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Annual Report No & Report Period: No. 13 – (March 2015-March 2016)

NPDES Phase II Small MS4 General Permit

Annual Report

Part I. General Information:

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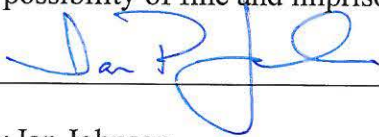
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Certification:

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: Ian Johnson

Title: Chairman, Board of Selectmen

Date: April 27, 2016

Part II. Self-Assessment

The Town of Westborough (Town) has completed the required self-assessment for Permit Year Thirteen and finds that our municipality is generally in compliance with the permit conditions.

Areas where the Town fell short of goal were generally in public outreach and maintenance. One of the key reasons this occurred is because the DPW is not using dedicated staff for these functions. Instead, existing staff performs these tasks when time allows. DPW has obtained funding to fill two unfunded positions which will help. However, it is anticipated that we will continue to struggle as dedicated personnel does not exist for the components of the MS4 program. It will become even more challenging with the issuance of a NPDES MS4 General Permit.

The Town has many notable accomplishments and improvements for Permit Year 13.

- Woodard & Curran performed storm drain condition assessment with inspection of approximately 21,500 linear feet of drainage infrastructure. Work included closed circuit television and cleaning activities. The Town was given a report with assessments and remediation project recommendations, which has been estimated at 1.95 million dollars.
- Approximately 95% of outfalls have been field located and mapped.
- Reviewed and approved 12 stormwater permits
- Drainage improvements construction included:
 - Warren Street By-pass Culvert project completed.
- The DPW continues to gather drainage infrastructure information including field data collection, GIS data compilation and mapping, asset condition assessments, and capital improvement recommendations.
- Hosted annual Household Hazardous Waste Collection Day and Rain Barrel Event for residents.
- Held Earth Day activities and events.
- Conducted several storm drain marking event.
- The Town's Engineering Division reviewed over 100 construction and post-construction submittals for compliance with the Town's bylaws and the MassDEP stormwater management standards.
- Street sweeping was completed on 100% of the roads.

The Town of Westborough is pleased to remain an active participant in the Central Massachusetts Stormwater Coalition (the Coalition). The Coalition's work in Year 13 was funded entirely by contributions of approximately \$4,000 from each of the 28 participating Towns. Year 13 work of the Coalition focused on implementation and preparation.

- Implementation included each town receiving 8 hours of one-on-one time with a Consultant to focus on the specific needs of each town. Westborough used the time for a review and update of their Illicit Discharge Detection and Elimination (IDDE) Plan, review of the current SWPPP, and field screening kit training.
- Preparation included work to both understand the technical components of the newly revised NPDES MS4 General Permit, as well as, how they will continue to finance the new Permit requirements.
 - The Coalition hosted a September 3, 2015 workshop by Keith Readling of Raftelis Financial Consultants. He has assisted numerous communities develop a stream of dedicated funding for stormwater management. The objective was not to force the concept of a "stormwater utility" on community leaders but thinking of stormwater funding as an enterprise, similar to a sanitary sewer enterprise fund. The Westborough Assistant Town Engineer attended this workshop.
 - The Coalition continues work on a Stormwater Program cost assessment for member towns. 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 (purchase, rental and depreciation), and third party vendors and consultants.

As noted in the Coalition's last year's report, the work of the Coalition completes requirements of all the MCM's. For example, the coalition aided communities with public education and outreach (MCM 1) by GPS surveying which is a highly-visible activity that will generate questions and is engaging to the public. The integrated mapping and inspection database documents any 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. Lastly, the Coalition developed on-line forms that were used to assist the Town in developing our own forms. The Coalition's online forms are fluid as they will continue to be revised, as needed, to meet the goals of the Coalition members and future Massachusetts MS4 Permit requirements.

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.

There are many organizations and entities mentioned 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 continues 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 intends to develop another Interactive Qualifying Project (IQP) with students from the Worcester Polytechnic Institute (WPI). One potential concept 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 of 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 network. We appreciate the support of these agency staff, and believe this positive communication resulted in some modifications to the revised NPDES MS4 General Permit that make it more reasonable while still benefiting and protecting water quality.

Massachusetts Stormwater Coalitions & MMA's Policy Committee on Energy & Environment (PCEE)

The Coalition continues to coordinate with "sister" groups with a similar stormwater focus. Also, members of the Coalition have been active on committees, such as the PCEE which formulates policy related to stormwater, water quality, water supply, wetlands, coastal areas, and other related environmental issues. This is a way for the Coalition to learn 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 divisions that mirror the six Minimum Control Measures (MCM's) in the 2003 Massachusetts Small MS4 Permit.

