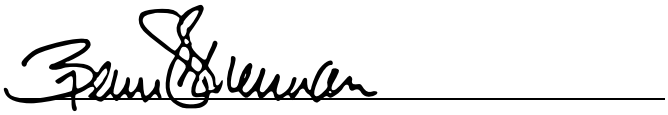
NPDES Phase II Small MS4 General Permit
Annual Report

***Municipality/Organization*:**	Town of Uxbridge
***EPA NPDES Permit Number*:**	MAR-04-1166
***MaDEP Transmittal Number*:**	W- 050211
Annual Report:	No. 13
***Number & Reporting Period*:**	April 1, 2015 through March 31, 2016

Part I. General Information

Contact Person:	Benn Sherman, P.E.	*Title*:	Director of Public Works
Telephone #:	(508)278-8616	*Email*:	bsherman@uxbridge-ma.gov

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: Benn S. Sherman, P.E.

Title: Director of Public Works

Date: April 30, 2016

Part II. Self-Assessment

The Town of Uxbridge has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions, except for the following provisions:

Part II.B.1-6 Any Provisions of Part II.B.1-6 that have not been met are detailed in Part III below.

In Year 13, the Town of UXBRIDGE 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 UXBRIDGE.

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.
  TOWNS: If you're not sure how your town chose to use its One-on-One time, see the attached PDF "Annual Report_One on One Status by Town". If your town didn't take advantage of this part of the scope, you may wish to delete the preceding paragraph.

- 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. TOWNS: If you're not sure if anyone attended from your community, see the attached Attendance Sheet from this event. If you want to attach a copy of Mr. Readling's presentation to your Annual Report, I've also included that.
  - 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. TOWNS: If you're not sure if anyone attended from your community, see the attached Attendance Sheet from this event.

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); andThe 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.

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)	Continuing Activities
1.1	Classroom Education on Stormwater	Department of Public Works	Three grade levels participate, three sets of educational materials, two workshops for teachers.	Materials from the EPA, BRWA and DEP distributed to the public schools. Teachers currently teaching environmental sciences to three plus grade levels.	Continue to revise and/or update program to reflect current school curriculum. Due to School Department attrition, we need to establish a new rewsource/contact person for this task. Examples of tasks would include utilizing the Central Massachusetts Regional Stormwater Coalition (CMRSWC) Non-Point source Enviroscape model.
Revised					
1.2	Flyer and Brochure Distribution	Department of Public Works	Develop and distribute one flyer and two fact sheets, distribute in utility bills and Town buildings (eg. DPW, library, town hall).	A stormwater flyer is posted in DPW office entryway. Uxbridge continued as a member of the CMRSWC. The Coalition has developed a number of public information products for use by the member communities. Developed stormwater bylaw fact to support passage of bylaw.	Continue to post a stormwater flyer in the DPW office and Town Hall. In anticipation of the new MS4 permit, evaluate materials and develop new materials which reflect the changing trends in stormwater management. Continue with our involvement with the CMRSWC. Further develop and promote stormwater awareness through the use of social media (Facebook) and the Town's website.
Revised					

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)	Continuing Activities
1.3	Using the Media	Department of Public Works	One article published local cable service announcement and press release each year.	Stormwater Management Guides for Homeowners, Small Farms, and Horse Owners are posted on the Town's website for the Planning Department No stormwater messages were aired on the local cable service; however, the environmental hotline number continues to be aired on the local cable service. No articles or press releases were published in Permit Year 13. The CMRSWC has developed a number of public information products for use by the member communities.	Continue to update and post Stormwater Management articles on the Town's website. Restart stormwater messages to be aired on the local cable service announcement. Publish one article and one press release during next program year. Continue with our involvement with the CMRSWC.
Revised					
1.4	Hazardous Waste Management	Department of Public Works	Track the amount of household hazardous waste collected during days.	Continued teaming with Town of Blackstone for collection of household hazardous materials in Blackstone. The facility is typically open three days per week and year round. Additionally, a metals recycling collections and leaf/brush disposal program was conducted 2-3 days per week from April through December. Local organizations in the Town of Uxbridge ran recycling fundraising programs for tv's, appliances, and computers.	Continue to encourage teaming efforts with area Town's to collect household hazardous materials. Uxbridge to continue to leaf/brush disposal and metal recycling program at the Compost Facility. Continue to promote local organizations to run recycling fundraising programs for tv's, appliances, and computers.
Revised		Department of Public Works / Board of Health	Team with neighboring towns to hold monthly collection days.		

