



NPDES Phase II Small MS4 General Permit Annual Report

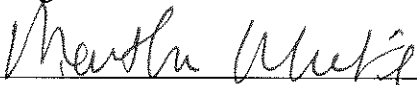
Municipality/Organization: Town of Natick, Massachusetts
EPA NPDES Permit Number: MAR041139
MassDEP Transmittal Number: W-035570
**Annual Report Number
& Reporting Period:** Report No. 11: May 1, 2013 – April 30, 2014

Part I. General Information

Contact Person: Mark Coviello, P.E. **Title:** Town Engineer
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Mailing Address: 75 West Street, Natick, MA 01760

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: Martha White
Title: Town Administrator
Date: April 24, 2014

Part II. Self-Assessment

The Town of Natick has completed the required self-assessment and has determined that our municipality is in substantial compliance with all permit conditions. Although we are not required to assess ourselves in regards to the BMP implementation, goals and schedule within this section, the Town would like to note that due to staffing and budgetary constraints during the stormwater management program, our plan of action had to be modified and schedules shifted. During that time, the Department of Public Works (the department responsible for the implementation of the NPDES Permit for the Town) lost their Stormwater Coordinator and numerous members of the Highway Department (one of the divisions tasked with assisting the Engineering Division with managing the program) and the positions were not filled (due to budget cuts). The duties of these positions were distributed to other personnel within the Department of Public Works and Community Development, but with the staffing and budgetary constraints, both departments are operating beyond their means. The Town of Natick was still committed to meeting all requirements of their permit, and believes that they have substantially completed all the required tasks set forth within the program.

Even with the budget cuts and staffing issues, the Natick Stormwater Committee has been pro-active in trying to ensure that all the scheduled tasks were completed by the end of the Permit and have gone as far as to revise their plans on multiple occasions during the past few years. Although many of the tasks were already completed prior to this report, continued implementation and upgrading has been a focus for the Town to make sure that they are remaining compliant with the scope and intent of the stormwater permit. Two such tasks are BMP 1-2 and 1-4 (Storm Water Flyer to Community Residents and Businesses respectively). Although these items were completed during previous years of the permit, the Town continues to make them available to the Natick Residents and Businesses. We are always looking for opportunities to further educate the residents of Natick on Stormwater and what they can do to help keep it clean.

Another task that the Town has been working and improving upon is BMP 2-5 (Storm Water Drain Marking Kits). The DPW has been working with local groups (including middle schools, watershed groups and local Eagle Scout candidates) on using the kits (as well as Storm Water Stencils) that the town has to help educate not only the people using them but also their friends and neighbors. The Town will continue to make these marking kits and stencils available for use by Natick Residents. BMP 6-3 (Investigate Town Owned BMP's for Retrofit Opportunities) is a task that the town is always trying to investigate. During the course of this permit, the town has spearheaded a couple drainage and roadway improvements projects in which structural BMP's have been incorporated. The Town is completing the design for the Pine Street Drainage and Roadway Improvements project as well as the Kansas Street Drainage and Roadway Improvements project. Some of the BMP's (and green technology) that will be incorporated into these projects are deep sump catch basins and hoods with the basins, grassed swales and infiltration piping. It is important to note that on every new development, the Town requires developers to incorporate structural BMP's into their storm drainage designs. As a result of these improvements, local street flooding has diminished in many areas and the quality of the drainage discharge for these areas has improved.

The Town was very active in regards to locating and mapping our storm drainage system during the

stormwater permit. The town was not only active in mapping the locations of our outfalls but also other drainage structures including pipes, catch basins, etc. (which was not required under this permit). These structures were located using GPS technology which has allowed the town to produce 40 scale drawings which the Town can use in cases of emergency or problems with the storm drainage system or to assist the Town in marking out the storm drains for contractors performing excavation work near the system. Knowing the locations of the storm drainage pipes and structures will minimize the likelihood that contractors will damage our storm drainage system during their excavation work thus protecting water bodies downstream. During the subsequent stormwater permit, it appears that the mapping of all drainage structures will be required (subject to change in the final permit). The Town is ahead of the curve in this item but will work to ensure that the present information is correct as well as obtaining the remaining information.