The Coalition provides its members with an integrated online mapping and inspection database tool developed by the Coalition and hosted by PeopleGIS that spans across multiple MCM's. Westborough purchased its own Lieca GPS and developed a database that mirrors the one created by the Coalition. By having easy access to the GPS unit the Town was able to double the amount of infrastructure (i.e. outfalls, MH's and pipes) mapped this year. The purchase is an important step in preparing for the increased mapping and catchment evaluation process that will be required in the 2016 MA MS4 Permit.

Minimum Control Measure (MCM)

In each MCM narrative, the work the Coalition completed is described first followed by specific activities and BMP's performed by the Town of Westborough. BMP ID numbers correspond to the BMP ID number used in Part III, Summary of Minimum Control Measures tables.

Minimum Control Measure 1: Public Education and Outreach

Year 13 activities included routine meetings of the Coalition's Steering Committee and the purchase of the DVD, "Water Blues, Green Solutions" documentary (<http://waterblues.org/about>), for each member town.

An exciting tool for public education is 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 held by member community's partners.

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.

As a member of the Coalition, Westborough will continue to have the ability to use the two Enviroscapes models which focuses on non-point source pollution education (<http://www.enviroscapes.com/nonpoint-source.html>). 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. 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.

Town BMP ID#

- 1.A. A "Sewer vs. Drain" display and handouts were distributed at the spring 2015 Town Meeting.
[See attached for photos of the displays]

1.B. Westborough Girl Scout Troop #11032 created 3 educational public service videos on stormwater pollution that continues to be aired on Westborough TV year round. The topics covered include:

- Scoop the Poop – animal waste pollutes humans drinking water supply
- Wash your car on the grass so soapy suds don't go into catch basins
- Don't litter – it's bad for the environment and can pollute stormwater

See attached and the video using the link: <http://www.youtube.com/watch?v=H3Od3-alT8>

1.C. Westborough TV continues to air "Stormwater Matters" Outreach and Ad Campaign created by the Engineering Division. The ad consists of five bulletins covering different stormwater issues such as lawn care, car care, picking up after pets, not littering, and keeping storm drains clean. This series of ads began running March 23, 2015.

1.D. The Town's DPW website has a dedicated section for just Stormwater Information. A video on how a catch basin is cleaned can be accessed on this site and educate residents on catch basin maintenance. Visit:

http://www.town.westborough.ma.us/Public_Documents/WestboroughMA_DPW/Stormwater%20Information/

1.E. A creative three dimensional display is shown at the Westborough Library at a minimum of once a year. See attached photos of the stormwater awareness display.

1.F. In an effort to reach out to more residents, the Town created an informational brochure that was mailed out with the Spring 2015 water bills. A copy of this brochure is attached.

1.G. The Conservation Commission Agent continues to mail educational letters to detention basin property owners.

1.H. The Town has available to use the Enviroscope provided by the Coalition to demonstrate to groups within the Town. Since interest in attending has greatly diminished a new goal set for this reporting year is to investigate new presentations to increase interest from different groups. Due to time constraints and limited funding no action was taken on this task.

1.I The Town will make a concerted effort in Permit Year 14 to reach out to schools and youth groups for stormwater education opportunities. Materials and assistance from outside groups will be investigated.

Minimum Control Measure 2: Public Involvement and Participation

In YR13 Westborough continued to work with the Coalition in its efforts to engage the public to get involved and participate in stormwater activities.

Town BMP ID#

2.A The Town had a substantial increase in CB stenciling this year. This work involves spray painting a variety of "Dump No Waste" stencils on the road next to each catch basin. Between the boy scouts and the girl scouts approximately 500 CB's were painted. In addition, a data base was created and started by one of the volunteers (see attached for both). Each year the Town will add inventory to the database until the entire system is accounted for. The BMP is an effective tool to:

- inform residents that catch basins are connected to water bodies

- discourage residents from pouring anything into the catch basins
- 2.B. The Westborough DPW will continue to host the Westborough Board of Health's annual household hazardous waste collection day which occurred in September 2015. By providing a place for residents to dispose of their household wastes; such as oils, paints, solvents and unrestricted pesticides, we hope to prevent people from dumping into catch basins and polluting our waters. (See attached)
 - 2.C. The Town has renewed its involvement in the Rain Barrel Program. This program helps the local watershed by slowly releasing rainwater from the rain barrel into residents' gardens resulting in decreased stormwater runoff and pollution. Additionally, this assists in recharging the ground water. (See attached)
 - 2.D. The Town of Westborough Community Land Trust organizes a "Town Wide Earth Day Clean-up" every year. Volunteers of all ages come together to pick up litter from around our lakes, streams and streets. (See attached)
 - 2.E. A new goal was added to BMP tasks last reporting year to create and conduct an informational stormwater presentation to the public. The Town will continue working on creating a basic easy to understand slide show to present at a public meeting held by the DPW. A date will be selected when the presentation is complete.
 - 2.F. Westborough TV continues to run 3 educational public service videos on stormwater pollution created by Girl Scout Troop #11032 several years ago. Details regarding the video can be read above under BMP 1.B. A goal was set for Year 13 to have the girl scouts create new videos. The Troop did agree to make a new video however they have yet to deliver the finished product. The Town will continue to seek participants to make a new videos to be shown on Westborough TV.
 - 2.G. The goal of this task is to improve school student involvement. A poster and photo contest took place several years ago and had good success. Although no action was taken on this goal, the DPW hopes to seek out funding and support to hold the contest in the next permit year.