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.

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.

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)	Continuing Activities
2.1	Storm Water Committee	Department of Public Works	Establish committee and meet quarterly.	The town contracted with a stormwater consultant to assist in the development of a new stormwater bylaw. This work was done in conjunction with the work of the Stormwater Committee.	Develop applicable rules and regulations in support of the new bylaw.
Revised					
2.2	Stream Cleanup and Monitoring	Department of Public Works	Create a document which outlines procedures for stream cleanup and monitoring.	Two events were conducted during this permit year. These events were done in conjunction with Earth Day and a local Riverways event.	Local groups will continue yearly cleanups
Revised			Yearly cleanups by local groups		
2.3	Stencil Storm Drains	Department of Public Works	Prioritize areas to be stenciled. Stencil 30 storm drains per year starting in year three.	No storm drains were stenciled in Permit Year 13..	Stormwater Committee to complete evaluation of stenciling program.
Revised					
2.4	Attitude Surveys	Department of Public Works	Two surveys completed, compiled and analyzed.	Uxbridge participated in a Coalition sponsored event to provide support and training with water quality test kits, inspections and system mapping. Served as a member of the of the Coalition's Steering committee and attended a number of meetings.	Continue with our involvement with the CMRSWC.
Revised	Stormwater Workshops	Department of Public Works	Organize and hold one Stormwater Workshop per year.		
2.5	Community Hotline	Department of Public Works	Establish hotline, track number of calls and number of problems/incidents remedied.	Hotline continues to be active (508-278-8617) and advertised on local cable TV channel. The DPW only received general drainage calls throughout the year.	Continue to track number of calls and number of problems/incidents remedied.
Revised					

In Year 13, Uxbridge continued to utilize several presentations 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 2014 Massachusetts MS4 Permit, and the financial impact these potential changes may have on Massachusetts communities.

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)	Continuing Activities
3.1	Illicit Discharge Bylaw or Regulation	Department of Public Works	Develop bylaw and present it to the Town meeting or adopt a regulation.	The Town adopted by reference the 2004 Ilicit Discharge Detection and Elimination Guidance Manual with amendments during Year 12 & 13. A new stormwater bylaw was developed and brought forth for consideration at the 2015 Fall Town Meeting. A 2/3's majority was obtained for passage.	Continue with the development of rules and regulations. Begin additional compliance training for staff.
Revised					
3.2	Drainage System Inspections and Mapping	Department of Public Works	Locate drainage structures with GPS unit, update the GIS databases and system map, and inspect each structure.	Utilized the CMRSWC Leica equipment to add newly installed infrastructure to the existing base mapping.	The Town will continue the process to update the drainage system mapping as funding becomes available. The Town will also continue with the work completed and in development through the CMRSWC.
Revised					
3.3	Inspect and Sample Discharges in UAs	Department of Public Works	Inspect and sample discharges in Urban Areas if flow is present.	Utilized the CMRSWC Leica equipment to add newly installed infrastructure to the existing base mapping. Conducted some outfall and catch basin inspections.	The Town plans to begin implementing a program to inspect outfalls throughout the drainage system as funding becomes available. The Town will also continue with the work completed and in development through the CMRSWC.
Revised			Inspect discharges after mapping is complete and sample if flow is present.		

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)	Continuing Activities
3.4	Illegal Dumping Education	Department of Public Works	Track the number of educational tools distributed, illegal dumps reported, penalties, rewards to citizens, and illegal dumps cleaned up.	Illegal dumping materials have been provided to schools in BMP's 1.1 and 1.2. Eleven (11) calls were received through the main DPW number for illegal dumping activities. These activities included items ranging from used tires to various household items.	Track the number of educational tools distributed, illegal dumps reported, penalties, rewards to citizens, and illegal dumps cleaned up.
Revised			Coordinate with non-municipal partner to include illegal dumping materials in the classroom education, flyers and brochures in BMP's 1.1 and 1.2. Track the number of educational tools distributed, illegal dumps reported, penalties, rewards to citizens, and illegal dumps cleaned up.		

