



April 29, 2011

Ms. Glenda Velez  
US EPA  
5 Post Office Square – OEP06-01  
Boston, MA 02109-3912

**Re: NPDES Phase II Stormwater General Permit  
2010-2011 Annual Report  
Town of Millis, MA**

Dear Ms. Velez:

On behalf of the Town of Millis, MA, please find enclosed the NPDES Phase II Stormwater General Permit 2010-2011 Annual Report. The Annual Report has simultaneously been filed with the Massachusetts Department of Environmental Protection (MassDEP).

Should you have any questions or require any additional information, please do not hesitate to contact me at 978-392-5355.

Sincerely,

**AMEC Earth & Environmental, Inc.**

A handwritten signature in black ink, appearing to read "Rich Niles". The signature is stylized and cursive.

Rich Niles  
Water Resources Project Manager

cc: Fred Civian, MassDEP, Boston Office  
Charles Aspinwall, Town Administrator, Town of Millis, MA

Enclosure – NPDES Phase II Small MS4 General Permit 2010-2011 Annual Report

AMEC Earth & Environmental, Inc.  
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**Municipality/Organization:** Town of Millis

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**EPA NPDES Permit Number:** MAR041100

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**MaDEP Transmittal Number:** W- 040942

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**Annual Report Number  
& Reporting Period: No. 8: May 1, 2010 -April 30, 2011**

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## NPDES PII Small MS4 General Permit Annual Report

### Part I. General Information

Contact Person: Charles J. Aspinwall Title: Town Administrator

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Telephone #: 508-376-7040 Email: caspinwall@millis.net

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#### Certification:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: 

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Printed Name: Charles J. Aspinwall

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Title: Town Administrator

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Date: 4/29/2011

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## **Part II. Self-Assessment**

The Town of Millis has completed the required self-assessment of the annual compliance review for the Phase II Stormwater Program. In accordance with the NPDES Phase II Stormwater requirements, the following topics were evaluated for the completion of the Annual Report:

1. Compliance with the Phase II Permit Conditions
2. Appropriateness of the Selected BMPs
3. Progress Towards Achieving the Program's Measurable Goals
4. Results of Any Information that has been Collected and Analyzed
5. Activities for the Next Reporting Cycle
6. Changes in Identified BMPs or Measurable Goals

The Town has determined that our municipality is in compliance with all permit conditions.

The Town would also like to note that it conducted a detailed self-assessment of its stormwater management program in October 2010 to complete the EPA MS4 Questionnaire (Millis Survey ID: regd32142). EPA's Office of Water requested the questionnaire for consideration in "revisions to its current NPDES regulations for discharges from MS4s, as well as expanding the scope of stormwater discharges regulated by EPA under the Clean Water Act". The purpose of the questionnaire was to "collect data to inform decisions regarding how the nation's stormwater regulations could be strengthened and to support the technical and financial feasibility analyses associated with this rulemaking . . ."

### 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 8	Planned Activities – Next Permit Term
1A	Distribute Brochures & Fact Sheets to Residents & Businesses	Dept. of Public Works (DPW)	Number of Articles & Copies of Materials.	Stormwater materials were sent to residents through water bill inserts in November 2010 and February 2011. The 2010 bill insert was a crossword puzzle and the 2011 insert was the UConn NEMO Fact Sheet “Strategies for Coping with Polluted Runoff”.  An additional stormwater education pamphlet (“Nonpoint Source Pollution Education: Fertilizing the Lawn”) was mailed to every household and water account as part of the Consumer Confidence Drinking Water Quality Report in June 2010. The report also included an article on lawn fertilizer and water quality impacts.  There are approximately 2,200 water accounts that reach 90% of the Town population. The above materials and the “Clean Charles Coalition” pamphlet were made available at the offices of the Selectmen and Town Clerk.	Continue to distribute stormwater educational materials to Millis residents and businesses with water bills and the annual Consumer Confidence Report.
Revised					
1B	Develop and Broadcast Stormwater Presentation on Local Cable Network	DPW & Town Selectmen	Cable TV tapes of presentations shown annually.	A budget presentation by the DPW at the March 2, 2011 Finance Committee meeting was shown on Millis Cable Television. The presentation included the cost of maintenance and NPDES permit compliance.	Continue cable broadcast of pertinent presentations and meetings.
Revised			“After the Storm” video shown bi-annually.	The Town did not broadcast the EPA video, “After the Storm”; however, pamphlets were distributed, as discussed under BMP 1A. Household hazardous waste collection events were advertised on the local cable network.	Consider future cable broadcasts of the EPA video “After the Storm.”  Review other available stormwater educational videos to evaluate their applicability to address specific behaviors and targeted audiences.