Minimum Control Measure 3: Illicit Discharge, Detection and Elimination

The Coalition performed 8 hours of one-on-one time to focus on specific needs to Westborough. Time was used for a review and update of the Illicit Discharge Detection and Elimination (IDDE) Plan, review of the current SWPPP, and field screening kit training.

In YR13 Westborough utilized its newly purchase Leica surveying unit to map new structures with very high accuracy, using connection to a military-grade Real Time Kinematic (RTK) satellite network. The Leica is extremely valuable for mapping outfalls, catch basins, pipe, drain manholes, BMPs, and other components of the system which serves as the foundation for IDDE.

BMP ID#

3.A.&B. The main goal of these two tasks is to enhance the stormwater system mapping by performing field verification, field mapping and editing the mapping system to reflect actual site conditions. The same college intern will return summer of 2016 to continue in these efforts. As well as, part time employee was added to the MIS/GIS department to aid in creating the enhanced mapping capabilities. A goal for FY14 includes creating and printing inspection reports for all documented outfalls in town. A water quality program for outfalls will be created using guidelines outlined in the revised NPDES MS4 General Permit. The identification of the receiving waters from outfalls will also be performed. (See attached samples).

The cost & time estimate associated with mapping Year 13.

Personnel	Time (Hours)	Cost (\$)
1 Senior Volunteer	250	\$2,500
1 College Intern	360	\$4,680
Engineering Division	625	\$18,750
MIS/GIS Director	60	\$2,250
MIS/GIS part time Employee	185	\$3,700
Totals	1480 hours	\$ 31,880

3.C. The Town continues to make progress on mapping. A summer intern will return to continue efforts in enhancing the mapping of the stormwater system. The following work was completed this reporting year:

- Catch basin inspection reports were numbered using the GIS id number and started entering the information into an excel spreadsheet. We hope to utilize the spreadsheet information in the future with (linkable) information in the mapping program.
- The Town doubled the amount of point features (i.e. catch basins, manholes, etc.) added to the map system.
- Corrections were made when discovered.

3.D. The Conservation Commission's office continues to regularly update the database of all commercial properties whose drainage system directly discharges into the Municipal drainage system. However, mapping of these systems has not occurred due to time and financial restraints. These efforts need to be integrated with the Town's MIS Director.

3.E. The Town's Conservation Commission Agent continues to identify violations of IDDE including restaurants dumping grease and mop water into the storm drainage system. All violations have been cured and continue to be routinely monitored both by the Conservation Officer and the Board of Health. Furthermore, the Conservation Officer continues to ensure that the 29 oil/water separators that are located on private property but are tied directly into the Town's sewer system are maintained on a yearly basis. Inspection letter is attached. Mapping of these locations still has not occurred but remains a future goal.

3.F. Since January 2012, the Highway Department performs inspections of all catch basins being cleaned. The properties of each catch basin in town are evaluated, inspected and recorded on a CB (Catch Basin) Inspection Sheet. This includes the rough measurement of material removed from each basin. A sample inspection sheet is attached. An important part of inspection is for the worker to look for indicators of illicit connections. All the data is being recorded in a spreadsheet and will be integrated into the GIS mapping program in the future. (See attached).

Last reporting year's goal was to create a less cumbersome form for CB crews was not finished. It will remain a future goal under this task.

3.G. The DPW signed a contract with Woodard & Curran to conduct a conditions assessment and develop a remedial plan for specific town owned storm drains and culverts. Approximately 19,000 linear feet of existing drain pipe with diameters ranging from 8" to 36" was inspected with CCTV and cleaned where needed. No cross connections or illicit discharges were found. As a result of inspections, the Town will begin to prioritize drainage areas to address (see attached). The actual work on these areas will occur as time and funding allows.