In Year 13, UXBRIDGE 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.

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)	Continuing Activities
4.1	Soil and Erosion Control Bylaw or Regulation	Department of Public Works	Develop bylaw and present it to the Town meeting, or adopt a regulation.	A new stormwater bylaw was developed and brought forth for consideration at the 2015 Fall Town Meeting. A 2/3's majority was obtained for passage	Continue with the development of rules and regulations. The stormwater committee to facilitate this process.
Revised					
4.2	Construction Inspections	Department of Public Works	DPW to inspect construction activities on a weekly basis. Report number of complaints from residents.	There were a minimum number of inspections for construction activities conducted by the DPW.	Continue to coordinate with the various boards and commissions on developing a program to inspect construction sites. The Town will continue to report number of complaints from residents.
Revised		DPW/Conservation Commission, Planning Board	Develop inspection form for documenting inspections.		

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)	Continuing Activities
5.1	Bylaw or Regulation for Post Construction Runoff	Department of Public Works	Develop bylaw and present it to the Town meeting or adopt a regulation.	A new stormwater bylaw was developed and brought forth for consideration at the 2015 Fall Town Meeting. A 2/3's majority was obtained for passage	Continue with the development of rules and regulations. The stormwater committee to facilitate this process.
Revised					
5.2	BMP Inspection and Maintenance	Department of Public Works	Inspect all Town maintained structural BMPs bi-annually, document the number of problems identified and remedied, review changes in water quality of effluent.	Performed a variety of inspections while utilizing the Leica GPS and mapping new infrastructure.	The Towns plans to continue to implement the inspection and maintenance program to inspect all Town maintained structural BMPs, document the number of problems identified and remedied, and review changes in water quality of effluent. The Town will also continue with the work completed and in development through the CMRSWC.
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)	Continuing Activities
6.1	Predictive Catch Basin Program	Department of Public Works	Develop a standardized catch basin and storm drain inspection program, collect data, refine based on trends.	The Town cleaned and repaired 50 catch basins during this permit year. We continue to experience mechanical issues with the in house catch basin cleaner, budget cuts, and a shortfall in staff.	The Town plans to continue cleaning and repairing catch basins as budgets and equipment operation allow.
Revised					
6.2	Street Cleaning	Department of Public Works	Sweep all streets once in years 1-2, twice in years 3-5, sweep all parking lots annually, in year five sweep lots twice.	We have experienced continued mechanical issues with the in house street sweepers combined with budget cutbacks during this period. The streets within the downtown area (10%) were swept on a number of occasions which coincided with special events. The remainder of the streets were swept at least once. .	As funding becomes available, continue sweeping activities within the UAs twice and the remaining streets once per year. The Town has requested capital funding for the purchase of a new sweeper. This will be a special appropriation that will be voted at the May 2016 Spring Town Meeting.
Revised					
6.3	Investigate Town Owned BMPs for Retrofit Opportunities	Department of Public Works	Inspect all the BMPs annually.	The DPW continued development of a program to inspect Town maintained structural BMPs.	The Towns plans to continue to develop a program to inspect all Town maintained structural BMPs, document the number of problems identified and remedied, and review changes in water quality of effluent. BMP inspections will begin during the next annual cycle.
Revised					

In Year 13, Uxbridge 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, Uxbridge 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.

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA)

Not Applicable. TMDL's have not been developed for any of the impaired water bodies in Uxbridge.

