference in Providence, Rhode Island.
- On November 18, 2015, Robin Craver (Charlton, MA) and a Coalition consultant did a presentation at the “*Community Stormwater Solutions*” conference, hosted at Worcester Polytechnic Institute by the Massachusetts Watershed Coalition.

Several Coalition members chose to use some of their “one-on-one” to expand their efforts on this MCM. Updates will be provided in future Annual Reports.

In Year 13, Leicester continued to utilize water quality monitoring kits from the World Water Monitoring Challenge program (www.worldwatermonitoringday.org), purchased by the Coalition in Year 10. These kits “build 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 used this in Year 13 to work with teachers in their local school department or district to do outreach to elementary and middle-school aged students. The kits continue to be stored in Spencer and Shrewsbury for distribution to the Coalition members.

Leicester continued to utilize the two Enviroscapes models focused on non-point source pollution education (<http://www.enviroscapes.com/nonpoint-source.html>). One model was purchased by the Coalition in Year 10 and the second was purchased in Year 13 with a grant from NEWEA. These tools are hands-on, visual trainers to demonstrate the importance of good housekeeping and low-impact development for pollution prevention, with the objective of maintaining water quality in our communities. These tools are shared with our statewide partners, upon request.

The Coalition continued to expand its educational website, www.CentralMAStormwater.org, focused on providing information about the project to a number of audiences, including the general public, educators, and kids.

Minimum Control Measure 3: Illicit Discharge, Detection and Elimination

Several Coalition members chose to use some of their “one-on-one” time to expand their efforts on this MCM. Updates will be provided in future Annual Reports.

In Year 13, Leicester continued to utilize the two Leica surveying devices (purchased by the Coalition in Year 10) that can be used to map new structures with very high accuracy, using connection to a military-grade Real Time Kinematic (RTK) satellite network. The Leica and tablets can be used to directly access the online mapping and inspection system: the Leica is the 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 Leica units rotate between the 28 Coalition communities on a schedule, with formal handoff between Towns documented.

Minimum Control Measure 4: Construction Site Stormwater Runoff Control

Several Coalition members chose to use some of their “one-on-one” time to expand their efforts on this MCM. Updates will be provided in future Annual Reports.

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

Several Coalition members chose to use some of their “one-on-one” time to expand their efforts on this MCM. Updates will be provided in future Annual Reports.

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

Several Coalition members chose to use some of their “one-on-one” time to expand their efforts on this MCM. Updates will be provided in future Annual Reports.

In Year 13, Leicester continued to utilize the Stormwater Pollution Prevention Plan (SWPPP) template in the form of a word processing document. This document was developed in Year 10 and 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. The 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.

In Year 13, Leicester continued to utilize the 15 Standard Operating Procedures (SOP’s) developed by the Coalition in Year 10, and

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.

Coalition Activities in Year 14 (April 1, 2016 – March 31, 2017)

The following are some, but not all, of the work presently underway by the Coalition in Year 14:

- *Administration.* The long-term goal of the Coalition has always been to be self-sustaining, and this was made a reality in Year 13. The Coalition's Steering Committee drafted a bylaw in Year 13 that will govern how the group makes future decisions. The group will add three new communities in Year 14, continuing to be fully self-funded. The Coalition's leadership is committed to keeping the momentum developed in recent years, and sharing the resources for the improvement of water quality in New England.
- *Funding.* The Coalition maintains a strong network of partners, and will continue to evaluate funding sources that become available, including competitive USEPA grants dedicated to MS4 communities as well as 319 and 604(b) grants appropriate for community-wide water quality projects.
- *Public Outreach and Education.* We are implementing development of training and outreach tools, made possible through a \$50,000 MassDEP Stormwater Technical Assistance grant. We are also considering developing of Coalition-specific outreach materials using FY2016 funding. Finally, the Coalition plans to increase its use of Twitter as a measurable outreach tool.
- *IDDE.* The Coalition is developing competitive pricing for its members that wish to use Environmental Canine Services to perform IDDE screening-level assessments. The catchment delineation tool initially developed during the WPI IQP Fall 2013 project will be revised, modified, finalized, and distributed for use by Coalition towns. The Request for Proposals (RFP) developed in Year 10 (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) will be re-evaluated in Year 14 to match the 2016 MA MS4 Permit. Improving the knowledge of IDDE components by many town departments will likely be a substantial component of FY2016 work.

- *Good Housekeeping.* The Coalition may coordinate an on-site demonstration of calibrating deicing equipment at a member community's highway facility. This active demonstration will provide a real-life example of the benchmarking process developed in Year 10 and encourage members to calibrate their own equipment, with a goal of reducing pounds of chloride per lane mile. The Coalition is in the initial phases of developing an IQP project with Worcester Polytechnic Institute and MassDEP to develop a pilot project for beneficial reuse of catch basin cleaning materials.