As of the writing of this report, 505 outfalls have been identified in our system. This includes both town owned and maintained outfalls as well as outfalls in subdivisions that are not currently under the control of the Town but will ultimately be. Of the 505 outfalls, approximately 15 remain to be located using GPS. The locations of these outfalls are generally known; however due to terrain and safety issues, we are unable to locate these outfalls. We are still working to record the locations of these structures but it is unclear if this will be possible. 446 of the 505 outfalls have been fully inspected and entered into our database. The majority of the remaining 59 outfalls have been inspected during field location work; however follow-up detailed inspections and data entry into our database remain. It is important to note that there are many areas where the state drainage system discharges into the Town of Natick (Portions of Speen Street, Route 9, Mass Pike). Although GIS information on their system has been requested by the Town, the state has not given the Town any of this information. This is being mentioned to detail our concern that no matter how much work the Town performs to limit contaminants into our drainage system, there are other entities that are impacting our system beyond the town's control.

The town has also been very active in locating and inspecting culverts within the Town as well which is beyond the scope of this BMP, but it is the feeling of the Town that identifying the entire system as a whole (and all its components) is vitally important to ensuring that the system is managed and maintained in the best possible fashion. Presently 181 culvert inlets and 98 culvert outlets have been identified in our system. Of these, 173 of the 181 inlets and 96 of the 98 outlets have been fully inspected and entered into our database.

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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future Years
1-1	Website Modifications	Department of Public Works	Update Website with • New Info • New Contacts • New Links Continue monitoring the website to ensure that it is up to date and current including all links.	During Year 11 (as in past years), the Town's Stormwater Management Website was reviewed to ensure that the residents have a very user-friendly experience. Contact information and links were verified and new information was added and out of date information was removed from the site.	To ensure that this site is effective, it will be reviewed on a regular basis to make sure that information is current and that links are working. If new information is available that may be useful to residents, it will be included within the website. The assumption is that this task will be continued under the next NPDES permit administered by EPA
1-2	Storm Water Flyer to Community Residents	Engineering Department	Distribute flyer to 75% of Natick Residents; Compile and Consider "Survey" results	The original flyer was created and distributed to residents during Year 1. During every subsequent year, the Town has been making these flyers available to town residents at the DPW, Town Hall and at the many Town Events where the Traveling Display has been displayed.	Goal Completed/Ongoing Implemented Program While it wasn't required, the Town has been looking into ways to update and create new storm water flyers for the residents. The town is committed to making sure that all the Town residents have access to as much of the storm water materials as possible. Goal Completed/Ongoing Implemented Program No future work is planned for this BMP. Goal Completed
1-3	Storm Water Lesson Plan for Fifth Grade Students	Engineering Department	Develop and Distribute lesson plan for Grade 5 level (Use plan to teach 1 or more Grade 5 classes)	No work performed for this BMP during Year 11. The lesson plan was developed, distributed and taught to fifth graders during Year 2 of the permit.	Goal Completed

1-4	Storm Water Flyer to Community Businesses	Engineering Department	Distribute flyer to a minimum of 50% of Natick Businesses, Storm Water Log displayed by half of the businesses receiving the flyer	The original flyer was created and distributed to businesses during Year 1. During every subsequent year, the Town has been making these flyers available to town businesses at the DPW, Town Hall and at the many Town Events where the Traveling Display has been displayed.	The town will keep these flyers available for whatever business or resident requests them and will continue to work with the residents and businesses of Natick to educate them about keeping their storm water clean. Goal Completed/Ongoing Implemented Program
1-5	Storm Water Media Campaign	Engineering Department	Deliver media information packet to the local media, Issue 4 press releases to local outlets and major media outlets	No work performed on this BMP during Year 11. Informational packets were delivered to media (local and major) outlets during Year 3 of the permit.	No future work is planned for this BMP. Goal Completed
1-6	Storm Water Video	Engineering Department	Show Storm Water Video at a minimum of 1 public meeting, and air Storm Water Video at least once on the local cable channel	The Stormwater Infomercial that was developed during Year 5 of the program and showcased during Year 6 was still being shown on Natick Pegasus (The local access station). During Year 7, a new infomercial was also created and broadcast that dealt with Green and LID practices. These infomercials were still being aired during Year 11 to the residents of Natick on a semi-regular basis on Natick Pegasus.	The Town will continue to work with the local cable channel to ensure that these mini infomercials are being shown at certain timeframes. Also it has been discussed that a follow-up interview by a member of the Stormwater Committee may occur to discuss Stormwater more in depth.
Revised	Storm Water Infomercials	Engineering Department	Take postcards created under the revised BMP 2-7 and turn them into mini infomercials on the local cable channel to increase awareness of storm water issues both locally and in general		Goal Completed