Part IV. Summary of Information Collected and Analyzed

The Town has completed GIS based mapping for water, wastewater and stormwater systems constructed prior to 2006. This information has not been updated since that time. It is estimated that over 85% of the stormwater collection system is mapped. Existing data verification and addition of undocumented stormwater collection system components will be the focus going forward. Due to budget shortfalls, additional time will be needed to fully complete the mapping component. There is no other information or data that was collected during Permit Year 13 that is not included elsewhere in this report.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	**No**
Annual program budget/expenditures	($)	**Not Determined**
Total program expenditures since beginning of permit coverage	($)	**Not Determined**
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		**General Fund**

Education, Involvement, and Training

Estimated number of property owners reached by education program(s)	(# or %)	**50%**
Stormwater management committee established	(y/n)	**Yes**
Stream teams established or supported	(# or y/n)	**No**
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	**Yes**
Shoreline cleaned since beginning of permit coverage	(mi.)	**Unknown**
Household Hazardous Waste Collection Days *		
▪ days sponsored	(#)	*
▪ community participation	(# or %)	*
▪ material collected	(tons or gal)	*
School curricula implemented	(y/n)	*

***Performed in conjunction with surrounding Towns.**

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	(%)	**90%**
Estimated or actual number of outfalls	(#)	**200+**
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	**90%**
Mapping method(s)		
▪ Paper/Mylar	(%)	**10%**
▪ CADD	(%)	
▪ GIS	(%)	**90%**
Outfalls inspected/screened	(# or %)	**0**
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	**0**
Illicit discharges identified	(#)	**0**
Illicit discharges identified (Since beginning of permit coverage)	(#)	**0**
Illicit connections removed	(#); and (est. gpd)	**None**
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	
% of population on sewer	(%)	**35%**
% of population on septic systems	(%)	**65%**

Construction

	(Preferred Units)	Response
Number of construction starts (>1-acre)	(#)	**10-20**
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	**100%**
Site inspections completed	(# or %)	**100%**
Tickets/Stop work orders issued	(# or %)	**0**
Fines collected	(# and $)	**0**
Complaints/concerns received from public	(#)	**<5**

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)	**Yes**

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)	**1**
Qty of structures cleaned	(#)	**<15**
Qty. of storm drain cleaned	(%, LF or mi.)	**Not Determined**
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	**<30 CY +/-**
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.)	(location)	**See (A) below**
Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)	($)	**General budget**
• Hourly or per basin contract rate	($/hr or $ per basin)	
• Disposal cost	($)	**See (A) below**
Cleaning Equipment		
• Clam shell truck(s) owned/leased	(#)	**1**
• Vacuum truck(s) owned/leased	(#)	**0**
• Vacuum trucks specified in contracts	(y/n)	**0**
• % Structures cleaned with clam shells	(%)	**100%**
• % Structures cleaned with vactor	(%)	**0%**
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)	**2+**
Qty. of sand/debris collected by sweeping	(lbs. or tons)	**<600 CY +/-**
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	**See (A) below**
Annual Sweeping Costs		**Not Determined**

	(Preferred Units)	Response
• Annual budget/expenditure (labor & equipment)	($)	**General Budget**
• Hourly or lane mile contract rate	($/hr. or ln mi.)	**Not Determined**
• Disposal cost	($)	**See (A) below**
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	**1**
• Vacuum street sweepers owned/leased	(#)	**0**
• Vacuum street sweepers specified in contracts	(y/n)	**0**
• % Roads swept with rotary brush sweepers	%	**100%**
• % Roads swept with vacuum sweepers	%	**0%**

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

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

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	**100% Cargill Treated Salt for entire season**
Pre-wetting techniques utilized	(y/n or %)	**No**
Manual control spreaders used	(y/n or %)	**Yes**
Zero-velocity spreaders used	(y/n or %)	**No**
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/ln mi. or %)	**500#/ln mi**
Estimated net reduction or increase in typical year sand application rate	(±lbs/ln mi. or %)	**Phased out Sand**
% of salt/chemical pile(s) covered in storage shed(s)	(%)	**100%**
Storage shed(s) in design or under construction	(y/n or #)	**No**
100% of salt/chemical pile(s) covered in storage shed(s) by May 2008	(y/n)	**Yes**

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	
Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	

(A) The Town appropriated $100,000 for the purposes of testing and removing accumulated catch basin screenings and street sweepings. To date the town tested, removed and properly disposed of over 1,800 tons of street sweepings and over 150 tons of catch basin cleanings and licensed landfills in Massachusetts and Rhode Island.