



## Part II. Self-Assessment

The Town of Upton has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions, except for the following provisions (section numbers refer to 2003 MS4 Permit):

### Part II.B.3

The Town has implemented comprehensive stormwater conveyance identification and mapping program. To date, outfalls, stormwater catch basins and culverts have been investigated, described, classified and mapped as a result of this program. No illicit discharges were identified. It is the intent of the Town to continue with the conveyance identification and mapping program in within the community as new outfalls are added.

Prior to Year 9, in anticipation of increased costs associated with the pending 2012 MS4 Permit, the Town of Upton reviewed all outfalls that were mapped and inspected in previous Permit years. As a result of this review, in Year 8, the Town deleted a number of structures previously reported as outfalls. Some of these structures had been located under a culvert mapping program and had been mis-named, while others conveyed only drainage from Route 140, which is a State Highway and therefore managed by MassHighway. The Town of Upton continues to report 72 outfalls, as it did during the Year 8 Report.

### Part II.B.3, II.B.4, and Part II.B.5

In Year 9, the Town made substantial progress toward this Minimum Control Measure. The Town created a Stormwater Bylaw Committee that included members of the Conservation Commission, Planning Board, and other residents. The objective of the group was to create a bylaw that satisfies the requirements of the 2003 MS4 Permit. The Town of Upton has proposed a stormwater management bylaw to eliminate non-stormwater discharges to the Town's stormwater management system, and to provide reasonable guidance for the regulation of development and post-development stormwater runoff for the purpose of protecting local water resources from degradation. This bylaw prohibits the discharges of illicit materials to the Town's stormwater management system and requires the removal of all such illicit connections. A public hearing on the stormwater management bylaw was held on April 11, 2012 at 8:00 pm at Nipmuc Regional High School PDC room. The Town will vote on the stormwater management bylaw during the Annual Town Meeting on May 10th, 2012 at 7:00 pm.

### 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 9 (Reliance on non-municipal partners indicated, if any)	Continued Efforts – Future Work
1 Revised	Develop & distribute brochures to residents.	Upton DPW	Distribution of brochures.	Continued brochure distribution to residents. Brochures included as mail stuffers for water bills. Also available at Town Hall & Code Enforcement office.	Review different brochures, provide additional information and continue distribution.
2 Revised	Develop & distribute brochures to businesses.	Upton DPW	Distribution of brochures.	Continued brochure distribution to businesses. Brochures included as mail stuffers for water bills. Also available at Town Hall & Code Enforcement office.	Review different brochures, provide additional information and continue distribution.
3 Revised	Install watershed signage.	Upton DPW	Installation of watershed signs.	No signs were installed this Permit year.	Install signs in the next Permit Year.
4 Revised	Develop collection program for household hazardous waste.	Upton DPW / Board of Health	Conduct collection program.	Household Hazardous Waste Collection day events were hosted in April 17, 2011 and October 2011.	Conduct similar collection days yearly in the Spring.
5 Revised	Develop school curricula & and distribute to schools.	Upton DPW / Board of Heath	Implementation of curricula.	Discussed several alternatives with school administration to include awareness/education into existing curricula. No program has been developed yet.	Develop programs to be incorporated into existing curricula.
Revised					

## 2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Continued Efforts – Future Work
6	Public meeting to discuss Stormwater management plan.	Upton DPW/Board of Selectmen	Conduct a public meeting to discuss goals of the Stormwater management plan.	In July 2011, the Town’s consultant presented a summary of the current MS4 Permit to the Board of Selectmen, and outlined anticipated changes that will be included in the new MS4 Permit, when it is issued. DPW has conducted meetings with Town Depts; Alternatives have been proposed to televise pertinent material on local cable access.	Coordinate with cable access personnel.
Revised					
7	Public Hearing to discuss water quality data of beach.	Board of Health/Board of Selectmen	Conduct a public discussion of goals and results of water testing.	No public hearings have been held. Routine sampling of Pratt Pond was performed.	Similar to above, utilize local cable access programming.
Revised					
8	Develop and implement composting program.	Board of Health	Implementation of composting program.	Composting program was not implemented due to lack of proper location. Residents can purchase composting materials from the Board of Health.	Currently, the Town is not planning to implement a composting program.
Revised					
9	Coordinate & implement beach clean-up program.	Board of Health / Board of Selectmen	Conduct a beach clean-up.	Town scout troops will conduct beach cleanups at Pratt Pond beach during the summer months in 2012. The Town’s Highway Department staff also performs regular cleanups at this location.	Encourage and continue similar efforts annually.
Revised					
10	Form citizen watch groups to identify polluters to waterways.	Board of Health / Board of Selectmen	Creation of watch group.	No public advertisement or meetings have been held.	Generate public interest and develop mission statement.
Revised					

