

**Municipality/Organization:** Town of Millis

**EPA NPDES Permit Number:** MAR041137

**MaDEP Transmittal Number:** W- 040942

**Annual Report Number**  
**& Reporting Period:** No. 11: May 1, 2013 -April 30, 2014

## NPDES PII Small MS4 General Permit Annual Report


### Part I. General Information

**Contact Person:** Charles J. Aspinwall                      **Title:** Town Administrator

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

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:** Charles J. Aspinwall

**Title:** Town Administrator

**Date:** \_\_\_\_\_

## 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.

### *Notable Accomplishments/Improvements in Permit Year 11:*

- Stormwater violation identified and corrected at 1365 Main Street
  - Earthwork/construction activities were underway without a permit
  - Stop work order was issued
  - Property owner has since filed site plans, including a bioretention swale and separator
  - Site is now permitted and property owner is making a donation to the Public Library in lieu of a fee

### *Planned Activities:*

- Hickory Hill Subdivision – April 2014
  - Stormwater plans are currently under review by the Planning Board
  - 34 lots, 3 retention areas, vegetated swale between existing development and subdivision
- Rosenfeld Road – Drainage Project – Summer 2014
  - Flooding associated with Town-owned stormwater drainage (5 stormwater drainage pipes, 1 manhole, with 1 outlet pipe)
    - Town will redesign/update drainage structures
  - Outlet pipe discharges to adjacent wetland
    - Town will conduct silt removal and some wetland restoration
- Farm Street, Flynt Lock Acre Subdivision – I/I Planning – Summer 2014
  - Town-owned interceptor to be cleaned and inspected

**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 11</b>	<b>Planned Activities – Next Permit Term</b>
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 the annual drinking water Consumer Confidence Report in June 2013. The materials were incorporated directly into the bound report and included a one-page article titled “What Can You Do to Protect Local Waterways?” and a one-page article titled, “Where Does All the Dirty Water Go?” from the EPA.  The Consumer Confidence Report was mailed to every water account and resident, including each apartment.  The above materials, EPA “After the Storm” brochure 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 the annual Consumer Confidence Report.  Continue to make materials available at Town offices.
Revised					
1B	Develop and Broadcast Stormwater Presentation on Local Cable Network	DPW & Town Selectmen	Cable TV tapes of presentations shown annually.	The Town did not broadcast the EPA video “After the Storm” on cable this permit year.  Household hazardous waste collection events were advertised on the local cable network.	Continue cable broadcast of pertinent presentations and meetings.  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.
Revised			“After the Storm” video shown bi-annually.		

<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 11</b>	<b>Planned Activities – Next Permit Term</b>
1C	Send out Stormwater Press Releases	DPW	Copies of Articles.	Information for the Millis Beautification Day was advertised in the Millis/Medway paper “Our Town” in March 2014 and on the Town’s website in April 2014.  Press releases about the next Household Hazardous Waste Collection Day and responsible use of fertilizers and pesticides will also appear in the June 2014 edition of the Millis/Medway paper and are currently posted on the paper’s website.	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 11</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: “Protecting Water Quality from Urban Runoff” and the pamphlet “After the Storm”.	

<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 11</b>	<b>Planned Activities – Next Permit Term</b>
1E	Post Stormwater Information on Millis Website	DPW	Copies of Pages and Hits Annually	Information related to the Millis Beautification Day was posted on the Town’s website. The Town’s home page has a link to the Town’s stormwater management regulations.	Continue to update the website periodically with new educational materials and other applicable announcements.
Revised			Copy of website page.	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.
1F	Classroom Stormwater Education	DPW, School Department & Consultant	Stormwater lesson plan and number of students participated	The Millis Garden Club continued to educate volunteers through events such as the Millis Beautification Day on April 12, 2014 regarding the care, maintenance, and water efficient plantings for the Town Hall landscaped area, irrigated by cistern-collected stormwater runoff.	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.		

## 2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11	Planned Activities – Next Permit Term
2A Revised	Establish a Stormwater Telephone Hotline	DPW	Record number of phone calls to hotline, copies of articles.	<p>1 call was received in the past year regarding stormwater issues on Rosenfeld Road. The Town will lower the curb and pour a new sidewalk in Summer 2014 to address this issue.</p> <p>Calls were received related to the ongoing beaver problem near Rose Road. The Town inspected the 300ft beaver dam and it was determined to be on private property. The neighborhood plans to trap and relocate the beavers and the state will help breach the dam.</p> <p>DPW addressed each of the stormwater issues and the hotline was promoted through the stormwater website.</p>	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.
2B Revised	Mark Storm Drains with Stencils During Cleaning	DPW	<p>Storm drains marked in the highest priority subbasins in Year 2.</p> <p>Mark as many as possible with volunteers.</p>	<p>DPW refreshed the storm drain stencils along Main Street, Exchange Street, and Village Street.</p> <p>The DPW continued to use its own stencils and non-toxic street marking paint.</p>	<p>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.</p> <p>Solicit volunteers and pursue stenciling in low priority sub-basins, such as side streets.</p>