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future Years
2-1	Storm Water Committee	Stormwater Committee	Establish a Stormwater Committee, Hold Quarterly meetings at a minimum	The Stormwater Committee was established during Year 1 of the permit. As was the case in previous years, the Stormwater Committee met during this past year (Year 11) of the permit.	The Stormwater Committee will continue to meet as regularly as possible to ensure that the storm water issues of the Town are being addressed and discussed. Also, with the next draft permit under review by EPA, the Stormwater Committee will be meeting to determine the impacts this will have on the town and how best to deal with them.
2-2	Community Hotline	Department of Public Works	Establish a Hotline; Residents Use Hotline and Phone calls indicating suspicious activities are investigated	During Year 11 of the permit, the hotline remained an important part of the Stormwater program. The Hotline phone numbers and email addresses of appropriate contacts in cases of flooding, illicit discharges and construction concerns were checked to ensure that they are active to allow resident to continue to report suspicious activity and storm water concerns.	Ongoing Implemented Program The Town will continue to monitor the hotline to determine the best possible way to ensure that residents can report suspicious activity in an effective way. If modifications need to be made to how this is done, the Town will update accordingly.
2-3	Stormwater Traveling Display	Department of Public Works	Storm Water Display circulates around Natick for at least 3 months; Display is Posted at a minimum of 3 different public locations; Posted in public places or at storm water events	The traveling display was purchased during Year 1 of the permit with an additional display being purchased during Year 4. Since its purchase the original display has been located primarily	Goal Completed The Town will continue bringing the stormwater display to town-wide events and other gatherings where it will be seen by a large number of residents at one time.

Revised		Stormwater Committee	Purchase Additional Traveling Display	at the Department of Public Works year round. During special events (Town Meeting, Storm Water events, etc), the additional display has been set for viewing by the residents or other attendees of the meeting. During Year 9, the Town worked with the SuAsCo Watershed Council to replace some of the panels on one of the displays that was starting to come apart.	Ongoing Implemented Program/ Goal Completed
2-4	Storm Water Poster Contest for 5 th Grade Students	Department of Public Works	Hold poster Contest, receive entries and judge submissions	No work was planned for this BMP during Year 11. Goal Completed	No future work is planned for this BMP. Goal Completed
2-5	Storm Water Photo Contest for High School Students	Department of Public Works	Hold Photo Contest, receive entries and judge submissions	This BMP was changed in Year 4 to be a storm drain marking kit. The kits were received in the end of Year 4 and were used by a couple groups (girl scouts) during Year 5 to help educate not only themselves but also their neighborhoods on not dumping anything down their catch basins. Additional groups (watershed groups, middle schools and Eagle Scouts) have inquired about the kits and they will have been used during Year 11 and will be used going forward.	The Stormwater Committee will continue to work to determine the best way to implement this task and get more community groups involved with this BMP.
Revised	<i>Storm Water Drain Marking Kit</i>	Department of Public Works	Install labels on approximately 200 catch basins		
2-6	Hold a Local Storm Water Summit	Stormwater Committee	Hold community storm water summit and advertise to encourage community attendance	No work performed for this BMP during Year 11. The summit was coordinated and held during Year 3 of the permit schedule.	Goal Completed Although this task was completed during Year 3, the town is always looking for opportunities to work with groups to educate them on stormwater management. Goal Completed

2-7	Participate in SuAsCo Storm Water Super Summit and Conduct an Evaluation and Assessment of Public Awareness of Storm Water	Engineering Department	Participate in Storm Water Super Summit; Storm Water Self Test distributed to a minimum of 75% of Natick residents, Compile and consider "Self Test" Results	During Year 6, the Town worked with SuAsCo to create postcards that focused on "Green" initiatives and what each resident could do. Also, a survey was created to test the resident's Stormwater IQ. During Year 7, these postcards were made available to all town residents as well as putting them on the town website so that residents can learn about green initiatives.	The Town will continue to work with SuAsCo and other organizations to come up with new and innovative ideas to educate the residents and businesses within Natick on stormwater and new technologies and ideas that can help people on an "every day basis" deal with stormwater. During Year 11, the practice of making the postcards available to residents at Town Hall and DPW continued.
	Revised	Engineering Department	Create specially designed postcards and send them out via tax bills to all the residents in Natick		Ongoing Program/Goal Completed Implemented