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1C	Send out Stormwater Press Releases	DPW	Copies of Articles.	A stormwater press release was published in the Milford Daily News on November 9, 2010 and consisted of tips for residents to minimize stormwater impacts.	Continue to publish newspaper articles and press releases.
Revised					

### 1a. Additions

<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</b>	<b>Planned Activities – Next Permit Term</b>
1D	Distribute Stormwater Pamphlets at Town Hall	Board of Health	Copies of Pamphlets	The Millis Board of Health continued to provide copies of the Clean Charles Coalition pamphlet “What You Can Do To Help” at the Town Hall.	Continue to make pamphlets available to the public through displays at Town offices.
Revised				The following materials were also made available at the offices of the Selectmen and Town Clerk: “Take the Stormwater Runoff Challenge”, a crossword puzzle, “Protecting Water Quality from Urban Runoff” and the pamphlet “After the Storm”.	
1E	Post Stormwater Information on Millis Website	DPW	Copies of Pages and Hits Annually	A dedicated Stormwater Management webpage was maintained and includes information on proper use of fertilizers and pesticides.	Continue to update the website periodically with new educational materials and other applicable announcements.
Revised			Copy of website page.	An announcement regarding the Household Hazardous Waste Disposal events on Wednesdays from April 1 <sup>st</sup> through September 30 <sup>th</sup> in Norfolk was posted on the website. The Stormwater Hotline was advertised on the website for residents to report stormwater concerns and illicit discharges.	Review the website content to evaluate its effectiveness addressing specific behaviors and target audiences.

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1F	Classroom Stormwater Education	DPW, School Department & Consultant	Stormwater lesson plan and number of students participated	No dedicated stormwater classroom education activities occurred during the permit term.	Continue to evaluate other stormwater education opportunities for the next permit term. Consider providing “After the Storm” or other pertinent videos to schools and library.
Revised			Copy of website page.	The Millis Garden Club continues to educate volunteers through events such as the April 9, 2011 Beautification Day regarding the care, maintenance, and water efficient plantings for the Town Hall landscaped area, irrigated by cistern-collected stormwater runoff.	

## 2. Public Involvement and Participation

<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</b>	<b>Planned Activities – Next Permit Term</b>
2A	Establish a Stormwater Telephone Hotline	DPW	Record number of phone calls to hotline, copies of articles.	3 calls were received in the past year regarding stormwater issues: a collapsed headwall along Main Street near Hammond Lane; flooding along Myrtle Street; and a collapsed catch basin on Oak View Ave. DPW addressed each of the stormwater issues and the hotline was promoted through the stormwater website.	The DPW will continue to handle stormwater related phone calls. Continue to advertise the Stormwater Hotline through the stormwater website as detailed in BMP 1E and incorporate into other avenues such as press releases and educational brochures provided to residents.
Revised					
2B	Mark Storm Drains with Stencils During Cleaning	DPW	Storm drains marked in the highest priority subbasins in Year 2.	DPW completed storm drain stenciling along Main Street, Pleasant Street, Spring St., Exchange Street, Village Street, and Dover Rd.	Assess the condition of stencils in high and medium priority sub-basins and along main roads and areas with heavy pedestrian activity. Refresh stencils where necessary.
Revised			Mark as many as possible with volunteers.	The DPW developed its own reusable stencils and used non-toxic street marking paint.	

