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**Municipality/Organization:** Town of Southborough

**EPA NPDES Permit Number:** MAR041160

**MassDEP Transmittal Number:** W-040764

**Annual Report Number & Reporting Period:** Year 8: April 1, 2010 – March 31, 2011

## NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2011)

### Part I. General Information

**Contact Person:** John Woodsmall, P.E. **Title:** Town Engineer

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**Mailing Address:** 147 Cordaville Road, Southborough, MA 01772

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:** William J. Boland

**Title:** Chairman, Board of Selectmen

**Date:** April 26, 2011

**Part II. Self-Assessment**

N/A

**Part III. Summary of Minimum Control Measures**

**1. Public Education and Outreach**

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)</b>	<b>Planned Activities – Future Years</b>
1.1 Revised	Storm Water Flyer to Community Residents, Watershed survey	SuAsCo Watershed Community Council, Storm Water Committee	Flyer distributed to 75% residences, survey distributed, results received, and compiled. Results published	Takes completed during Year 2. The Town continues to provide public outreach programs.	Task Completed.
1.2 Revised	Storm Water Lesson Plan for Fifth Grade Students	SuAsCo Watershed Community Council, Storm Water Committee	Lesson plan developed, distributed, taught in at least one (1) Grade 5 class.	SuAsCo distributed lesson plan to schools.	Task Completed.
1.3 Revised	Storm Water Flyer to Community Business “Green Neighbor” Logo	SuAsCo Watershed Community Council, Storm Water Committee	Flyer developed, distributed to at least 50% local businesses. Logo displayed by at least 50% of businesses receiving flyer.	Flyers were previously provided and displayed at events in previous years. The Town will continue to partner with SuAsCo Watershed Council to distribute materials.	If SuAsCo provides additional business targeted mailings, the Town will distribute them. Other non-business specific mailings will be sent out in future water and tax bills to all property owners.
1.4 Revised	Storm Water Media Campaign	SuAsCo Watershed Community Council, Storm Water Committee	Media package developed, distributed to local media. Four (4) press releases developed and distributed.	Stormwater/Rain Bain Barrel/Compost reminders sent out in April, 2010 water and tax bills. Continued to display bookmarks at the Library; displayed presentation and self-test on the Town’s website; displayed “Stormwater Matters” banner at Transfer Station; displayed stormwater poster at various public events.	Continue to display bookmarks, presentation, self-test, banner, and posters.

1.5	Storm Water Video	SuAsCo Watershed Community Council, Storm Water Committee	Storm water video developed, shown at least one public meeting/hearing, provided to local cable station.	Completed in Year 1 when the Town advertised that the Weather Channel would be showing "After the Storm."	Task completed.
Revised					
1.6	Consider posting signs at publicly accessible storm water outfalls	DPW	Map outfalls, signs developed, signs installed. Consider using volunteers where possible.	No additional outfalls were signed from what was completed in Year 2. However, various wetland layers were added to all sections of the Town's online, publicly accessible GIS website. This allows for increased understanding of locations of wetlands. Layers continued to be provided on the public GIS.	Continue to provide the wetland layers on the GIS website.
Revised					
1.7	Develop Storm Water Awareness Package	Storm Water Committee, Selectmen's Office	Materials to be included in package compiled, information distributed (transfer station stickers), number of packages distributed.	A storm water display was set up at Family Fun Day on 6/11/06. Flyers were also distributed at this event.  Continued to distribute "new comers" flyer, which includes information about the water and transfer station usage.	Continue to support distribution of the New Comer Flyer to new residents.
Revised					
1.8	Meet with local school officials annually to identify past activities and upcoming curriculum	Storm Water Committee, School Department	School Department official contacted, meeting conducted, Each school has designated contact.	The School Department continues to use the curriculum provided by the SuAsCo. The DPW provided laminated maps, field-maps and stencil kits to the Mary E. Finn School Council in May, 2008, to support the storm water curriculum developed by them.	The Town plans to continue to work with school groups as the opportunity may arise to expand the storm water curriculum.
Revised					
1.9	Develop Storm Drain Stenciling Program	DPW, Storm Water Committee	Program developed, volunteers organized, basins stenciled.	Stenciling was held in May, 2008 at the Mary E. Finn School as part of the new storm water curriculum. Sudbury River Watershed	Continue the Stenciling Program, as opportunities arise. SRWO is no longer