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future Years
3-1	Illicit Discharge Bylaw	Board of Health/ Engineering	Develop Illicit Discharge Bylaw and Present it to Town Meeting	No work was performed for this BMP during Year 11. The Department of Public Works and the Conservation Commission will work together to continue implementing the bylaws, rules, and regulations set forth as part of this BMP.	No work is planned for this BMP in the future. Goal Completed

3-2	Inspect and Sample Town Discharges	Engineering Department	Inspect all Town Discharges; Identify outfalls that indicate potential sewerage or illicit discharges; If Schedule and budget allows, conduct follow-up testing and inspection at discharges with the potential of illicit discharges and/or sewage contamination	The DPW has focused a large amount of resources on completing the inspection of all town outfalls. Budget constraints and loss of the storm water coordinator for the town have made it harder to complete, but the DPW personnel have been working hard to locate and inspect all the outfalls. As of the writing of this report, 446 of the 505 outfalls have been FULLY inspected and entered into our database. The remaining 59 have been inspected during field location work; however, follow-up detailed inspections and data entry remain.	The next permit from EPA is going to stress testing of the outfalls during both dry and wet weather (under certain conditions). The Town will use the information collected during the initial permit to assist us in better inspecting and analyzing the data collected during the next permit cycle.
3-3	System Mapping and Evaluation	Department of Public Works	Complete system map, structures, pipe databases and coverages; Locate all known discharges with GPS; Conduct Hydraulic modeling of flood prone areas; Add soils and land use to base mapping; Map septic system and provide pumping history	The Town has been very active in completing the mapping of our Storm Drainage system. During this permit, outfalls were located using GPS technology. Also, basins, manholes, culverts, etc were located. By doing this, the town can create 40 scale drawings which can be used by the DPW to locate the system in cases of emergency or it can be available to contractors to assist them in knowing the location of the storm drains during their projects which will limit the amount of damage they can do to the system. The remaining outfalls that have not been located using GPS or surveying may not be able to be located due to terrain and safety issues.	It is the DPW's belief that all outfalls that CAN be located have been located. There are still outfalls that the Town is unable to locate due to field conditions and/or access (as previously mentioned). Hydraulic analysis/modeling of flood prone areas, using the drainage mapping will continue through the end of the permit. The draft permit from the EPA stresses mapping of the entire drainage system. The Town will be "ahead of the curve" in that task but will continue to work to cross reference our information to make sure our drainage information is as correct as possible. See Item 3-5 for additional info on septic system mapping

Ongoing Implemented Program

Ongoing Implemented Program

3-4	Illegal Education	Dumping	Stormwater Committee	Educate the public on the hazards of illegal dumping	In conjunction with the educational BMP's listed above, the Stormwater Committee has been continuing to educate the residents of Natick of the hazards of Illegal dumping. During Year 8, the Town put together a Pet Waste Disposal Standard Operating Procedures document for the residents of Natick. This SOP has been continued during Year 9, 10 and 11 of the permit. As was the case in previous years, the Town will be holding a Household Hazardous Waste Day in May to collect wastes from residents instead of illegal dumping occurring.	The town is going to continue its efforts of educating residents on the hazards of illegal dumping. This will be done by using all the materials that were obtained by the Town for Permit Years 1 through 11. The town will continue to stress the importance of not dumping illegal and hazardous materials into Natick's storm drain system. The DPW and the Town's Conservation Agent has worked with the Town Clerk's office to have the Pet Waste document available to all residents when they obtain a dog license.	Goal Completed
3-5	Septic System Controls		Board of Health	Mandate Septic System Maintenance; Create database to track maintenance activities; Update database based on new septic system information	The septic system database is up and running, data entry has been completed; and the Board of Health has finalized the capabilities of the database reporting. This system is web based and residents/town personnel will have the ability to see if a house is on septic, check maintenance records and also be able to see any as-built plans that have been submitted for the septic systems.	The Board of Health will continue to update and improve the septic system maintenance database. This database along with already existing Septic System Regulations will help reduce system failures over time by assuring/ mandating system maintenance, effectively reducing the pollution and public health nuisances associated with such failures. Ongoing	Implemented Program/Goal Completed