- 3.H. As reported last year, the Town completed its Sewer System Evaluation Study (SSES) with AECOM. The object of the study is to identify sources of inflow and infiltration into the wastewater system. A portion of the funds was dedicated to the investigation and inspection of the Town's interceptor from the downtown area to the WWTP which was constructed in 1968. The study's conclusion was that the aging interceptor is deteriorating and in need of re-lining. The Town received the final report in February 2015.
- 3.I. The Town of Westborough has a Discharges to Municipal Storm Drain System bylaw that was adopted at the May of 2008 Annual Town Meeting. This bylaw functions as the IDDE bylaw required in the NPDES Permit. To date the program has been an effective, appropriate and enforceable program. The consultant's review recommended minor changes therefore the Town decided to wait till the new NPDES MS4 General Permit is issued before making any changes. In accordance with the 2016 MA MS4 Permit the Town will create a monitoring for potential illicit discharges program. [see attached Westborough IDDE bylaw]
- 3.J. This new goal set last year was to solicit help from other Town Departments to inspect for potential cross connections or illicit discharges when they are performing inspections for their own departments. This task was not completed and will remain as a future goal for Permit Year 14.
- 3.K. The Town met with the Coalition to investigate grant options for municipalities. Even though the Coalition is not aware of any grant money available the Town will continue on its own to explore funding options.

Minimum Control Measure 4: Construction Site Stormwater Runoff Control

The Coalition reviewed the Town's Stormwater by-law and recommended minor changes. The Town chose to wait in making any changes until the 2016 MA MS4 Permit requirements were published.

Town BMP ID#

- 4.A. The Town completed its stormwater by-law in Year 6 and continues to get good results from it. Each year a review of the by-law takes place and is updated as necessary. In Permit Year 14, the Town will review the by-law for compliance under the revised 2016 MA MS4 Permit and make any needed changes.
- 4.B. The DPW continues to issue and keep track of all stormwater permits for projects that disturb over 5,000 square feet of land. Sites are continuously being reviewed for site runoff control. Periodic inspections are performed on all active sites. See attached for listing of stormwater permits issued in Permit Year 13.

We found that many homeowners felt overwhelmed by the Town's Stormwater requirements. Therefore, in the fall of 2012, we developed a simple document titled "Stormwater Permit Requirements". For each small project (less than 5,000 square feet of disturbance) the DPW prepared a list of conditions that must be met by the owner. We have continued to issue this document and are revising it as necessary.

- 4.C. The Town's Conservation Officer prepares very detailed set of Orders of Conditions under the Wetlands Protection Act that aim to prevent construction sites from discharging runoff from the limits of approved construction. This has been highly successful and the Orders of Conditions include assistance in reviewing certain construction elements by the Town's Engineering Department. The benefits of this

stormwater management policy include ensuring that detention basins are sized correctly, groundwater elevations conform to previous modeling, and that the overall utilities are installed in conformance with the approved plans.

- 4.D. The Town's Conservation Officer will continue to perform on-site inspections of all projects that have Orders of Conditions during the construction phase. A site report with any violations found will be completed and filed in the Town records.

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

The Coalitions work for this MCM was not applicable to the Town of Westborough this year.

- 5.A The stormwater By-law adopted in reporting Year 6 continues to be an effective tool in the Town's efforts to mitigate degradation of the Towns water bodies.

- 5.B All new development and redevelopment in town must design, construct and maintain stormwater management practices that improve upon the pre-development runoff conditions following construction. The post-construction rate and volume of discharges are not permitted to exceed the pre-development conditions. These goals are accomplished by use of infiltration and drainage system improvements.

- The Town's Stormwater Bylaw requires that all projects which disturb more than one acre comply with the DEP Stormwater Management Requirements. The DPW reviews projects with no wetlands the same as they would if there were wetlands. All projects must meet Stormwater Management Requirements. This includes:
 - Mitigating peak rate and volume of runoff
 - Writing a full SWPPP with Erosion and Sediment Control Plan
 - Providing Required Recharge volume calculations
 - Providing Water Quality volume calculations
 - TSS removal calculations
 - Sediment forebay sizing
 - Stormwater Management checklist (from DEP)
 - Show calculations for 1" roof runoff recharge
 - Estimated seasonal high ground water elevation and determine the Hydrologic soil group by a soil professional
 - 72 hour drawdown calculations

The Town requires the submittal of as-built plans before occupancy permits are issued. This provides the Town with the ability to assure that the project has been built according to our regulations and that all permit requirements have been fulfilled appropriately.

- 5.C. Site inspections are conducted on all project sites on a regular basis for assurance that BMP's are in compliance.
5. D. The Westborough Conservation Officer has created a database of 260 private sites that include a mix of industrial, commercial, and high-density residential sites that are yearly inspected for compliance with Town's stormwater maintenance requirements. Additionally, the database identifies which commercial properties have on-site drainage that discharge directly into the public drain system. All the sites have been broken down into their respective river basins and aquifer zones. This information is valuable and will enhance the Town's GIS mapping system once it is integrated together. An example of the database's capabilities is attached. The Town's conservation officer will continue to send out yearly letters to all sites reminding them of their obligations and to set up yearly visits.