Revised					Organization (SRWO) performed stenciling demonstration at Riverfest 2008 and 2009. Additionally, the Conservation Commission applied to the Knox Trail Council of the Boy Scouts of America in response to the Council's request for environmental related projects for 2010. However, application was not accepted.	active, and cannot be partnered with.
1.10	Make the Storm Water Management Plan available to the general public.	Storm Water Committee	Make the plan available at the Town Hall, Library, and in schools as an environmental resource. Consider putting the plan on the website.		Task Completed Year 1. The Storm Water Management Plan and Year 7 Annual Report were also posted on the Town's website.	Task Completed. Post the Year 8 Annual Report on the Town's website.
Revised						
1.11	Consider developing a Storm Water Management web page	DPW, Storm Water Committee	Consider developing a web page identifying the Town's req's and activities. Consider links to other websites such as SuAsCo, MA DEP, and USEPA. Web page developed		The Town continues to post storm water education information on the Town's webpage. A section on the DPW web page has been created dedicated to Stormwater Management information.	Task completed Year 1. Continue to maintain and upgrade web site as needed.
Revised						

### 1a. Additions

1.12	Provide rain barrels at a reduced cost to interested residents	DPW, Storm Water Committee, MA DEP	Number of barrels sold		A number of barrels and composters were sold at discounted rates in conjunction with the 2010 Earth Day Clean-up. Final numbers have not been provided by the sales company at this time.	Task completed.
Revised						
1.13	Support Green Schools and Trotter Middle School's Environmental Fair	DPW, Recycling Committee	Participate at the Fair		Recycling Committee participated at the Fair on May 22, 2010 and represented the DPW. Recycling handbags and thermos cups were given away. The Stormwater Poster Board and Stormwater Self-Tests were displayed.	If the Fair is held again, provide support and participate again.
Revised						

1.14 Revised	Provide bill insert with information about DPW operations.	DPW	Provide inserts to be included with spring quarter tax bills.	A bill insert with information on stormwater, street trees, rain barrels and composters, and the Spring Clean-Up was provided in the April, 2010 quarterly tax bill.	Provide stormwater informational postcards with one billing in Year 9.
1.15 Revised	Display "Think Green" PowerPoint presentation on Southborough Community Cable TV	DPW	The presentation is displayed on the Southborough Community Cable TV station at least once.	The community cable TV station has been provided the presentation, which was developed by the SuAsCo council. The station has indicated that they will display it on their channel. The presentation is focused on techniques homeowners can use to keep stormwater clean, and includes a self-test.	The Southborough Community Cable TV will display the presentation as their schedule allows.
1.16 Revised	Inform property owners of changes to FEMA FIRMs	DPW	All property owners within a flood zone, as determined by the new January 4, 2011 FEMA FIRM, will be notified by letter of the changes to the flood zone.	A letter dated March 24, 2011 was sent to all owners of property identified as being within a flood zone. New FEMA FIRMs are displayed on Town's website.	Task completed. Continue to answer property owner's questions regarding flood zones.

## 2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future Years
2.1 Revised	Local Storm Water Committee to assist in developing and implementing plan	Town Administrator, DPW, Cons. Comm., SW Committee	Committee established, meetings conducted, plan developed, activities conducted	The Committee did not meet in Year 8. Committee was provided the Year 7 Annual Report for review, prior to presentation to the Board of Selectmen.	Members of the Committee will review the Year 8 Annual Report prior to submission to the Board of Selectmen, and will attempt to be at the meeting. Evaluate composition of committee.

2.2	Storm Water Plan Annual Meeting	Storm Water Committee	Annual meetings planned, noticed, conducted, minutes prepared. # of attendees. Comments received, considered (Plan Development, SWMPP and Annual Report)	Meeting held with Board of Selectmen on April 27, 2010 to present and discuss the Year 7 Annual Report.	Meet with the Board of Selectmen to present and discuss the Year 8 Annual Report.
Revised					
2.3	Storm Water Traveling Display	SuAsCo Council, Storm Water Committee	Display developed, display in 3 locations in 1 <sup>st</sup> permit year. Opportunities ID'd for future displays.	Displayed poster at Spring 2010 Annual Town Meeting, at Spring Clean-Up on May 1, and at Environmental Fair at Trotter School on May 22.	Display poster at Spring 2011 Annual Town Meeting, and at other events as opportunities arise.
Revised					
2.4	Storm Water Photo Contest for High School Students	SuAsCo Council, Storm Water Committee	Contest announced and held, photos received, judged, winners announced, displayed (consider for future graphic)	An open space photo contest was conducted for the Southborough Open Land Foundation in previous permit years.	Task Completed.
Revised					
2.5	Storm Water Summit Special Event	SuAsCo Council, Storm Water Committee	Meet with SuAsCo Council to determine community specific or multi-community event. Event noticed, conducted, minutes recorded. Number of participants.	SuAsCo has been identified as the responsible party for the procedures for this task. No summit was held in Year 8.	Continue to remain in contact with SuAsCo Council in the event that this event is held.
Revised					
2.6	SuAsCo Storm Water Super Summit	SuAsCo Council	Super Summit announced, conducted, municipal participation.	SuAsCo has been identified as the responsible party for the procedures for this task. No summit was held in Year 8.	Continue to remain in contact with SuAsCo Council in the event that this event is held.
Revised					