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future Years
4-1	Soil and Erosion Control Bylaw	Conservation Agent/Department of Public Works	Develop a Soil and Erosion Control Bylaw and present it to Town Meeting	No work performed for this BMP during Year 11. The Soil and Erosion Control Bylaw was created and approved by Town Meeting during Year 3 of the permit. During Years 4-11, the town began implementing this bylaw and has continued to work with the Conservation Commission to ensure that it is being followed during construction activities.	The Department of Public Works and the Conservation Commission will work together to continue implementing the bylaws, rules, and regulations set forth as part of this BMP.
4-2	Construction Inspections	Conservation Agent/Department of Public Works	Town Representative to inspect Construction Activities on Weekly Basis	During Year 11, as was the case in all previous years of the permit, the Town of Natick has been very active in inspecting construction activities within the Town. ALL construction sites in town are inspected and all departments (building, conservation, DPW, Board of Health) make this a priority and it will remain a top priority for the Town even after the conclusion of the EPA permit.	Goal Completed The Town will continue to monitor ALL construction activities within the Town of Natick.
					Ongoing Implemented Program

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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future Years
5-1	Bylaw for Post Construction Runoff	Conservation Agent/Department of Public Works	Develop a bylaw to limit runoff from post construction areas and present it to Town Meeting	No work performed for this BMP during Year 11. The Post Construction Runoff Bylaw was created and approved by Town Meeting during Year 3 of the permit. During Years 4 through 11, the town implemented this bylaw and has been working with the Conservation Commission and Building Department to ensure it is being followed during construction.	The Department of Public Works and the Conservation Commission will work together to continue implementing the bylaws, rules, and regulations set forth as part of this BMP.
					Goal Completed

5-2	BMP Inspection and Maintenance	Conservation Agent/Department of Public Works	Inspect all town maintained structural BMP's over a Two Year period; Document any problems with BMP and investigate possible modifications	During the inspections of the Town's outfalls, the town's BMP's have also been inspected and their condition noted.	There has been no indication as to what the next 5 year permit will entail; however, the Town will continue to make sure that the locations and conditions of their BMP's are noted and observed and if any new information is available to include it within the database.	Goal Completed
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6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future Years	Ongoing Implemented Program
6-1	Catch Basin Cleaning	Highway Department	Clean 1/3 of all catch basins per year	Starting in April/May 2014, a subcontractor will be commencing with the cleaning of approximately 1/3 of all catch basins within Natick. It is scheduled to be completed by the end of Year 11 of the permit or shortly thereafter. This will be done as the first year of a 3 year contract for the Town to have a subcontractor perform catch basin cleaning throughout Natick.	In early 2011, the town bid a 3 year catch basin cleaning contract that ran through June 2013. The town has put out to bid the new 3 year catch basin cleaning contract where 1/3 of the basins in Natick will be cleaned each year. The quantity of materials removed will be noted and the material disposed of properly (for beneficial use if testing yields no contaminants or disposed of out of town at a proper disposal site)	

6-2	Street Cleaning	Highway Department	Sweep all town owned streets and parking lots once per year; Sweep downtown areas once per month (Apr-Nov); Sweep Major Streets twice per year; Sweep Town Parking Lots twice per year; Document amount of collected debris; and BUD for Street Sweeping Material Collected	All town streets were swept at least once during Year 11 of the permit. Downtown streets were swept once per month (April to November) while major town streets as well as all town owned parking lots were swept twice per year. The amount of street sweepings and catch basin sediment that was collected was documented by the DPW.	The town will continue its yearly maintenance of the roadways by cleaning the streets per the schedule that was noted in the Year 9 description until new parameters are established under the new stormwater permit under consideration by EPA. The amount of sediment and debris collected will be documented as was the case in every other year of this permit.
6-3	Investigate Town Owned BMP's for Retrofit Opportunities	Department of Public Works	Implement two retrofit projects (based on inspections conducted in BMP 5-2)	As noted in previous submittals, this BMP was completed during Permit Year 4 (ahead of the originally scheduled timeframe).	Ongoing Implemented Program The Town is always looking for opportunities and places to install retrofit projects and will continue this endeavor in the future. The Town is completed a Roadway and Drainage Improvements design project for Pine Street in Natick that will incorporate structural BMP's (such as deep sump catch basins, hoods, etc) as well as Green/L.I.D. infrastructure to be installed. It is important to note that on every new development, the Town is requiring developers to incorporate structural BMPs into their storm drainage designs. As a result of these improvements, local street flooding was eliminated and the quality of the drainage discharge for these areas was improved as a result of the BMP's used. Goal Completed /Ongoing Implemented Program