- 5.E During the review process, a Stormwater Operations and Maintenance document must be prepared by the applicant and is reviewed by the Town and adopted as a condition of approval. The document must include provisions for all aspects of maintaining the stormwater system with specific inspections and maintenance schedules. The Stormwater Bylaw gives the Town authority to perform corrective actions and recoup the costs from the owner/operator if necessary. A goal for Permit Year 14 is to evaluate the Town's requirements and procedures against the newly issued NPDES MS4 General Permit and make any changes as needed.

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

The Town's Stormwater Pollution Prevention Plan (SWPPP) remains to be effective for MCM 6.. A template in the form of a word processing document is available on the Coalitions website 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 Town in the next reporting year will review the SWPPP template online and update it's own SWPPP as needed.

Town BMP ID#

- 6.A Employees have been trained in good housekeeping procedures in municipal operations and will be periodically re-trained.
- 6.B The Town continues to seek out opportunities for more employee training. Attached is a seminar that a staff member from Engineering attended.
- 6.C The Town's Conservation Commission Officer did not conduct any presentations this reporting year however, he is currently working on a new presentation that will be scheduled at a future date.
- 6.D The Westborough DPW Highway has improved their record keeping of catch basin cleaning. Each basin cleaned gets an inspection report written which included condition of the structure, sediment height and any signs of IDDE. The Town was plagued with equipment failures and not enough qualified personnel to achieve our goal of cleaning 100% of the catch basins in Town. Funding for new equipment was not approved at the annual Town Meeting. The DPW will continue to request funding and personnel to satisfy this requirement.
- 6.E The Town's Conservation Commission Officer continues to work with the DPW in maintaining the approximate 50 Town-owned detention basins. The basins are mowed once annually by DPW personnel. In addition, the Conservation Commission Officer ensures that all the stormwater related maintenance is performed on each of the 6 school campuses. Currently, the School Department contracts annually to have all the stormwater structures professionally maintained.
- 6.F Management of pesticides, herbicides and fertilizer application is monitored each year. Herbicide is only applied to control roadside vegetation where it is necessary to reduce the potential for stormwater contamination.
- 6.G The DPW Maintenance Department continues to take a very active role in stormwater pollution prevention. Vehicles are closely monitored and maintained on a regular basis. Repairs are made immediately. Repair Order history print outs assist in determining which vehicles are in need of future maintenance [see attached]. Personnel are trained and utilize spill control devices when needed. All oil and wastes are disposed of in one location and removed/disposed of by an outside party.

- 6.H An important component to the Town's program is the street sweeping operation. The program is evaluated on annual basis looking for trends and trouble areas. 100% of the streets were swept in the spring and in the fall. The downtown area is swept more frequently in the summer months. Again, the Town continues to be plagued with equipment failures and not enough qualified personnel to achieve this goal. Knowing that the newly issued NPDES MS4 General Permit will have more stringent requirements under this task, the DPW will seek funding again.
- 6.I There has been a collection center for oil & grease waste at the DPW for many years. In addition the salt shed, vehicle maintenance bay and garage are cleaned once a year in February by Clean Harbors. These facilities have closed-system drains with oil/water separators. Records for both are on file at the DPW.
- 6.J A new collection center has been added and is designed for just anti-freeze products. The collection center is maintained properly and waste will be picked up and disposed of by a qualified vendor when the containment system is full.
- 6.K The Conservation Commission Officer continues to ensure that all the stormwater related maintenance is performed on each of the 6 school campuses. Currently, the School Department contracts annually to have all the stormwater structures professionally maintained. A goal for future reporting year is to GPS the infrastructure and update the GIS mapping with this information.