2.7	Evaluation and Assessment of Public Awareness of Storm Water	SuAsCo Council, Storm Water Committee	Storm Water Self Test developed, distributed to a minimum of 75% of residences. Surveys received, results analyzed community specific and watershed wide, results published.	Task completed in previous permit year.	Task Completed.
Revised					
2.8	Develop Storm Drain Stenciling Program	DPW, Storm Water Committee	Program developed, volunteers organized, basins stenciled.	See 1.9.	See 1.9. Obtain stencil refill packets from SuAsCo Council.
Revised					
2.9	Coordinate with Sudbury River Watershed Organization (SWRO, formerly SWaMP), and others to consider results of water quality monitoring	DPW, Storm Water Committee	Meeting conducted, activities scheduled, conducted. Results reviewed, potential actions identified, implemented.	The Upper Sudbury River monitoring study by DCR/USGS has ended (25 Southborough volunteers had participated in that study). SWRO continued monitoring for a time, but is no longer an active group.	The SRWO is no longer an active group.
Revised					
2.10	Identify and coordinate with potential volunteers, to include "neighborhood watch" groups, Boy and Girl Scout organizations, school groups/clubs, local and regional environmental advocates.	DPW, Storm Water Committee	Groups identified. Contact established, meetings conducted. Activities scheduled, conducted. Number of volunteers participating.	The DPW continues to sponsor and support the Annual Earth Day Cleanup each May. On May 1, 2010, 54 groups participated in the clean-up, including the local Boy Scouts, and local businesses acted as sponsors. Flyers and signup sheets are attached.  The Southborough Open Land Foundation participated in the annual Sudbury Riverfest event, June 12, 2010.	The Earth Day clean-up and Riverfest will continue to be held and supported.
Revised					



2.11	Continue to sponsor, support cleanup projects	DPW, Storm Water Committee	Groups identified. Contact established, meetings conducted. Activities scheduled, conducted. Number of events sponsored/supported, amount of material collected, number of volunteers participating.	The Town continues to sponsor and provide material for cleanup events. The Earth Day cleanup was held on May 1, 2010 (see attached flyer) and involved 54 groups. The Town also held a Household Hazard Waste (HHW) day at the DPW facilities in October.	Continue to support the Earth Day Clean-up and HHW day.
Revised					

### 2a. Additions

2.12	Sudbury Reservoir Earth Day Clean-up	Massachusetts Department of Conservation & Recreation (DCR)	Number of volunteers participating, amount of material collected	35 volunteers picked up 45 bags of trash, 4 tires, and a TV along the road edges and shoreline of the Sudbury Reservoir in Southborough and Marlborough on April 24, 2010.	DCR will hold a Park Serve day on April 16, 2011.
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### 3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future Years
3.1	Complete implementation of GIS to include Storm Sewer System	DPW	Mapping completed, consider integration of asset management system.	Task completed in Year 2.	Task completed in Year 2.
Revised					

3.2	Verify outfall locations. Conduct outfall survey. Investigate suspected illicit discharges	DPW	Number of outfalls located. Survey of outfalls completed. Investigations identified, prioritized, conducted. Source identified and scheduled for removal. Enforcement actions taken or referred to other entity such as police, Board of Health, MA DEP, or USEPA.	Task completed in Year 2. The Town completed the dry weather survey in Year 5. Further investigations occurred in October, 2009. 2 outfalls were ruled as having illicit discharges, as they were running dry 4 days after last precipitation event. Other outfalls were running, and samples were taken again. Samples were inconclusive. Spring samples were not taken due to excessive rainfall.	Further dry weather sampling will be done in spring of 2011, to further investigate outfalls at Constitution Drive, Cherry Street, and Ted Lane, to determine if flows are ground water or not.
Revised					
3.3	Adopt by-law to effectively prohibit illicit discharges.	DPW, Storm Water Committee	Review of model ordinance to ensure compliance with existing laws and regulations. Draft language and legal review. Conduct informational meetings as necessary. Submit to warrant, schedule for vote at Town Meeting. Article voted, accepted.	Regulations drafted, presented and adopted at Town Meeting in April, 2006.	Task completed.
Revised					
3.4	Inform public employees, businesses, and the general public of hazards associated with illegal discharges and improper disposal of waste.	DPW, Storm Water Committee, SuAsCo	Ensure that educational materials developed include illicit discharge awareness. Materials developed and distributed.	Many of the above mentioned activities inform the public about these hazards.	Continue efforts to inform the public in future years.
Revised					