### 2a. Additions

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### 3. Illicit Discharge Detection and Elimination

<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 9</b> (Reliance on non-municipal partners indicated, if any)	<b>Continued Efforts – Future Work</b>
11 Revised	Develop Stormwater system map.	Upton Highway Department	Creation of system map.	Progress toward this goal was completed in previous Permit years.	Continue to inspect mapped outfalls. Review & edit map as necessary.
12 Revised	Identify illicit discharges.	Upton Highway Department	Create a list of illicit discharges.	Efforts to detect illicit discharges are ongoing. None were identified this in Permit Year 9. A multi-departmental meeting is planned for late spring 2012 to discuss further investigation and cooperation.	Continue to investigate illicit discharges in Town through additional dry weather and wet weather monitoring and sampling starting after the late spring meeting in 2012.
13 Revised	Commence with elimination of identified illicit discharges.	Upton Highway Department	Removal of all identified illicit discharges.	No illicit discharges were identified during Permit Year 9.	Continue monitoring discharges as funding allows. Follow up on discharges discovered by next round of monitoring and sampling.
14 Revised	Review & implement ordinances.	Board of Selectmen	Adoption of additional bylaws & regulations.	In Year 9, the Town Stormwater Bylaw Committee drafted a bylaw to address illicit discharges, construction controls, and post-construction stormwater BMPs. A public hearing on the stormwater management bylaw was held on April 11, 2012.	The Town will vote on the stormwater management bylaw during the Annual Town Meeting on May 10th, 2012 at 7:00 pm. Implementation pending approval of bylaw.
15 Revised	Develop employee training program to identify discharges.	Upton Highway Department	Implementation of training program.	DPW employees received training on November 16, 2011 related to the Stormwater Pollution Prevention Plan for the Highway Department Garage. A portion of this training addressed identification of illicit discharges.	SWPPP training on illicit discharges will expand in Year 10. Develop training program that will increase employee awareness and aid in illicit discharge identification and preventative methodologies.

#### 3a. Additions

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#### 4. Construction Site Stormwater Runoff Control

<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 9</b> (Reliance on non-municipal partners indicated, if any)	<b>Continued Efforts – Future Work</b>
16	Develop procedures to inform public of upcoming projects.	Planning Board/ Conservation Commission/ DPW	Advertise to the public of upcoming activities. Develop and implement review process.	The Planning Board and Conservation Commission are developing a review process, defined in the Draft stormwater bylaw. The nature of the review will incorporate a public notification process.	Continue review of projects as required. The Town will vote on the stormwater management bylaw during the Annual Town Meeting on May 10th, 2012 at 7:00 pm. Implementation of new review processes pending approval of stormwater management bylaw.
Revised					
17	Develop & implement site plan review process for sites.	Planning Board/ Conservation Commission/ DPW	Develop and implement review process.	The Planning Board and Conservation Commission are developing a review process, defined in the draft stormwater management bylaw.	The Town will vote on the stormwater management bylaw during the Annual Town Meeting on May 10th, 2012 at 7:00 pm. Implementation of new review processes pending approval of bylaw.
Revised					
18	Develop & implement erosion & sediment control ordinances.	Planning Board/ Conservation Commission	Develop and implement control ordinances.	The draft stormwater management bylaw addresses erosion and sedimentation control and will be a substantial step toward the goal of addressing runoff control from construction sites.	The Town will vote on the stormwater management bylaw during the Annual Town Meeting on May 10th, 2012 at 7:00 pm. Implementation of erosion and sediment control requirements pending approval of bylaw.
Revised					