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2C	Conduct River, Stream, and Pond Cleanups	DPW & Volunteers	Cleaner streams as documented by before and after photographs	<p>Millis Beautification Day occurred on April 9, 2011. Approximately 110 volunteers were involved through the Millis Garden Club, Millis Lions Club, Boy &amp; Girl Scouts, Millis High School and the Town Democratic Committee. 200 33-gallon bags of trash, 150 40-gallon leaf bags, 30 pounds of scrap metal, 4 tires and 12 dump truck loads of brush were collected as part of the cleanup.</p>	<p>Additional river, stream and pond cleanups will be conducted in the Town led by the Millis Garden Club &amp; Millis Lions Club with assistance from the Millis DPW. Cleanup activities will be coordinated with the CRWA as projects arise. Continue to recruit volunteers through existing contacts and other interested parties.</p>
Revised		Millis Garden Club & Millis Lions Club, CRWA			

**2a. No Additions at this time.**

**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 8</b>	<b>Planned Activities – Next Permit Term</b>
3A	Make Annual Household Hazardous Waste Collections Available to Residents	DPW & Board of Health (BOH)	Document Quantity of Tickets Sold.	<p>The Town of Millis coordinates monthly collection events with the Town of Norfolk. Residents were informed of the collection event through utility mailings and local cable broadcasts. Notice of the event and application forms were also made available on the Town website. Pamphlets are made available at the Millis Transfer Station and the DPW offices. Household Hazardous Waste (HHW) disposal is available for a fee on Wednesdays from 11:30 AM to 6:00 PM from April 1, 2010 through September 30, 2010 at the Norfolk Transfer Station.</p> <p>12 Millis residents participated in the HHW disposal event during Permit Year 8.</p>	<p>Continue to promote the HHW collection events that are available to residents through the Town website, the cable channel, utility mailings, and stormwater educational materials.</p> <p>Track the number of Millis participants and explore ways to improve attendance.</p> <p>Evaluate methods for tracking the volume of materials collected by Millis participants.</p>
Revised					

<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</b>	<b>Planned Activities – Next Permit Term</b>
3B	Develop Primary Town Storm Drain System Map	DPW	95 % of system mapped on GIS.	Following multiple rounds of investigations, the Town completed inspections of 16 outfalls that previously could not be located due to a lack of drainage system information or because of being clogged or buried.	Continue to revise base map as needed based on new development or differences observed in the field.
Revised				These locations were updated on the existing map as part of other drainage mapping efforts, as discussed further under BMP 3D.	
3C	Identify Illicit Floor Drain Connections at Businesses	DPW	27 illicit connections identified and removed, 2 from the storm drain system and/or waterways in Millis.	No illicit floor drains were identified.	Illicit floor drains will be removed as they are identified. Illicit floor connections will be addressed as part of the Millis Illicit Discharge Detection and Elimination Plan.
Revised					
3D	Complete Storm Drain Map	DPW	Map All Outfalls by Year 4	Outfall and storm drain system mapping was completed as part of the updates discussed under BMP 3B. A total of 16 outfalls were investigated, resulting in the following updates: identification of 3 (newly located) outfalls; removal of 2 outfalls from the map where the drainage system was determined to be a drywell; removal of 1 outfall that was actually an interconnection with another known outfall; and the remaining 10 outfalls could not be located, requiring more extensive investigations.	The storm drain system map will continually be updated based on any new subdivisions and roads constructed in the Town.
Revised			Outfalls mapped by Year 5		

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3E	Develop Illicit Discharge Prohibition Ordinance	DPW & BOH	Regulation at Town meeting by the end of Year 2.	The Illicit Discharge Prohibition Regulation was developed based on available model ordinances to meet the Phase II requirements. It was enacted June 28th, 2004.	Continue to enforce Illicit Discharge Prohibition regulations and remove illicit discharges as they are identified via the hotline or other methods.
Revised			Keep record of enforcement issues and eliminate illicit discharges within 1 year.	As discussed in previous reports, MassDEP enforcement is ongoing for an oil release from an Acorn Street property to a nearby stream back in the Spring of 2010. The Board of Health is enforcing a Title 5 violation (failed septic) along Causeway Street.	
3F	Develop Illicit Discharge Detection and Elimination (IDDE) Plan and Implement Activities	DPW, BOH, Consultant	IDDE Plan – Year 2, All outfalls examined by Year 4. Sources traced and results documented within one year of discovery.	Concurrent with the mapping efforts discussed under BMP 3D, the Town reviewed historical field monitoring results at outfalls from 2005-2008. 11 outfalls were identified for further investigation and sampling due to the presence of intermittent dry weather flow or other concerns such as a submerged outfall or yard waste dumping nearby. Dry weather flow was observed at 9 outfalls that were sampled for laboratory analysis and flow source tracing was conducted for 2 of these outfalls. No illicit discharges were identified based on laboratory analysis and field observations/ investigations.	Sample any additional dry weather discharges located and update the town map.
Revised			All outfalls examined by Year 5	In October 2010, the Town completed the infiltration/inflow (I/I) capital improvements that began in April 2008, resulting in the repair of manholes, sewer service lines and removal of approximately 65,400 GPD of I/I. \$116K was appropriated for Phase II of I/I activities that are scheduled to begin in Spring/Summer of 2011.	Continue infiltration/inflow investigations and capital improvement plan with consideration of potential stormwater pollution issues through illicit discharges.