**3a. Additions**


#### 4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future Years
4.1	Adopt by-law to require erosion and sediment controls.	Town Planner, DPW, Conservation Commission, and Storm Water Committee	Review of model ordinance to ensure compliance with existing laws and regulations. Draft language and legal review. Conduct informational meetings as necessary. Submit to warrant, schedule for vote at Town Meeting. Article voted, accepted.	Regulations drafted, presented and adopted at Town Meeting in April, 2006. The by-law is managed by the Conservation Commission and the ordinance has been implemented. The Conservation Commission issues Storm Water permits for sites that meet various criteria, including all sites greater than one acre. The Town Engineer reviews all Storm Water permits and provides recommendations to the Conservation Commission. Discussions were had about streamlining permit process, and moving stormwater permit to DPW jurisdiction. Decision was made to leave permit with Conservation Commission, but to remove it from zoning code, and add it to the Wetlands Bylaw. This year, the Zoning Bylaw continued to be studied.	Task Completed. As part of the updating of the Town's Zoning By-Laws, move the Stormwater Permit process out of Zoning Bylaw and into Wetlands Bylaw process.
Revised				Now conducted as normal site plan review. The Conservation Commission is the assigned party. Online inspection form has been created in April, 2011.	Task Completed. Begin the use of the online inspection tracking form.
4.2	Ensure that construction site operators disturbing one acre or more implement erosion and sediment controls.	Building Officials, Town Planner, DPW, Storm Water Committee, Conservation Commission	Inspection schedule established. Inspections conducted. Deficiencies noted and corrected.		
Revised					

<p>4.3</p> <p>Revised</p>	<p>Ensure construction site operators disturbing one acre or more control construction wastes, and other wastes that may cause adverse impacts to water quality during construction.</p>	<p>Building Officials, Town Planner, DPW, Storm Water Committee</p>	<p>Ensure proposed by-law includes language to control construction wastes. Inspections conducted. Deficiencies noted and corrected.</p>	<p>Now conducted as part of normal site plan review. The Conservation Commission is the responsible party for the Storm Water by-law.</p>	<p>Task Completed.</p>
<p>4.4</p> <p>Revised</p>	<p>Develop procedures for site plan review which incorporate consideration of potential water quality impacts.</p>	<p>Building Officials, Conservation Commission, Storm Water Committee</p>	<p>Ensure proposed by-law, regulations, or guidance includes language for site plan review process. Consider providing guidance documents or other outreach materials for developers.</p>	<p>The Conservation Commission reviews all projects that trigger Major Site Plan review, that disturb areas of slopes greater than 15% in excess of 15, 000 sf., and that disturb greater than 1 acre. All storm water permit applications are reviewed by the Town Engineer and in special cases hired consultants.</p>	<p>Task Completed.</p>
<p>4.5</p> <p>Revised</p>	<p>Develop procedures for site inspection and enforcement of control measures.</p>	<p>Building Officials, Town Planner, DPW, Storm Water Committee</p>	<p>Inspection schedule established. Inspections conducted. Deficiencies noted and corrected.</p>	<p>Each individual department is responsible for inspections for their respective permits. The Conservation Commission hired a wetlands scientist to conduct inspections of approved permits.</p>	<p>See 4.2. The inspections are conducted by the wetlands scientist.</p>
<p>4.6</p>	<p>Develop procedures for receipt and consideration of information submitted by the public.</p>	<p>Building Officials, Town Planner, DPW, Storm Water Committee</p>	<p>Develop a form for the public to provide information. Designate municipal official responsible for receiving information, identifying responsible official to investigate, and ensure appropriate response (deficiencies noted and corrected). Consider making form available on the Town's website.</p>	<p>The public is allowed to comment on all projects subject to hearings by Planning Board, ZBA, and Conservation Commission. The DPW has created an online work order tracking system which allows for handling of complaints.</p> <p>In the period of March '10 to</p>	<p>Task Completed.</p>