Part IV. Assessment and Future Activities

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 & OUTREACH

BMP ID#	BMP Description	Responsible Dept/person	Measurable Goal(S)	Progress on Goal(s)- Permit Year 13	Planned Activities - Permit Year 14
General Public					
1. A	Educational Posters with handouts	DPW	1. Display educational posters & handouts at Spring and Fall TM 2. Find new locations to display posters	Ongoing 1. Displayed only at Spring '15 TM. 2. Displayed at DPW office building.	- Find and display posters at minimum of two new locations. - Maintain existing posters and create/buy new ones
1. B	Cable TV Outreach	DPW	Run educational PSA's on local cable TV	Ongoing. Video made by Girl Scouts continues to be available on the site.	Continue to run PSA but reach out to have an improved video made
1.C	Cable TV Outreach	DPW	Bulletin campaign aired on Westborough TV	Continue to run bulletin series, "Stormwater Matters"	Create new bulletin series to engage public.
1. D	Town Website	DPW	Post stormwater information on Town website	Ongoing. General stormwater information remains available on the website	Work with IT to modify website to be more user friendly and ability to show graphics and brochures without links.
1. E	Educational Stormwater display	DPW	Exhibit a stormwater display at Library and Senior Center	Display was shown during the month of September 2015. Improvement needed for displays at senior center.	- Same display has been used for many years now. Create a new & exciting display for next reporting year - Coordinate with Senior center on display availability and new ideas.
Homeowners					
1. F	Mailings	DPW	Mail educational flyers that target specific issues pertaining to homeowners & stormwater	A brochure was created and mailed to every Westborough homeowner on public water Spring 2015	make improvements on existing brochure & create new brochures as time and funding allows
1.G	Letters to detention basin abutters	Con Com Officer	Mail educational letters to detention basin abutters about function and importance of no dumping	All abutters to the 50 town owned detention basins received educational letters from Con Com Department.	Work with Con Com officer on follow-up educational information to residents
Students					
1. H	Education	DPW	Conduct grade appropriate presentations w/ Environscape	Previous years presentations were performed to 3 rd & 6 th grades. No presentations performed this year.	Interest in attending the Environscape has decreased each year. Find new presentations that will engage students.
1. I	Education	DPW	To engage and work with schools to increase discussions with students on stormwater issues	No action occurred on this task this year.	Reach out to schools/youth groups to encourage teaching kids about stormwater. Look to outside groups i.e. OARS for materials and assistance.
NEW Goals for Permit Year 14					
1.J	Education	DPW	Educate general public using new technologies	N/A	Make available to the public the Coalitions Twitter account
1.K	Target potential high	DPW / Con	Educate specific industries	N/A	Make and mail industry specific

	commercial polluters	Com officer	stormwater pollution they generated		educational flyers. Seek help from Depts
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2. PUBLIC INVOLVEMENT AND PARTICIPATION

BMP ID#	BMP Description	Responsible Dept/person	Measurable Goal(S)	Progress on Goal(s)- Permit Year 13	Planned Activities - Permit Year 14
General Public					
2. A	Catch Basin Stenciling	DPW	Solicit and have volunteers perform CB Stenciling	Ongoing. We had increased interest in CB stenciling this year. A Boy scout & Girl Scout completed approximately 500 CB's this year.	Continue to encourage local groups to participate.
2. B	Hazardous Waste Collection Day	Board of Health	Hold Hazardous Waste Collection Day annually	Completed. The Board of Health continues to hold a household hazardous waste day annually.	Continue to work with the Board of Health in running the collection day.
2. C	Rain Barrel Program	DPW	Participate in the rain Barrel program in coordination with The Great American Rain Barrel Company	Completed. The Town of Westborough participates in this annually.	- Continue to participate in program. - create a link on Town website for residents to obtain information
2. D	Earth-day clean up	Westborough Community Land Trust	Earth Day Clean-up	Completed. The Town of Westborough participates in this annually.	- Continue assisting WCLT in Earth Day activities - Reach out to WCLT to participate in other activities that contribute to the stormwater campaign
2.E	Hold public meeting to educate people on stormwater awareness	DPW	Advertise and hold meeting	This was a new goal for YR 13. A basic presentation is in progress of being made. A meeting date has not been chosen.	- Continue to work on creating a presentation. - Conduct a basic stormwater information presentation.
Students					
2.F	Education video	DPW	Create educational videos	Ongoing, the goal was to have a new video created since the 3 being run on the local cable station are from 2013.	Girl scout troop #30507 agreed to make a video and according to their leader a video was made, however the video was never given to the Town nor has a web link been provided. YR14 goal is to try again.
2.G	School student involvement	Many	Improve School student improvement	No action was taken on this goal therefore YR14 goal will remain the same	Investigating having a poster and/or photo contest for school students.

3. ILLISCIT DISCHARGE DETECTION AND ELIMINATION

BMP ID#	BMP Description	Responsible Dept/person	Measurable Goal(S)	Progress on Goal(s)- Permit Year 13	Planned Activities - Permit Year 14
3.A	Stormwater System Mapping	DPW	Focus on QA/QC of the maps between the field and the database	Ongoing. The full time summer intern field checked map accuracy. Discrepancies were GPS'd in and/or visually added.	• The Town purchased its own GPS unit fulfilling a goal from last year. • Continue gathering information and updating maps as time allows. • Hire summer intern to assist.
3.B		DPW	Map all and inspect all outfalls. Monitor outfall for contrition and begin water quality field testing.	Inspect and generate inspection report for all outfalls. Map with GPS new or found outfalls.	• Perform & record inspection of all outfalls in Town • develop and begin water quality program with goal of 10% outfalls tested or as new MS4 permit requires
3.C		GIS/MIS	Make changes and up-dates to main database	Ongoing. A part time employee was added to the dept. to assist with this task. No links or updated software has been added.	• Enhance the mapping link possibilities. Upgrade software to have enhanced mapping abilities. • Seek out qualified volunteers
3.D	Inventory commercial properties with drain system directly discharges to municipal drainage system	CON COM Officer	Identify, create a database and map all of the commercial properties. Indentify which sites discharge directly into the municipal drainage system.	The database has been created and continues to be updated. Mapping has not occurred at this time due to time and financial constraints.	• Work with MIS Director to have the information integrated into the Town mapping system. • Seek additional funding to continue and expand these efforts.
3.E	Identify and eliminate illicit discharges from non-residential sites	CON COM Officer	Identify sites that are illicitly discharging into the municipal drainage system and take corrective action where applicable	The database has been created to highlight these sites. The Con Com officer has taken the steps to eliminate the discharges.	• Work with MIS Director to have the information integrated into the Town mapping system. • Seek additional funding to continue and expand these efforts.
3.F	IDDE Plan	DPW	Record conditions of each CB on "CB Inspection Sheet". Create and record information on a computer spreadsheet	DPW crews continue to fill out CB inspection forms during CB cleaning operations. All goals from last year are ongoing.	• Crews the existing inspection form cumbersome, still working on better forms to suit crew needs. • Continue logging all inspection information in spread sheet. • Integrate information into GIS Mapping Database.
3.G		DPW	Contract camera work to inspect existing drainage networks	Woodard & Curran completed all of the camera inspection work and provided Town with evaluation of existing conditions assessment.	• A prioritized list of drainage improvements was generated. Seek funding sources.
3.H		DPW	SSES activities	Completed.	• Review report and begin obtaining