19	Develop construction inspection program.	Planning Board/ Conservation Commission	Implementation of inspection program.	The Town has a successful construction inspection program and history of acting on inspections. Pulte Homes installed 50 new catch basins at the Glen Echo Estates development project. In early July 2011, a detention basin at Glen Echo states was inspected in which a gully had formed. The developer, Pulte Homes, was called in for repairs. One new construction project at Cross Winds, which consists of 34 residential lots, has employed a third party consulting firm, Scofield Engineering, to deliver written weekly/biweekly reports of inspections.	Continue implementation efforts.
Revised					
20	Implement construction inspection program with fines for violations.	Planning Board / Conservation Commission	Implementation of inspection program and fine schedule.	The draft stormwater management bylaw addresses enforcement of construction controls.	The Town will vote on the stormwater management bylaw during the Annual Town Meeting on May 10th, 2012 at 7:00 pm. Implementation pending approval of bylaw. Develop construction inspection checklist & procedures and implement inspection program. Develop fine schedule concurrently.
Revised					

## 5. Post-Construction Stormwater Management in New Development and Redevelopment

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Continued Efforts – Future Work
21	Review existing non-structural BMPs.	Planning Board/ Conservation Commission/ DPW	Development and addition of any necessary amendments and/or bylaws.	Progress toward this goal was completed in previous Permit years, including development of Good Housekeeping Practices in the Stormwater Pollution Prevention Plan for the Highway Garage. DPW staff received training on the SWPPP in Year 9	The Town will vote on the stormwater management bylaw during the Annual Town Meeting on May 10th, 2012 at 7:00 pm. Implementation pending approval of bylaw.
Revised					
22	Review of existing structural BMPs.	Conservation Commission/ Planning Board/ DPW	Development and addition of any necessary amendments and/or bylaws.	In Year 9, the Town Stormwater Bylaw Committee drafted a bylaw to to provide reasonable guidance for the regulation of development and post-development stormwater runoff for the purpose of protecting local water resources from degradation. A public hearing on the stormwater management bylaw was held on April 11, 2012.  The Town has integrated structural BMPs in its own projects. A water main installation project designed for the Town in Year 9 included an access road composed of porous asphalt, which eliminates the need for catch basins and drains and allows for natural drainage & flow of water.	The Town will vote on the stormwater management bylaw during the Annual Town Meeting on May 10th, 2012 at 7:00 pm. Implementation pending approval of bylaw.
Revised					
23	Require O&M manuals for newly installed BMPs.	Conservation Commission/ DPW	Catalogue and review of all new structural BMPs.	Little progress on this goal due to little or no new development.	Maintenance of BMPs is a challenge that will be addressed in Year 10.
Revised					

24	Develop inspection program of newly installed BMPs.	Conservation Commission/DPW	Implement new BMP inspection program.	The Town has a successful inspection program for newly installed BMPs.	Work with developers to implement review scheduling of BMPs installed as incorporated into private NPDES permits.
Revised					
25	Conduct inspections of BMPs within 1 <sup>st</sup> year of operation.	Conservation Commission / DPW	Conduct Inspections.	Conducted inspections as necessary and as part of routine maintenance. Detention basins on Pleasant Street and Glen Avenue were inspected during Permit Year 9 and found to be operating well.	Maintenance of BMPs is a challenge that will be addressed in Year 10.
Revised					