Revised				March '11, 2 Stormwater Management permits were applied for and approved. Three enforcement actions were undertaken by the Conservation Commission under the Wetland Protections Act.	
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**4a. Additions**


**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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future Years
5.1	Identify structural and non-structural best management practices (BMPs) appropriate for the community	Town Planner, DPW, Storm Water Committee	Incorporate by reference state specific standards (i.e. acceptable practices under Wetlands Protection Act). Identify standard practices which are not acceptable in the community. Consider developing guidance documents or other outreach materials for developers outlining BMP selection as well as general guidance on proper operation and maintenance.	LID by-law and Stormwater by-law were adopted in April, 2006. Permitting process discussed as part of Zoning By-Law review. It is anticipated that Stormwater will be removed from Zoning Code and incorporated into Local Wetland Bylaw, and the LID bylaw will be incorporated fully into zoning/planning bylaw and regulations.	Task completed. Continue process of preparing Zoning By-law update, under the direction of the Town Planner.

Revised	Adopt by-law to require post-construction runoff controls.	Town Planner, DPW, Conservation Commission, and Storm Water Committee	Review of model ordinance to ensure compliance with existing laws and regulations. Draft language and legal review. Conduct informational meetings as necessary. Submit to warrant, schedule for vote at Town Meeting. Article voted, accepted.	Regulations drafted, presented and adopted at April, 2006 Town Meeting. The Conservation Commission has implemented a Storm Water Permit for sites over an acre, requiring Major Site Plan Approval, and/or disturbing areas of greater than 15,000 sf with slopes of 15% or greater. Also, see 5.1 for info about coordination of permitting process.	Task completed. Ease of permitting process being examined as part of Town's Zoning By-Law review which will continue in 2011, see 5.1.
Revised	5.2				
Revised	5.3	Town Planner, DPW, Conservation Commission, Board of Health, and Storm Water Committee	Ensure proposed by-law or regulations, language and enforceable mechanism for long term operation and maintenance of post-construction runoff controls.	Both the LID and Stormwater Management Permits require long term Operations and Maintenance plans to be submitted, reviewed by Town Engineer and/or outside consultants, and to be approved by either the Conservation Commission or the Planning Board.	Task completed as part of Stormwater and LID permits implementation.
Revised	5.4	Building Officials, Town Planner, Conservation Commission, DPW, Storm Water Committee	Ensure the by-law developed in Task 5.2 includes language providing DPW authority to ensure proper operation and maintenance of all BMPs tributary to the storm sewer system. Identify structures tributary to the storm sewer system and determine the need for inspection.	This responsibility has been transferred to the Conservation Commission and the Town Planner. They are responsible for implementing the new ordinances for LID and Stormwater Management, which contains specific operation and maintenance requirements. The Conservation Commission has	Efforts to ensure long term operation will be continued.

Revised				hired a wetland scientist to assist in the examination of BMPs. Private systems at Town Center Shopping Center and Carriage Hill Condominium were maintained based upon contact from the DPW.
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**5a. Additions**

5.5	Adopt revised Wetland and Flood plain Zoning Overlay District	Planning Board, Conservation Commission	Adopt the revised zoning district at the Spring 2011 Annual Town Meeting to be held in April, 2011.	Revised language for the overlay district was prepared in consultation with the MA Department of Conservation and Recreation. The district is being revised to account for changes to the FEMA FIRMs, which went into effect on January 4, 2011. A public hearing was held by the Planning Board on March 21, 2011, and was continued to April 4, 2011.	The Planning Board will hold a second public hearing on April 4, 2011, and Town Meeting will vote on the changes at the Town Meeting scheduled for April 11 and 12, 2011.
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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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future Years