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3G	Incorporate Information on Illicit Discharges into Public Education and Outreach Topics	DPW & BOH	Copies of Materials.	Illicit discharges information and stormwater impacts have been incorporated into the pamphlets described in BMPs 1A & 1D.	Continue existing practices and explore the use of additional illicit discharge information into public education documents in conjunction with Minimum Measure 1 BMPs.
Revised			Copy of Website.		
3H	Setup and Advertise a Hotline for Illicit Discharges	DPW & BOH	Log of Complaints and Action Taken.	The Board of Health operates the hotline and coordinates with the DPW (e.g., BMP 2A).	Continue to advertise the DPW and phone number with press releases, the Town's stormwater website and the stormwater educational materials.
Revised				The Town advertises the DPW and phone number with press releases, the Town's stormwater website, and stormwater educational materials.	Continue tracking calls and recording investigative and corrective actions taken by the Town.

### 3a. Additions

<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</b>	<b>Planned Activities – Next Permit Term</b>
3I	Sewer Projects to Address Failed Septic Systems	DPW & BOH	Proposed Sewer Plan by end of Permit Year 5.	Millis received 14 applications for new sewer connections in 2010. 7 of these applications were for homes with existing failed septic systems. An additional 6 failed septic systems were replaced and there were 6 pipe or distribution box repairs. As discussed in the Year 7 report, the Glen Ellen Country Club reduced its waste volume to be under permit limits and re-filed with the Board of Health, which remains in process.	The Town will continue to address septic system issues and conduct sewer projects as issues are identified and funding is available.
Revised			Homes on sewer system in 2006.		
3J	Model Study for Localized Sewerage Treatment Facilities	DPW	Study results by end of Permit Year 5.	The Town purchased more sewer capacity from the Town of Franklin to address the Dyer, Village, and Pleasant Street neighborhood; however, these homes are not required to connect at this time. The Millis Sewer Study Committee recommended reserving new capacity for the downtown area.	Continue to evaluate wastewater handling needs on a Town-wide basis.
Revised					

#### 4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8	Planned Activities – Next Permit Term
4A	Develop Erosion Control Regulation	Building Inspector (BI) & DPW	Regulation at Town Meeting by End of Yr 2.	A stormwater bylaw was developed and regulations were enacted June 28, 2004 to meet the Phase II requirements.	Continue to review projects and enforce existing Erosion and Sedimentation Control Regulations.
Revised				<p>The Town reviewed 3 projects subject to the regulations: a Town drainage project along Myrtle St.; a modification to Milliston Common for a bank drive-thru; and a site along Main St.</p> <p>As discussed in previous reports, the Town received a grant through the Metropolitan Area Planning Commission (MAPC) to develop a new local Stormwater bylaw to promote low impact development (LID) techniques and create a Stormwater Commission. The Town decided not to proceed at this time with a new LID stormwater bylaw or a Stormwater Commission due to opposition from the public. The Selectmen will continue to be the stormwater authority, but the Town anticipates revisiting the bylaw and authority once the Phase II permit is re-issued.</p>	Re-evaluate the stormwater bylaw that promotes LID, consider amendments, and seek additional support for adoption.
4B	Establish a Procedure for the Receipt of Information Submitted by the Public	BI & DPW	Record number of phone calls to hotline, copies of articles advertising the hotline.	The Town did not receive any complaints associated with construction activities. As discussed in BMP 2A, 3 calls were received for stormwater-related issues and DPW addressed each one.	The DPW will continue to handle stormwater related phone calls and administer investigative and corrective actions.
Revised					
4C	Develop & Adopt Design Standards Guidance for Erosion Controls	Planning Board (PB), DPW, Conservation Commission (Con. Com.)	Inspection checklist and documented inspections.	Multiple inspections were conducted at the following sites: CVS along Milliston Road, Milliston Place and the Myrtle Street drainage project.	Continue inspections of construction sites for compliance with erosion and sediment control plans and procedures, utilizing the Town's standard inspection form and procedure.
Revised				No stop work orders were issued.	