					funds for prioritized areas is ongoing
3.I	Bylaw Ordinance	DPW	Implementation of IDDE by-law	Continue on monitoring for potential Illicit discharges and address any with the authority of the by-law	● Met with CMSWC to evaluate existing by-law. Minimal recommendations for improvement. ● Work under this task will coincide with work described in BMP 3.B.
3.J	Inspection & Enforcement	DPW/ Bldg Dept	Solicit help from other Town departments in continuing to find and/or prevent illicit connections	No action was taken on this goal. Therefore, this goal is carried over to the new permit year.	Investigate the potential of enlisting Town Plumbing Inspector to inspect all plumbing permit work for potential cross connections or illicit discharges in to storm drain system.
3.K	Investigation	DPW	DPW will investigate/apply grant programs and opportunities for funding assistance.	Met with CMSWC to see funding options for future studies. The Coalition is not aware of any grant money available to municipalities.	Continue to explore funding options for future studies and apply when applicable

4. CONSTRUCTION SITE STORM WATER RUNOFF CONTROL

BMP ID#	BMP Description	Responsible Dept/person	Measurable Goal(S)	Progress on Goal(s)- Permit Year 13	Planned Activities - Permit Year 14
4.A	Stormwater Regulatory Mechanism	DPW/ Planning Dept	Develop and implement a bylaw for E&S control utilizing appropriate BMPs	Completed. Stormwater By-law adopted in Year 6.	● The Coalition performed a review of the by-law and made minimal recommendations
4.B	Stormwater Management Policy	DPW	Review all incoming projects for compliance of stormwater management policy, including, proposed use of BMPs, erosion control plans and SWPPP.	Ongoing. DPW continues to review all submissions and evaluate for conformance of regulations	● Continue to require stormwater permits and reporting requirements ● Review and update permit as necessary ● Continue reviewing all incoming plans for stormwater applicability
4.C	Stormwater Management Policy	CON COM Officer	Review all incoming projects from the Conservation Commission Officer's point of view apply Con Com stormwater management policy(s).	Ongoing. Con Com Officer continues to review all project submissions and writes detail Order of Conditions to ensure compliance.	● Continue having the Con Com Officer actively reviewing all in coming plans and projects.
4.D	Inspection & Enforcement	DPW/ CON COM Agent	Conduct construction site inspections. Keep inspection records and violation reports Follow stormwater by-law procedures for any violations	Ongoing. Designated staff has been trained & perform regular inspections on all active construction sites	● Continue site inspections & writing site reports. Maintain all records. ● Violations into database ● review current procedures and evaluate whether any adjustments should be made