6-4	Municipal Employee Training	Conservation Agent	Continue town's current practices	During Year 11 of the permit, the town performed the required municipal employee training on two separate days (April 24 th and May 1 st). Training included: Hazard Communication, Spill Prevention Control and Countermeasures, Storm Water Management and "Right to Know". New hires are trained in these areas within their first 30 days of employment.	The training of personnel is important and the Town will continue to be progressive in training its personnel on these very important issues.
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Ongoing Implemented Program

6a. Additions

6-5	DPW – General Notice of Intent (GNOI)	Department of Public Works	File a NOI for Routine DPW Operations and Maintenance Activities	Even after its approval at the beginning of Year 5 of the permit and amendment in Year 8, the DPW has continued to work with the Conservation Commission to ensure that the goals of the GNOI are being met.	The DPW will continue to work with the Conservation Commission (through the Conservation Agent) to implement this General Notice of Intent and modify as is deemed necessary.
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Goal Completed

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 water bodies in Natick.

Part IV. Summary of Information Collected and Analyzed

There is no information or data that was collected during Permit Year 11 that is not included elsewhere in this report.

Part V. Program Outputs & Accomplishments (OPTIONAL)

(Since beginning of permit coverage unless specified otherwise by a **, which indicates response is for period covering May 1, 2013 through April 30, 2014)

Programmatic

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	N
Annual program budget/expenditures **	(\$)	80,000
Total program expenditures since beginning of permit coverage	(\$)	Unknown ^{Note 1}
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		General

Note 1: The annual stormwater program budget of \$80,000 covers only the costs for outside services. All other work performed was completed using Town personnel; equipment; and materials. These costs were not tracked.

Education, Involvement, and Training

Estimated number of property owners reached by education program(s)	(# or %)	Unknown
Stormwater management committee established	(y/n)	Y
Stream teams established or supported	(# or y/n)	Y
Shoreline clean-up participation or quantity of shoreline miles cleaned **	(y/n or mi.)	4
Shoreline cleaned since beginning of permit coverage	(mi.)	14
Household Hazardous Waste Collection Days		
▪ days sponsored ** (See Note A)	(#)	1
▪ community participation ** (See Note B)	(# or %)	Unknown
▪ material collected ** (See Note B)	(tons or gal)	Unknown
School curricula implemented	(y/n)	N

Note A: The 2014 Household Hazardous Waste Collection Day will be held on 05/10/14 (just after the end of the reporting cycle).

Note B: The April 2013 Collection Day occurred during the last reporting period, but after the Year 10 report was submitted so we weren't able to report on community participation. It yielded 190 cars worth of community participation.

Legal/Regulatory

Regulatory Mechanism Status (indicate with "X")	In Place Prior to Phase II	Reviewing Existing Authorities	Drafted	Draft in Review	Adopted
▪ 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	(%)	98
Estimated or actual number of outfalls	(#)	505
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	99
Mapping method(s)		
▪ Paper/Mylar	(%)	Yes
▪ CADD	(%)	Yes
▪ GIS	(%)	Yes
Outfalls inspected/screened **	(# or %)	0
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	446
Illicit discharges identified **	(#)	0
Illicit discharges identified (Since beginning of permit coverage)	(#)	0
Illicit connections removed **	(#); and (est. gpd)	0
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	0
% of population on sewer	(%)	87
% of population on septic systems	(%)	13

Construction

(Preferred Units)		Response
Number of construction starts (>1-acre) **	(#)	4
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 **	(#)	0

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	100
Site inspections (for proper BMP installation & operation) completed **	(# or %)	100
BMP maintenance required through covenants, escrow, deed restrictions, etc.	(y/n)	Y
Low-impact development (LID) practices permitted and encouraged	(y/n)	Y

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets) **	(times/yr)	Once/3 years
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	Once/3 years
Qty. of structures cleaned ** (See Note C)	(#)	1,355*
Qty. of storm drain cleaned **	(LF)	3,600
Qty. of screenings/debris removed from storm sewer infrastructure ** (See Note C)	(tons)	Unknown*
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	New Bedford