**5a. Additions**

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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 9 (Reliance on non-municipal partners indicated, if any)	Continued Efforts – Future Work
26 Revised	Inspection of Town owned sand/salt storage areas.	Upton Highway Department	Conduct inspections, make recommendations, and review procedures.	Stormwater Pollution Prevention Plan and SPCC for the Highway Garage were developed and implemented in Year 8.	Continue inspection and housecleaning efforts.
27 Revised	Review snow removal & street sweeping procedures.	Upton Highway Department	Review procedures and make recommendations.	Review of procedures continues. Town contracts Lloyd Truax for catch basin cleaning, and Dan Amarillo for street sweeping.	Formalize recommendations. Continue catch basin cleaning, street sweeping, and sidewalk sweeping.
28 Revised	Develop & implement maintenance schedules – BMPs.	Upton Highway Department	Implement annual BMP maintenance program.	DPW has been active in addressing private BMP neglect.	Maintenance of BMPs is a challenge that will be addressed in Year 10.
29 Revised	Develop & implement employee training program.	Upton Highway Department	Implement training program.	DPW employees received training on November 16, 2011 related to the new Stormwater Pollution Prevention Plan for the Highway Department Garage.	SWPPP training will be expanded in Year 10. Develop training program that will increase employee awareness and aid in illicit discharge identification and preventative methodologies.
30 Revised	Review & Update Town's recycling program.	DPW/ Board of Health/ Board of Selectmen	Review existing program and make recommendations.	Effective as of October 4, 2011, the Board of Health contracted E.L. Harvey to manage the curbside recycling program. Single stream recycling was introduced.	Create a review committee and conduct review of existing program.

### 6a. Additions

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## 7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) <<if applicable>>

<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 9</b> (Reliance on non-municipal partners indicated, if any)	<b>Continued Efforts – Future Work</b>
Revised	Not Applicable	Not Applicable	Not Applicable	The following Upton water bodies are considered impaired: Mill River, West River, Fiske Millpond, Mill Pond, North Pond, Pratt Pond, Taft Pond, Lake Wildwood. However, TMDLs have not been developed for any.	Evaluate any TMDLs developed for Upton impaired waters.
Revised					
Revised					
Revised					

**7a. Additions**


**7b. WLA Assessment**

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

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

**Programmatic**

Stormwater management position created/staffed	(y/n)	N
Annual program budget/expenditures	(\$)	\$15,000

**Education, Involvement, and Training**

Estimated number of residents reached by education program(s)	(# or %)	75%
Stormwater management committee established	(y/n)	N - Pending
Stream teams established or supported	(# or y/n)	N
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	Y
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	2
▪ community participation	(%)	20%
▪ material collected	(tons or gal)	NA
School curricula implemented	(y/n)	N

**Legal/Regulatory**

	In Place Prior to Phase II	Under Review	Drafted	Adopted
Regulatory Mechanism Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination			X	Anticipated May 2012
▪ 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**

Outfall mapping complete	(%)	100%
Estimated or actual number of outfalls	(#)	72
System-Wide mapping complete	(%)	100%
Mapping method(s)		
▪ Paper/Mylar	(%)	0%
▪ CADD	(%)	0%
▪ GIS	(%)	100%
Outfalls inspected/screened	(# or %)	100%
Illicit discharges identified	(#)	0 (ongoing)
Illicit connections removed	(#) (est. gpd)	0
% of population on sewer	(%)	30%
% of population on septic systems	(%)	70%

## Construction

Number of construction starts (>1-acre)	(#)	1
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 completed	(# or %)	100
Estimated volume of stormwater recharged	(gpy)	

## Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	1
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	1
Total number of structures cleaned (Approximate Values)	(#)	770
Storm drain cleaned	(LF or mi.)	None
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	
Disposal or use of sweepings (landfill, POTW, compost, <i>recycle for sand, beneficial use</i> , etc.)	Recycle, fill	Recycle
Cost of screenings disposal	(\$)	12,000 0

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	1
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	1
Qty. of sand/debris collected by sweeping	(lbs. or tons)	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(roadway fill)	
Cost of sweepings disposal	(\$)	
Vacuum street sweepers purchased/leased	(#)	
Vacuum street sweepers specified in contracts	(y/n)	

Reduction in application on public land of: (“N/A” = never used; “100%” = elimination)		
▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	

Anti-/De-Icing products and ratios (Approximate Values)	% NaCl % CaCl <sub>2</sub> % MgCl <sub>2</sub> % CMA % Kac % KCl % Sand	1,300 Tons 2,000 gal     None
Pre-wetting techniques utilized	(y/n)	N
Manual control spreaders used	(y/n)	N
Automatic or Zero-velocity spreaders used	(y/n)	Y
Estimated net reduction in typical year salt application	(lbs. or %)	50%
Salt pile(s) covered in storage shed(s)	One shed used (y/n)	Y
Storage shed(s) in design or under construction	(y/n)	N