**4a. No Additions at this time.**

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

<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</b>	<b>Planned Activities – Next Permit Term</b>
5A	Develop BMP Regulation	BI & DPW	Regulation at Town Meeting by end of Year 2	Regulations to meet the Phase II requirements were enacted June 28, 2004.	Continue to enforce Post-Construction Regulations.
Revised				<p>The Town reviewed 3 projects subject to the regulations: a Town drainage project along Myrtle St.; a modification to Milliston Common for a bank drive-thru; and a site along Main St.</p> <p>As discussed under BMP 4A, the Town decided not to proceed at this time with a new LID stormwater bylaw or a Stormwater Commission due to opposition from the public.</p>	Re-evaluate the Stormwater bylaw that promotes LID, consider amendments, and seek additional support for adoption (see BMP 4A).
5B	Develop and Implement Inspection Program	BI & DPW	Copies of maintenance reports received annually, plus records of inspections completed and results.	<p>Construction sites listed in BMP 4C were inspected and maintained in accordance with the O&amp;M Plan on file.</p> <p>No additional inspection programs were reviewed.</p>	Continue site inspections and maintenance tracking program for regulated sites.
Revised					
5C	Develop BMP Design Standards	PB, DPW, Con. Com. & Consultant	Improved Bylaws - Year 4	The Millis Stormwater Management Regulations are used to review BMP design criteria requirements for developers on a case by case basis. A consultant is retained for a more detailed review of stormwater designs for additional water quality protection.	Continue detailed review of plans and sites in accordance with the Millis regulations. Review additional design standards as part of BMP 4A & 5A.
Revised					

**5a. No Additions at this time.**

## 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	Planned Activities – Next Permit Term
6A Revised	Clean Catch Basins	DPW	Clean all catch basins.	<p>969 catch basins in town were cleaned, yielding approximately 138 cubic yards of cleanings that were stored at the DPW yard for reuse through the existing Beneficial Use Determination (BUD) approval.</p> <p>The Town explored the possibility of tracking sediment quantities per each structure to help determine future cleaning priorities. Although this information can be tracked during future cleaning activities, the Town already cleans every catch basin and decided that further action requires a more detailed evaluation.</p>	<p>Continue catch basin cleaning program annually and continue to track sediment quantities.</p> <p>Evaluate the cost/benefit of additional cleaning versus other maintenance or drainage system improvements that have the potential to improve water quality.</p>
6B Revised	Sweep Streets in Town	DPW	Priority plan of sweepings based on water quality impact. Volume of sweepings collected.	<p>All streets in town were swept once and some streets and sidewalks in the downtown area were swept twice. The SOP developed during Permit Year 6 was used and approximately 40 cubic yards of sweepings were reused through the Town's BUD. The Town coordinates with the Tresca concrete facility at the Millis/Medway Town line to sweep Route 109 approximately 5 times a week due to truck traffic.</p> <p>The Town did not track sediment data on a per-street basis and decided that further action requires a more detailed evaluation.</p>	<p>Continue existing street sweeping program.</p> <p>Evaluate the cost/benefit of additional cleaning and develop a priority street map for streets (if any) that should receive additional sweeping based on data collected, traffic loads and/or pollutant loads.</p>
6C Revised	Store Road Salt Under Cover and Clean Loading Area	DPW	Minimize Stormwater Contact with Salt	Road salt materials are stored under cover at the Highway Garage and the loading area is cleaned as needed.	Continue existing practices.