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 13 (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 has reviewed the new draft MS4 permit and continues to await the finalization of the new Massachusetts MS4 Permit.
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.	Funding options continue to be explored. Leicester is an active participant in the Central Massachusetts Regional Stormwater Coalition.	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.
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 materials continue to be available on the Town's	Continue to implement and evaluate outreach programs to educate the specific groups of the public, particularly

Revised				<p>website.</p> <p>Leicester has added a link on the Towns website for the CMRSWC.</p>	<p>materials developed by the Coalition project.</p> <p>Information will be provided at the Founder's Day event in June 2016.</p>
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.	Reviewed educational materials provided by Coalition on specific activities.	Create and send out an educational brochure to homeowners.
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/	<p>Outreach materials continue to be available on the Town's website.</p> <p>The Town streamed the Pennsylvania State University documentary "Liquid Assets" on the Leicester local cable access channel.</p>	<p>Continue to identify and implement alternative information sources for public outreach and evaluate the program.</p> <p>Continue to stream the Pennsylvania State University documentary "Liquid Assets" on the Leicester local cable access channel.</p>
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 .	<p>Leicester continues to maintain these links on its website.</p> <p>Promote Coalition developed educational website, www.CentralMAStormwater.org.</p>	Continue to identify and implement alternative information sources for public outreach and evaluate the program.

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 meetings of the Stormwater Committee in Year 13.	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 every 2 years, next is scheduled for October 3, 2015.
Revised					Leicester will continue to participate in Drug Take-Back events.

				<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 13 (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 2015.	Continue to hold community clean-ups in the Town, including Earth Day events in Year 14, 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 13 (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 13, members of Leicester's Highway Department received continued training on the integrated mapping and inspection database, which serves 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 tablet computer to complete outfall and catch basin inspections.
Revised				<p>The Town received additional training on using both the Leica GPS devices and the tablet computer, both of which were purchased as part of the Coalition project.</p> <p>The Town utilized the Coalition purchased Leica GPS device to map catch basins in permit year 13. All catch basins in Urbanized Area have been mapped.</p> <p>Leicester has started the process of catchment delineation.</p>	Continue to utilize the Coalition Leica GPS devices to map all catch basins in Town as well as storm drain manholes and structural BMPs.

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 is currently working on mapping BMPs and storm drain outfalls.	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 of Franklin Street and Grove Street to eliminate an illicit discharge located previously. The construction contract was completed during a previous reporting year, permanently eliminating this illicit discharge.	Continue to implement and be proactive with the IDDE plan from data from the consultant and evaluate the progress.
Revised				The Town has prepared a Statement of IDDE Program Responsibilities which establishes a chain of command in regards to reporting illicit discharges and responsibilities for important positions in Town.	Review and evaluate the Coalition developed standard operating procedure (SOP) for locating and identifying illicit discharges. Keep documents and presentation on file for interested parties to review.
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 in a previous	Continue to implement and evaluate the current policy.

Revised				<p>reporting year. 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>An IDDE bylaw was passed at Town meeting a previous reporting year and continues to be in effect.</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.	<p>Leicester continues to actively seek recycling grants, most recently to implement a program to provide low-cost composting 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>	<p>Continue to implement and evaluate the current policy.</p> <p>Continue to see grants that encourage residents to drop off materials that otherwise may result in pollution.</p>
Revised					

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 13 from the Coalition. Most of the Coalition tasks have been developed with a "regionalization" focus, and address multiple watersheds.	Continue to implement and evaluate the current policy with the Stormwater Committee in place. Maintain active participation in the Coalition in Year 14.
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 and sewer 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 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
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21	Bylaw: Stormwater management regulations 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 by-law was developed in previous permit years. The Town has reviewed and evaluated Coalition developed SOP for construction inspection and erosion and sedimentation control.	Continue to implement and evaluate the current policy with the stormwater committee in place. Continue to use tools created from the Coalition regarding Construction Site Stormwater Runoff Control.
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 13 (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 by-law was developed in previous permit years. The Town received structural Best Management Practice (BMP) inspection SOPs developed as part of the Coalition in previous Permit years.	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 developed Stormwater Best Management Practices (BMP) Toolbox, which was developed to provide property owners with information about low impact stormwater management tools. The Town will consider using porous pavers in a project being considered in the Town Common area, if that project moves forward.
Revised					

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 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
23	Develop a municipal Operations and Maintenance Plan	Highway Department	Using regulations and recommendations 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 13. All basins were cleaned at least once in Year 13, with approximately 125 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 prior to Year 13. These forms and inspections were incorporated in the integrated mapping and inspection database, on which several Highway Department staff members received training.</p> <p>Fire stations and police headquarters were evaluated for the need of SWPPPs. Documents not needed at this time.</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 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>
Revised					

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 13.</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 previous permit years. These forms and inspections were incorporated in the integrated mapping and inspection database, on which several Highway Department staff members received training.</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>Evaluate the use of WPI students as interns to perform catch basin inspections during spring cleaning operations.</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.	Training in Year 13 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, SWPPP template, BMP toolbox, and use of	<p>Continue to implement this project and evaluate the progress.</p> <p>Continue to provide Coalition-developed education and training to municipal employees.</p>

Revised				<p>water quality kits.</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>Municipal employees received OSHA 10 hour training prior to Year 13.</p>	
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 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
	Not Applicable	Not Applicable	Not Applicable	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.	Evaluate any TMDLs developed for Leicester impaired waters.
Revised					

				<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>	
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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, 2014 through March 31, 2015)

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)	y
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 **	(#)	
Illicit discharges identified (Since beginning of permit coverage)	(#)	6
Illicit connections removed **	(#); and (est. gpd)	

Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	6
% 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 **	(#)	2

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 vacuor **	(%)	
	(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)	300 tons 1,200 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/lb mi. or %)	

Estimated net reduction or increase in typical year sand application rate **	(±lbs/ln 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	