Basin Cleaning Costs

• Annual budget/expenditure (labor & equipment)**(See Note C)	(\$)	Unknown*
• Hourly or per basin contract rate ** (See Note C)	(\$ per basin)	Unknown*
• Disposal cost** (See Note C)	(\$)	Unknown*

Note C: The new 3 year Catch Basin Cleaning contract is presently being bid and the Year 1 cleaning (1,355 basins) should commence soon after the end of the Year 11 timeframe. We are hopeful that the prices received will be consistent with prior years pricing but with not knowing, we didn't want to make any assumptions on this report thus the reason for the Unknown status. We will include the updated information for this year's cleaning in the Year 12 report with the cleaning that is done during Year 12.

Cleaning Equipment			
• Clam shell truck(s) owned/leased	(#)		1
• Vacuum truck(s) owned/leased	(#)		2
• Vacuum trucks specified in contracts	(y/n)		N
• % Structures cleaned with clam shells **	(%)		90
• % Structures cleaned with vacor **	(%)		10
		(Preferred Units)	Response
Average frequency of street sweeping (non-commercial/non-arterial streets) **		(times/yr)	1
Average frequency of street sweeping (commercial/arterial or other critical streets) **		(times/yr)	2
Qty. of sand/debris collected by sweeping **		(tons)	1,680
Disposal of sweepings (landfill , POTW, compost, beneficial use, etc.) **		(location)	New Bedford
Annual Sweeping Costs			
• Annual budget/expenditure (labor & equipment)**	(\$)		No Assigned Budget
• Hourly or lane mile contract rate **	(\$/hr. or ln mi.)		Not Calculated
• Disposal cost**	(\$)		15,120
Sweeping Equipment			
• Rotary brush street sweepers owned/leased	(#)		2
• Vacuum street sweepers owned/leased	(#)		0
• Vacuum street sweepers specified in contracts	(y/n)		N
• % 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 %)		0
▪ Herbicides	(lbs. or %)		0 – Rarely Used
▪ Pesticides	(lbs. or %)		0 – Rarely Used
Integrated Pest Management (IPM) Practices Implemented		(y/n)	Y

(Preferred Units)		Response
Average Ratio of Anti-/De-Icing products used **		
(also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)		
	% NaCl	55%
	% CaCl ₂	5%
	% MgCl ₂	
	% CMA	
	% Kac	
	% KCl	
	% Sand	40%
Pre-wetting techniques utilized **	(y/n or %)	Y
Manual control spreaders used **	(y/n or %)	Y
Zero-velocity spreaders used **	(y/n or %)	N
Estimated net reduction or increase in typical year salt/chemical application rate**	(±lbs/lb mi. or %)	Approx 30% Decrease from last year
Estimated net reduction or increase in typical year sand application rate **	(±lbs/lb mi. or %)	Approx 5% Decrease from last year
% of salt/chemical pile(s) covered in storage shed(s)	(%)	100
Storage shed(s) in design or under construction	(y/n or #)	N
100% of salt/chemical pile(s) covered in storage shed(s) by May 2008	(y/n)	Y

Water Supply Protection

Storm water outfalls to public water supplies eliminated or relocated	# or y/n	N
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	N
• Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	N

Town of Natick Stormwater Management Plan
Revised Composite BMP Schedule - All Minimum Control Measures As of 5/1/14