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6D	Calibrate Salt Spreading Equipment	DPW	Prevent over-application of salt as shown with calibration records.	Equipment is calibrated annually. Salt use is tracked through purchase records. Approximately 2,358 tons of salt and 452 tons of sand were purchased this winter.	Continue to calibrate equipment and record quantities annually.
Revised					
6E	Use Low Salt Applications at Designated Areas	DPW	Use less salt at Norfolk county line than at other roadways as demonstrated with application rate.	Low-traffic side streets were sanded less often than the main streets in an effort to reduce the amount of sand and salt used each year. Continued to use the rear-mounted spreader to reduce salt application rates significantly (estimated greater than 10% reduction) compared to arterials and major roads.	Continue existing practices and evaluate appropriate application rates for various routes and watersheds while maintaining safe winter drivability.
Revised					
6F	Use IPM Practices for Application of Pesticides in Town	DPW	Copy of IPM Plan.	The DPW performs routine inspections of town-maintained lands for pest persistence and promotes the use of cultural management techniques for pest and turf management. All turf treatment for athletic fields is subcontracted and the Town's subcontractor agreement contains requirements to protect human health and the environment related to chemical applications. This agreement serves as the Town's policy for turf management.  The Town reduced chemical applications at fields from 4 at the start of the program to 1 application currently. The Town began updating its YOP for application of pesticides along public rights-of-way.	Ensure that turf management techniques for athletic fields are consistent with IPM techniques and past activities. Ensure that any right-of-way applications are consistent with the VMP and YOP.
Revised					
6G	Use Licensed Applicators for Fertilizers and Insecticides in Town	DPW	Record quantities of fertilizers and pesticides purchased annually.	Chemical quantities are tracked through purchase records. Subcontracted chemical applicators are licensed, as required by the Town's subcontractor agreement for turf management. The Town significantly reduced fertilizer application with just one application at Town fields.	The Town will monitor ways to reduce the use of chemical applications if possible.
Revised					

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6H	Ensure Compliance with SPCC Plan for the Highway Garage	DPW	Prevent releases of oil at the Highway Garage through weekly inspections, annual training, and annual plan evaluation.	Informal SPCC training sessions for DPW employees occurred during monthly staff meetings and staff received EPCRA training in Fall 2010 for Hazard Communication and Emergency Response Planning.	Follow the current SPCC Plan and continue with DPW employee training.
Revised				Routine inspections were completed in accordance with the SPCC and the annual plan evaluation will be completed in Summer 2011.	
6I	Ensure Compliance for Snow Disposal in Town	DPW	Map of Acceptable Snow Disposal Areas.	Snow disposal occurred at acceptable areas at Oak Grove, which is outside the Zone II designation.	Continue existing practices to ensure proper disposal of snow in town.
Revised					
6J	Use Filter Socks for Excavation and Hydrant Waters	DPW	Prevent discharge of sediments during dewatering and hydrant flow testing activities.	Filter socks are used during hydrant flushing and excavation dewatering (e.g., during water main breaks). The Town estimates that approximately 7.1 million gallons was lost to hydrant flushing and water main breaks.	Continue existing practices.
Revised				The Town also requires contractors to use filter socks during excavations to prevent excess sediment discharge.	
6K	Evaluate Pollution Prevention BMPs for the Fueling Station at the Highway Garage	DPW	As-built sketches or plans and photos.	This task was completed during Permit Year 2. No additional changes were made.	No further action is required.
Revised					
6L	Evaluate BMPs at the Highway Garage to Prevent Sedimentation to the Adjacent Waterway from Site Runoff and Road Material Storage	DPW	As-built sketches or plans and photos.	DPW maintained the BMPs and cleaned the detention area in October 2010. The BMPs are properly functioning to prevent sediment discharges to the adjacent waterway.	Maintain the BMPs to ensure proper function and ongoing sediment load reduction.
Revised					

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6M	Develop an Inspection and Maintenance Plan	DPW	Written Policy – Year 3, Records of inspections and maintenance.	DPW implemented the SOPs and Inspection & Maintenance Plan. The Town has a Beneficial Use Determination (BUD) approval from DEP for the reuse of street sweepings and catch basins in town to construct a town-owned tree nursery at an old gravel pit site. Sediments generated in Town (BMPs 6A & 6B) were reused under the BUD.	Operate BUD site in accordance with DEP permit, SOPs, and Inspection & Maintenance Plan.
Revised				The Town conducted extensive beaver control activities (e.g., grate installation, pipe & catch basin cleaning) to address clogged pipes and culverts at a cost of ~ \$20K.	
6N	Ensure Water Quality Improvements are Considered for Flood Projects	DPW	Records of Flood Control Projects.	The Town employs a protocol for flood project review, including NOI permitting and subsequent steps towards approval. Two culverts along Causeway Street were replaced in Summer 2010 and the Main/Farm Street culvert was replaced in April 2011. As discussed in the Year 7 report, Millis previously applied for 3 flood control projects at Island Road, Dover Road, and Main/Farm Street under the FEMA Disaster Mitigation program. Only the Main/Farm Street culvert was funded and replaced, as discussed above.	Follow in-house protocol for the review of flood projects to ensure that new projects consider water quality improvements.
Revised				In 2010 the Town applied for 3 flood projects through FEMA: a culvert replacement along Route 109; pump station flood proofing; and a culvert replacement along Ridge Street. The pump station flood proofing project was approved and the Town anticipates construction in 2011.	Replace culverts as necessary and as funding allows.  Continue to apply for flood control project grants to replace flooded infrastructure.