5. POST-CONSTRUCTION STORMWATER MANAGEMENT

BMP ID#	BMP Description	Responsible Dept/person	Measurable Goal(S)	Progress on Goal(s)- Permit Year 13	Planned Activities - Permit Year 14
5.A	Regulatory Mechanism	DPW/ Planning Dept	Bylaw that regulates the control of post construction runoff and the evaluate for appropriate BMPs	Completed. Stormwater By-law adopted in Year 6 included provisions for post-construction runoff.	● Perform a review of the by-law and update as necessary. ● Continue to regulate and implement the By-law
5.B	Stormwater Management Policy	DPW/ Planning Dept	Review all projects at various stages of construction for compliance of stormwater policy and conformance of BMP's	Ongoing. DPW reviews all submissions and evaluates proposed BMPs for conformance of regulations.	● Continue reviewing all projects at various stages of construction.
5.C	Inspection & Enforcement	DPW/ CON COM Agent	Designate staff and perform inspections for each project	Ongoing. Designated staff performs regular inspections of all active construction sites	● Continue site inspections and writing site inspection reports. ● Enlist other departments to assist in the inspections.
5.D	Inspection & Enforcement	CON COM Agent	Create database and perform inspections	Ongoing. Database has been created and inspections occur on a regular basis. All inspections are recorded in database.	● Update database as needed. ● Perform inspections.
5.E	BMP Operation & Maintenance Procedures	DPW/ CON COM Agent	Develop operation and maintenance procedures for submission on each project	Ongoing. Procedures continue to be required for all projects	● Continue requiring O&M plans ● Evaluate Town requirements to the new MS4 permit requirements and change as necessary
5.F	Sampling to verify compliance with stormwater policies	TBD	Perform sampling on downstream watersheds of projects that have suspected negative impacts to the watershed.	No action was taken on this goal set for this year due to the anticipated release of the new MS4 permit and it's requirements	Develop sampling protocol and procedures for suspect violations using the new MS4 permit requirements

6. POLLUTION PREVENTION/ GOOD HOUSEKEEPING

BMP ID#	BMP Description	Responsible Dept/person	Measurable Goal(S)	Progress on Goal(s)- Permit Year 13	Planned Activities - Permit Year 14
6.A	Employee Training	DPW	Develop and implement a training program for all DPW employees to attend	Ongoing. Employee training was performed in year 7.	● Review and up-date training program. ● Conduct a training session for all employees on new procedures and policies
6.B		DPW	Attend seminars and classes to educate employees in new techniques and trends in the industry	Ongoing. One employee attended the "Key topics in funding local government stormwater programs" workshop	● Increase the number of seminars and classes employees attend. ● Expand the number of employees attending seminars and classes
6.C		Con Com Officer	Develop and conduct training/seminars for all municipal employees	No new presentations in this reporting year	● Contact Con Com Officer to develop more presentations and/or training.
6.D	Stormwater System O&M	DPW	Enhance the existing storm drain system and CB cleaning. Implement a schedule of increased cleanings and strengthen record keeping.	Ongoing. Highway Dept. continues to complete inspection reports on all CB's during cleaning, however cuts in the Department resulted in only 50 % of CBs being cleaned this year. Funding was requested at ATM but the request was not approved.	● Continue filling out inspection reports and maintaining records. ● prioritize CB schedule so that CBs not cleaned this year are completed first in the following year. ● Request funding for new equipment.
6.E		DPW/CON COM Officer	Maintain Town stormwater infrastructure by performing annual maintenance inspections.	Ongoing. All Town owned detention basins are inspected and mowed annually.	● Continue to implement program and record keeping. ● Computerize record keeping. ● Investigate expanding the program.
6.F	Pesticide / Fertilizer Reduction	DPW (Highway/Parks)	Develop and implements a management program for application. Annually summarize allocations	Ongoing. Application of fertilizers and pesticides is reviewed each year and modifications made.	● Continue to implement program and reporting. ● Develop and implement training on good application techniques that reduce impact to the watershed.
6.G	Municipal vehicles Maintenance and Repair	DPW	Review maintenance and repair vehicle repair program. make improvements that increase stormwater pollution prevention	Completed and ongoing. Spill collection devices are continuously being utilized. All oils and wastes are disposed of in one location and removed/disposed of by an outside party	● Annually review operations and methods, make improvements where needed. ● Train new employees in good housekeeping practices and re-train existing employees on a regular basis.
6.H		DPW	Enhance street sweeping	Ongoing. Evaluate program	● Again, mechanical equipment

	Municipal Roads		operations. Computerize record keeping system.	annually to look for trends and trouble areas. 100% of the streets were swept Spring and Fall. Downtown area was swept bi-weekly during summer months. Funding was requested at ATM but the request was not approved.	failures have plaque the DPW. Efforts have been hindered at times due to lack of functioning equipment. ● Continue to investigate funding sources for new equipment.
6.I	Hazardous Waste	DPW	Establish a collection site to accept oil & grease waste to be properly disposed of	Completed and ongoing. The collection center for oil & grease waste at the DPW has been maintained for many years. Waste is picked up and disposed of by a qualified Vendor	●Continue to train employees and to use the collection site for all oil and grease waste.
6.J		DPW	Establish a collection site to accept antifreeze waste to be properly disposed of	Completed and ongoing. The collection center for just antifreeze waste products continues to be maintained. Waste is picked up and disposed of by a qualified Vendor.	●Continue to train employees and to use the collection site for all antifreeze waste. ● Maintain properly records of disposal activities.
6.K	Municipal (School) Infrastructure	Con Com Officer	Inventory municipal property infrastructure and set up maintenance program	Completed. A database was created with all stormwater related structures located on the 6 school campuses	●Continue to update as necessary ●GPS locations and update GIS database