6.1	Establish formal public street and parking lot sweeping program	DPW, Storm Water Committee	<p>Continue existing program. Consider incorporating routes and schedule as a data layer in GIS. Maintain records of curbs-miles swept, approximate volume of material collected. Note areas that accumulate more sediment and consider more frequent sweeping or further investigation of pollution source.</p>	<p>Road in the Town are swept at least once per year, primarily in the Spring. Logs were kept of quantities generated during cleaning and sweeping. New report logs and clipboards were provided to equipment operators.</p>	Continue to sweep roads at least once per year and maintain records.
Revised					
6.2	Consider including pollution prevention training for equipment operators	DPW, Storm Water Committee	<p>Consider including pollution prevention training for equipment operators. Evaluate the existing level of awareness of equipment operators. Consider enhancing existing training (Health and Safety) with storm water awareness training.</p>	<p>Spill kit has been provided at the maintenance facility. Training was conducted in Year 1.</p>	<p>A refresher training session will be considered for fall of 2011.</p>
Revised					
6.3	Establish formal storm sewer system inspection and maintenance program	DPW, Storm Water Committee	<p>Continue existing program. Consider an asset management program for Town's GIS. Identify the system and all public structures tributary to the system. Conduct a catch basin sediment accumulation pilot program. Establish a routine inspection and maintenance program. Maintain records of inspections conducted, # of basins cleaned, volume collected. Note areas that accumulate more sediment and consider more frequent inspection, cleaning or further investigation.</p>	<p>All basins are cleaned at least once every two years. Basins in high sediment areas are cleaned annually. Basins were cleaned in Spring and Summer 2010. The catch basin cleaning truck became inoperable, and the full amount of basin cleaning could not be accomplished. 13 basins were repaired or rebuilt. The DPW addressed existing stormwater issues on Sears Road and Woodland Road.</p>	<p>Maintain records for all catch basin cleanings and repairs. Develop, bid, and award outside contract for catch basin cleaning. Continue use of online work order forms.</p>



Revised					<p>An online form based DPW work order tracking system has been implemented as of January, 2009.</p> <p>The DPW and Building Inspector worked with Town Counsel to continue enforcement of sump pump discharge causing a public safety nuisance at 126 Marlborough Road.</p>	
6.4	Identify, as necessary, structural modifications to the system in conjunction with future roadway improvements.	DPW	Evaluate system improvement needs in conjunction with planned roadway improvements.		<p>Paving was performed in 2010, and several drainage structures were upgraded in conjunction with the paving operations.</p> <p>Continue to upgrade drainage structures as necessary with roadway projects.</p>	
Revised						
6.5	Provide spill response training to mechanics and equipment operators	DPW	Develop training program. Identify staff for training. Conduct initial and annual training refresher training. Maintain training roster for each session, and include documentation in personnel files.		<p>New staff are provided a briefing by departing staff.</p> <p>A refresher training session will be considered for all DPW staff in fall of 2011.</p>	
Revised						
6.6	Post spill prevention/emergency action plans prominently in areas where hazardous materials are used and stored.	DPW	Develop posters outlining spill prevention/emergency response plans. Post prominently in the garage.		<p>Spill cleanup materials are present at the maintenance facilities. MSDS sheets are available in the maintenance garage.</p> <p>As part of refresher training, the need for additional posters will be evaluated and the response plans will be developed and posted.</p>	
Revised						
6.7	Conduct annual inspection of maintenance facilities.	DPW, School Department	Develop Checklist. Conduct inspections. Record and correct deficiencies.		<p>DPW staff perform informal inspections regularly, which includes formal logged inspections of the waste oil and gasoline systems which are performed on a weekly basis.</p> <p>Continue use of waste oil inspections and logs.</p>	
Revised						

6.8	Publicize and support Household Hazardous Waste (HHW) Collection events.	DPW, Health Department	Coordinate with Health Department to publicize and support HHW Collection events. Record the number of attendees, volunteers. Record the types and amount of material collected.	HHW event (October, 2010) supported and collected materials tracked.	Continue with supporting annual HHW collection event.
Revised					

**6a. Additions**

6.9	Install formalized drainage system at DPW Yard	DPW	Drainage system installed	A formal drainage system was installed as part of the paving of the rear area of the DPW yard. Structures installed include deep sump catch basins, 1,500-gallon oil/grit separator, sediment forebay and an infiltration basin.	Work Completed.
6.10	Upgrade drainage system at Transfer Station Recycling Area	DPW	Install additional drainage pipe and outlets	Preliminary design prepared.	Complete final drainage design and install the additional pipe and outlets.
Revised					

**7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) <<not applicable>>**

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Future Years
Revised					

Revised				
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**7a. Additions**


**7b. WLA Assessment**

N/A

**Part IV. Summary of Information Collected and Analyzed**

See attached.