BMP	Year										
	1	2	3	4	5	6	7	8	9	10	11
Minimum Control Measure 1 - Public Education and Outreach											
BMP 1-1 Web Site Modifications											
Add Links to Supply Watershed Information											
Add the New Hottline Photo Number (See Minimum Control Measure #2)											
BMP 1-2 Storm Water Flyer to Community Residents											
Distribute Flyer to 75% of Natick Residents, Compile and Consider "Survey" Results											
BMP 1-3 Storm Water Lesson Plans for Fifth Grade Students											
Develop and Distribute Lesson Plan for Grade 5 Level, Use Plan to Teach One or More Grade 5 Classes											
BMP 1-4 Storm Water Flyer to Community Businesses											
Distribute Flyer to a Minimum of 50% of Natick Businesses, Storm Water Logo Displayed by Half of the Businesses Receiving the Flyer											
BMP 1-5 Storm Water Media Campaign											
Deliver Media Information Packet to the Local Media, Issue 4 Press Releases to Local Media and Major Media Outlets											
BMP 1-6 Storm Water Informercial											
Show Storm Water Informercial on Public Access TV on regular basis and attach to the Stormwater Management Page of the Natick's Webpage											
Minimum Control Measure 2 - Public Involvement and Participation											
BMP 2-1 Storm Water Committee											
Establish the Storm Water Committee											
Hold Quarterly Meetings at a Minimum											
BMP 2-2 Community Hotline											
Establish a Hotline											
Residents Use Hotline and Photo Calls Indicating Suspicious Activities Are Investigated											
BMP 2-3 Storm Water Travelling Display											
Storm Water Display Circulates Around Natick for At Least 3 Months											
Display is Posted at a Minimum of 3 Different Public Locations											
Posted in Public Places or at Storm Water Events, Purchased Additional Display.											
BMP 2-4 Storm Water Poster Contest for Fifth Grade Students											
Poster Contest Held, Entries Received and Judged											
BMP 2-5 Storm Water Drive Marketing Kits											
Install Labels on Approximately 200 Catch Basins											
BMP 2-6 Hold a Local Storm Water Summit											
Hold Community Storm Water Summit and Advertising to Encourage Community Attendance											
BMP 2-7 Stormwater Education Postcards to Natick Residents											
Various Stormwater themed postcards will be sent to all Natick Residents educating them on Stormwater issues											
Minimum Control Measure 3 - Illicit Discharge Detection and Elimination											
BMP 3-1 Illicit Discharge Bylaw											
Develop Illicit Discharge Bylaw and Present it to the Town Meeting											
BMP 3-2 Inspect and Sample Town Discharges											
Inspect All Town Discharges											
Identify Outfalls That Indicate Potential Sewerage or Illicit Discharges											
If Schedule and Budget Allows Conduct Follow-Up Testing & Inspection at Discharges With The Potential of Illicit Discharges and/or Sewage Contamination											
BMP 3-3 System Mapping & Evaluation											
Complete System Map and Structure and Pipe Databases and Coverages											
Locate All Known Discharges with GPS											
Conduct Hydraulic Modeling of Flood Prone Areas											
Add Sails and Land Use to Base Mapping											
Map Septic System and Provide Pumping History											
BMP 3-4 Illegal Dumping Education											
Actions Implemented by the SuAsCo Watershed Community Council											
BMP 3-5 Septic System Controls											
Mandate Septic System Maintenance											
Create a Database to Track Septic System Maintenance Activities											
Update Database Based on New Septic System Information											
Minimum Control Measure 4 - Construction Site Storm Water Runoff Control											
BMP 4-1 Soil and Erosion Control Bylaw											
Develop a Soil and Erosion Control Bylaw and Present it to the Town Meeting											
BMP 4-2 Construction Inspections											
Town Representative to Inspect Construction Activities on Weekly Basis											
Minimum Control Measure 5 - Post Construction Site Controls											
BMP 5-1 Bylaw for Post Construction Runoff											
Develop a Bylaw to Limit Runoff From Post Construction Areas and Present it to the Town Meeting											
BMP 5-2 BMP Inspection and Maintenance											
Inspect All Town Maintained Structural BMPs Over A Two Year Period											
Document Any Problems With BMP And Investigate Possible Modifications											
Minimum Control Measure 6 - Pollution Prevention and Good Housekeeping											
BMP 6-1 Catch Basin Cleaning											
Clean 1/3 of All Catch Basins Per Year											
BMP 6-2 Street Cleaning											
Sweep All Town Owned Streets & Parking Lots Once Per Year											
Sweep Downtown Areas Once Per Month (April Through November)											
Sweep Major Streets Twice Per Year											
Sweep Town Parking Lots Twice Per Year											
Document Amount of Collected Debris (Street Sweepings & Catch Basin Cleanings)											
BUD for Street Sweeping Material Collected											
BMP 6-3 Investigate Town Owned BMPs for Retrofit Opportunities											
Implement Two Retrofit Projects Based on Inspections Conducted in BMP 5-2											
BMP 6-4 Municipal Employee Training											
Continue Town's Current Practices											
BMP 6-5 DPW - General Notice of Intent											
Filed an NOI for Routine DPW Operations and Maintenance Activities											
Submit Annual Report to Conservation Commission detailing status of GNOI activities											

Completed Stated Goal