<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</b>	<b>Planned Activities – Next Permit Term</b>
6O	Conduct Town Employee Stormwater Training	DPW	Attendance Sheet & Copy of Program.	DPW employees participated in stormwater outfall inspections and investigations with the Town's consultant (see BMPs 3B and 3F).	Continue to conduct SPCC and stormwater training for DPW employees. Establish a Stormwater Training program and track attendance annually.
Revised				<p>Informal SPCC training sessions for DPW employees occurred during monthly staff meetings and staff received EPCRA training in Fall 2010 for Hazard Communication and Emergency Response Planning.</p> <p>The Director and Assistant Director of Public Works attended a stormwater financing workshop provided by two consultants on March 1, 2011. DPW staff also attended a public information session in the Town of Franklin on March 24, 2011 regarding nutrient reduction methods by the Charles River Watershed Association.</p>	

### 6a. Additions

<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</b>	<b>Planned Activities – Next Permit Term</b>
6P	Additional Covered Storage for Sanders & Equipment	DPW	Written/ photo documentation	Sanding and other outdoor equipment was stored under cover to minimize stormwater contact.	Continue existing practices to store equipment under cover.
Revised					
6Q	Roof Repairs to Improve Good Housekeeping for Water Treatment Chemicals	DPW	Written/ photo documentation	This was completed in Permit Year 5. No additional changes were made.	Ensure chemicals are stored in an adequate facility.
Revised					

**7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) <<if 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 – Next Permit Term
Revised					

**7a. One addition at this time.**

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 – Next Permit Term
7A	Develop a Water Quality Strategy for 303d Waters	DPW, Conservation Commission, and Consultant	Summary of pollution prevention efforts, future needs, and responsible parties.	As discussed in the Year 7 annual report, the Town developed a preliminary strategy to meet the TMDL considering existing actions under the current program and available resources. The Town evaluated program and funding needs for the next permit term and decided to incorporate the preliminary strategy into the SWMP Update that will be required following the permit re-issuance.	Incorporate the preliminary TMDL strategy into the SWMP Update that will be required following the permit re-issuance. Consider new information available from studies in the Charles River Watershed.
Revised					

**7b. WLA Assessment**

As discussed in previous reports, two TMDLs have been finalized for the Charles River Basin. These include the Total Maximum Daily Load for Nutrients in the Lower Charles River Basin, Massachusetts CN 301.0, June 2007 and the Pathogen TMDL for the Charles River Watershed, CN 0156.0, January 2007. Bogastow Brook listed as impaired for pathogens and was addressed as part of the Charles River pathogen TMDL and the recommendations in this TMDL apply to Bogastow Brook. A draft Nutrient TMDL has been developed for the Upper/Middle Charles River, CN 272.0, September 2009.

The Town has reviewed the requirements of the draft Phase II Permit for North Coastal Watersheds and considered previous work/progress under the current program to develop a preliminary outline of activities to meet these permit requirements and address water quality objectives outlined in the TMDLs. It appears that the preliminary TMDL strategy previously developed by the Town’s consultant is generally consistent with the proposed Phase II Permit requirements with respect to the elements of a Phosphorous Control Plan (PCP), for example. The Town developed an outline of program needs over the 5-year permit term and a budget for the first year of the permit.

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

Number of Outfalls Inspected for Illicit Discharges: 11 during this permit term

Number of Outfalls Re-sampled: 7 during this permit term

Number of Illicit Discharges Found: 0 identified during this permit term; however, the Board of Health is enforcing a Title 5 violation (failed septic) along Causeway Street.