**Part V. Program Outputs & Accomplishments (OPTIONAL)**

(Since beginning of permit coverage unless specified otherwise by a \*\*, which indicates response is for period covering April 1, 2010 through March 31, 2011)

**Programmatic**

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

**Education, Involvement, and Training**

Estimated number of property owners reached by education program(s)	(# or %)	100%
Stormwater management committee established	(y/n)	Yes
Stream teams established or supported	(# or y/n)	Yes

Shoreline clean-up participation or quantity of shoreline miles cleaned **	(y/n or mi.)	Yes
Shoreline cleaned since beginning of permit coverage	(mi.)	
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	1
▪ community participation **	(# or %)	
▪ material collected **	(tons or gal)	
School curricula implemented	(y/n)	Yes
Stormwater Seminars attended by DPW Staff	(# of Seminars)[# of staff]	(2), (1)

**Legal/Regulatory**

	In Place Prior to Phase II	Reviewing Existing Authorities	Drafted	Draft in Review	Adopted
<b>Regulatory Mechanism Status (indicate with "X")</b>					
▪ Illicit Discharge Detection & Elimination	Partial				X
▪ Erosion & Sediment Control	Partial				X
▪ Post-Development Stormwater Management	Partial				X
<b>Accompanying Regulation Status (indicate with "X")</b>					
▪ Illicit Discharge Detection & Elimination					X
▪ Erosion & Sediment Control					X
▪ Post-Development Stormwater Management					X

**Mapping and Illicit Discharges**

Outfall mapping complete	(Preferred Units)	Response
	(%)	100

Estimated or actual number of outfalls	(#)	188
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	50 (100% of outfalls mapped)
Mapping method(s)		
▪ Paper/Mylar	(%)	N/A
▪ CADD	(%)	N/A
▪ GIS	(%)	100
Outfalls inspected/screened **	(# or %)	0 outfalls
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	100 %
Possible illicit discharges identified **	(#)	1 identified
Possible illicit discharges identified {require further investigation} (Since beginning of permit coverage)	(#)	{3} (0)
Illicit connections removed **	(# ); and (est. gpd)	0
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	1
% of population on sewer	(%)	0
% of population on septic systems	(%)	100
Septic system inspections	(#)	105 (87 Passed, 13 Conditional Pass, 5 Failures)
New septic systems installed	(#)	32 installed, all residential.

### Construction

	(Preferred Units)	Response
Number of construction starts (>1-acre) **	(#)	4
Number of continuing construction (>1-acre)**	(#)	2
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)	100

Tickets/Stop work orders issued **	(# or %)	1	Administrative Enforcement Hearing for SMP at 28-32 Newton Street.
Fines collected **	(# and \$)	0	
Complaints/concerns received from public **	(#)	0	
Building permits opened (all construction projects requiring excavation)	(#)	158	

**Post-Development Stormwater Management**

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	100	
Estimated volume of stormwater recharged	(gpy)	Unknown	
New subdivision streets with completed inspections	(y#)	2, William Colleary Lane and Metcalf Lane.	
Low-impact development (LID) Permits Issued	(#)	2	
Stormwater Management Permits Issued	(#)	2	
Private BMP Maintenance Issues Addressed by Private Owners	(#)	2 (Town Center & Carriage Hill)	

**Operations and Maintenance**

Average frequency of catch basin cleaning (non-commercial/non-arterial streets) **	(times/yr)	.5/ year	
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	.5/ year	
Qty of structures cleaned/repaired **	(#)	Approx. 200/16	

Qty. of storm drain cleaned/inspected **	(%, LF or mi.)	0
Qty. of screenings/debris removed from storm sewer infrastructure **	(cubic yards)	-
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Recycled-DPW

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	
• Hourly or per basin contract rate **	(\$/hr or \$ per basin)	
• Disposal cost**	(\$)	
Cleaning Equipment		
• Clam shell truck(s) owned/leased	(#)	1 owned
• Vacuum truck(s) owned/leased	(#)	
• Vacuum trucks specified in contracts	(y/n)	
• % Structures cleaned with clam shells **	(%)	100
• % Structures cleaned with vector **	(%)	

(Preferred Units) Response		
Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	1/ year
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	1/ year
Qty. of sand/debris collected by sweeping **	(cubic yards)	330
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Recycled-DPW
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	
• Hourly or lane mile contract rate **	(\$/hr. or ln mi.)	
• Disposal cost**	(\$)	N/A
Sweeping Equipment		

<ul style="list-style-type: none"> <li>Rotary brush street sweepers owned/leased</li> </ul>	(#)	1 sweeper owned, 1 main broom & 4 gutter brooms bought
<ul style="list-style-type: none"> <li>Vacuum street sweepers owned/leased</li> </ul>	(#)	0
<ul style="list-style-type: none"> <li>Vacuum street sweepers specified in contracts</li> </ul>	(y/n)	No
<ul style="list-style-type: none"> <li>% Roads swept with rotary brush sweepers **</li> </ul>	%	100
<ul style="list-style-type: none"> <li>% Roads swept with vacuum sweepers **</li> </ul>	%	0
Material collected at Transfer Station for proper disposal or recycling (Residents)		
<ul style="list-style-type: none"> <li>Newspaper</li> </ul>	(tons)	335.53
<ul style="list-style-type: none"> <li>Yard Waste collected at Transfer Station</li> </ul>	(tons)	308.90
<ul style="list-style-type: none"> <li>Commingled material for recycling</li> </ul>	(tons)	230.20
<ul style="list-style-type: none"> <li>White Goods and Scrap Metal</li> </ul>	(tons)	162.28
<ul style="list-style-type: none"> <li>Cathode ray tubes</li> </ul>	(tons)	0.00
<ul style="list-style-type: none"> <li>Corrugated cardboard</li> </ul>	(tons)	175.21
Municipal Hazardous Waste to proper disposal		
<ul style="list-style-type: none"> <li>Part washer fluid</li> </ul>	(# of times fluid disposed of and replaced)	Twice per year
<ul style="list-style-type: none"> <li>Waste oil (burned in permitted waste oil burner of gas powered unit heaters in garage storage bay)</li> </ul>	(gallons in '09-'10 heating season)	440

Reduction (since beginning of permit coverage) in application on public land of:		
("N/A" = never used; "100%" = elimination)		
<ul style="list-style-type: none"> <li>Fertilizers</li> </ul>	(lbs. or %)	Unknown
<ul style="list-style-type: none"> <li>Herbicides</li> </ul>	(lbs. or %)	Unknown



<ul style="list-style-type: none"> <li>▪ Pesticides</li> </ul>	(lbs. or %)	Unknown
Integrated Pest Management (IPM) Practices Implemented	(y/n)	Yes

	(Preferred Units)	Response
Average Ratio of Anti-/De-Icing products used **	% NaCl % CaCl <sub>2</sub> % MgCl <sub>2</sub> % CMA % Kac % KCl % Sand	50% NaCl      50% Sand
(also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)		
Pre-wetting techniques utilized **	(y/n or %)	No
Manual control spreaders used **	(y/n or %)	Yes
Zero-velocity spreaders used **	(y/n or %)	Yes
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/ln mi. or %)	Unknown
Estimated net reduction or increase in typical year sand application rate **	(±lbs/ln mi. or %)	Unknown
% of salt/chemical pile(s) covered in storage shed(s)	(%)	100
Storage shed(s) in design or under construction	(y/n or #)	N/A

**Water Supply Protection**

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



## STORMWATER COMMUNITY ASSISTANCE PROGRAM

### “STORMWATER MATTERS THINK GREEN PRODUCT”

## IMPLEMENTATION POINTERS

*Note: these materials have been reviewed and praised by EPA and DEP*

*Also Note: this Stormwater Matters Think Green Product is intended for use only within your municipality – please contact SWCAP for any special situations.*

### STORMWATER MATTERS THINK GREEN PRODUCT CONTENTS:

- Blue folder containing this tip sheet, self test postcard, and two CDs - one for your use and one addressed to give to your local cable station
- One table top display in black carry bag
- 500 “self test” postcards and brochure holder in Stormwater Matters tote bag
- Website-ready, cable-ready, and PowerPoint versions of the self test and the display
- Bonus for early payment of invoice: Stormwater Matters banner

### STORMWATER MATTERS THINK GREEN TABLETOP DISPLAY:

- 3-panel tabletop display folds for easy transport in black carry bag
- Think Green posters are laminated for durability and long-time use
- Using the brochure holder, exhibit the self test postcards in front of the display
- Circulate display to locations such as town hall, library, schools, and town events

### STORMWATER MATTERS THINK GREEN SELF TEST POSTCARD:

- 500 self test postcards are provided
- The self test postcard is also provided electronically as an eps, pdf and in design file on the CD along with a text file of printing instructions should you need to produce additional copies
- Self test postcards may be exhibited with the table top display using the brochure holder, mailed as a postcard, included in an already-scheduled municipal mailing (e.g., tax bills or water bills) in a No. 10 envelope, distributed at municipal functions and at a variety of locations around the community

NOTE: If you need more displays or postcards, please contact SWCAP as we may have extra inventory that you could purchase. If you decide to print more postcards on your own, THINK Marketing in Maynard is very familiar with the product and offers competitive pricing; Jim Mansfield at THINK Marketing can be contacted at 978-461-5060 ext. 704 – you may wish to compare their costs with other printers and use the printer of your choice.