110 volunteers removed 200 33-gallon bags of trash, 150 40-gallon leaf bags, 30 pounds of scrap metal, 4 tires and 12 dump truck loads of brush were collected as part of the cleanups at the following areas: Charles River at Main St., Richardson Pond, Farm St., Acorn St., Village St., Route 115, Route 109, Clyde Brown School, Millis Town Park, Millis High School, Millis Library and Millis Town Hall.

969 catch basins were cleaned, generating 138 yards of catch basin cleanings during this permit term.

All streets in town were swept, generating 40 yards of street sweeping cleanings during this permit term.

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

**Programmatic**

Stormwater management position created/staffed	(y/n)	No
Annual program budget/expenditures	(\$)	~35,000

**Education, Involvement, and Training**

Estimated number of residents reached by education program(s)	(# or %)	100%
Stormwater management committee established	(y/n)	No
Stream teams established or supported	(# or y/n)	No
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	Yes
Household Hazardous Waste Collection Days		
• days sponsored	(#)	1
• community participation	(%)	12*
• material collected	(tons or gal)	Not Available
School curricula implemented	(y/n)	No

\*The Town of Millis participates in a monthly joint Household Hazardous Waste Collection Day with the Town of Norfolk. Residents can bring one car load of wastes to the event for a cost of \$50. 12 Millis residents used the Norfolk hazardous waste collection facility during the permit year.

### Legal/Regulatory

	In Place Prior to Phase II	Under Review	Drafted	Adopted
Regulatory Mechanism Status (indicate with “X”)				
▪ Illicit Discharge Detection & Elimination				X
▪ Erosion & Sediment Control				X
▪ Post-Development Stormwater Management				X
Accompanying Regulation Status (indicate with “X”)				
▪ Illicit Discharge Detection & Elimination				X
▪ Erosion & Sediment Control				X
▪ Post-Development Stormwater Management				X

### Mapping and Illicit Discharges

Outfall mapping complete	(%)	100
Estimated or actual number of outfalls	(#)	148 mapped
System-Wide mapping complete	(%)	95%
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	100%
Outfalls inspected/screened	(# or %)	148
Illicit discharges identified	(#)	0
Illicit connections removed	(# ) (est. gpd)	0
% of population on sewer	(%)	50%
% of population on septic systems	(%)	50%

### Construction

Number of construction starts (>1-acre)	(#)	3
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	100%
Site inspections completed	(# or %)	Multiple
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 %)	Multiple
Estimated volume of stormwater recharged	(gpy)	Not Assessed

### 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)	1-2/yr*
Total number of structures cleaned	(#)	969
Storm drain cleaned	(LF or mi.)	NA
Qty. of cleanings /debris removed from storm sewer infrastructure	(lbs. or tons)	138 CY
Disposal or use of cleanings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		DEP BUD
Cost of cleanings disposal	(\$)	N/A
*Some drainage structures in the downtown area are cleaned more frequently based on the rate of sediment accumulation and historical flooding issues.		

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)	1-2/yr
Qty. of sand/debris collected by sweeping	(lbs. or tons)	40 CY
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	DEP BUD
Cost of sweepings disposal	(\$)	N/A
Vacuum street sweepers purchased/leased	(#)	1 owned
Vacuum street sweepers specified in contracts	(y/n)	N/A

Reduction in application on public land of: (“N/A” = never used; “100%” = elimination)		
▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	
The DPW performs routine inspections of town-maintained lands for pest persistence and promotes the use of cultural management techniques for pest and turf management in an effort to minimize the use of chemicals. The Town reduced chemical applications at fields from 4 at the start of the program to 1 application currently.		
Anti-/De-Icing products and ratios	% NaCl % CaCl <sub>2</sub> % MgCl <sub>2</sub> % CMA % Kac % KCl % Sand	No deicing catalysts other than road salt are used.
Pre-wetting techniques utilized	(y/n)	No
Manual control spreaders used	(y/n)	Yes
Automatic or Zero-velocity spreaders used	(y/n)	Zero Velocity
Estimated net reduction in typical year salt application	(lbs. or %)	
Salt pile(s) covered in storage shed(s)	(y/n)	Yes
Storage shed(s) in design or under construction	(y/n)	N/A