<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 11</b>	<b>Planned Activities – Next Permit Term</b>
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 12, 2014. Approximately 105 volunteers were involved through the Millis Garden Club, Millis Lions Club, Boy &amp; Girl Scouts, Millis High School and Millis DPW. 113 cubic yards of trash and brush were collected as part of the cleanup: 200 35-gallon leaf bags, 140 35-gallon trash bags, 5 small dump truck loads of brush (3 yards each), 1 couch and 2 TVs.</p> <p>35 volunteers from Millis participated in the Earth Day cleanup event organized by the Charles River Watershed Association (CRWA). The cleanup took place on April 26, 2014 and focused on the Charles River banks near Rt. 115, resulting in 35 gallon trash bags.</p>	<p>Additional river, stream and pond cleanups will continue to be conducted in the Town led by the Millis Garden Club &amp; Millis Lions Club with assistance from the Millis DPW.</p> <p>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

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11	Planned Activities – Next Permit Term
3A	Make Annual Household Hazardous Waste Collections Available to Residents	DPW & Board of Health (BOH)	Document Quantity of Tickets Sold.	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 was available for a fee on Wednesdays from April 1, 2013 through September 30, 2013 and April 1, 2014 - present at the Norfolk Transfer Station.  13 Millis residents participated in the HHW disposal events during Permit Year 11.	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.  Track the number of Millis participants and explore ways to improve attendance.  Evaluate methods for tracking the volume of materials collected by Millis participants.
Revised					
3B	Develop Primary Town Storm Drain System Map	DPW	95 % of system mapped on GIS.	Outfall and storm drain system mapping was completed in Year 9.	Continue to revise base map as needed based on new development or differences observed in the field.
Revised					
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 in Year 11.	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					



<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 11</b>	<b>Planned Activities – Next Permit Term</b>
3D	Complete Storm Drain Map	DPW	Map All Outfalls by Year 4	Outfall and storm drain system mapping was completed in Year 9.	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	The Town completed its GIS system and conducted field verification for all utilities.	
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 28, 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.		
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.	As discussed in the Year 10 report, all outfalls have been screened for illicit discharges and follow-up sampling and investigation activities did not identify any illicit discharges.	Sample identified dry weather discharges and update the town map, if needed.
Revised			All outfalls examined by Year 5	The Sewer System Rehabilitation Project continued in Permit Year 11 and consists of 9 manhole repairs, joint sealing, connection sealing, liner installations, etc. This resulted in an estimated peak I/I reduction of 1,690 gpd in Permit Year 11.	
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.		

<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 11</b>	<b>Planned Activities – Next Permit Term</b>
3H	Setup and Advertise a Hotline for Illicit Discharges	DPW & BOH	Log of Complaints and Action Taken.	DPW operates the Illicit Discharge Hotline (refer to BMP 2A) and 3 calls regarding illicit discharges in the form of sewer line breaks were received and resolved in Year 11: - 2/11/2014 - 4/1/2014 - 4/7/2014  The Town advertises the DPW and phone number with press releases, the Town's stormwater website, and stormwater educational materials.	Continue to advertise the DPW and phone number with press releases, the Town's stormwater website and the stormwater educational materials.  Continue tracking calls and recording investigative and corrective actions taken by the Town.
Revised					

### 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 11</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 conducted the following septic inspections in Permit Year 11: - Perc Tests and Soil Evaluations: 13 - Septic Plans (new construction): 7 - Septic Construction Permits: 9 - Title 5 Inspection Report reviews: 19 - Septic Abandonment (w/sewer 3 Distribution Box Repairs (D-Box): 3 - Innovative/Alternative Technology Systems: 9 - Reports and or Inspections of I/A Systems: 17	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.		

<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 11</b>	<b>Planned Activities – Next Permit Term</b>
3J	Model Study for Localized Sewerage Treatment Facilities	DPW	Study results by end of Permit Year 5.	The Town previously purchased more sewer capacity from the Town of Franklin to address the Dyer, Village, and Pleasant Street neighborhood. The Millis Sewer Study Committee also reserved additional capacity for Farm Street and the downtown area.	No further activities are planned at this time.
Revised					

#### 4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11	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				The Town anticipates revisiting the bylaw and authority once the Phase II permit is re-issued.	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.	As discussed under BMP 2A, 1 call was received for stormwater issues on Rosenfeld Street. The stormwater hotline is advertised on the DPW website and calls are addressed as they are received.	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.	1 project disturbing greater than one acre occurred during the permit year.  Multiple inspections were conducted at the following sites: Ridge Street culvert; Island Road culvert; Forest Road; Main Street Library Project; the Route 109 flood control project; weekly on Causeway Street and Island Road for beaver activity; Forest Road culvert; and the Main Street culvert project.  1 stop work order was issued for 1365 Main Street for conducting earthworks without a permit. The site has since applied for and been granted a permit.	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					

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

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

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11	Planned Activities – Next Permit Term
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				As discussed under BMP 4A, the Town anticipates revisiting the bylaw and authority once the Phase II permit is re-issued.	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.	Inspections were conducted to ensure BMPs are maintained in accordance with the O&M Plans on file.  43 sanitary sewer manholes were inspected in 2011 for infiltration/inflow (I/I). 36 sanitary sewer manholes were inspected for I/I in 2012. No sanitary sewer manholes were inspected in 2013.	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 11	Planned Activities – Next Permit Term
6A Revised	Clean Catch Basins	DPW	Clean all catch basins.	<p>930 catch basins in town were cleaned, yielding approximately 145 cubic yards of cleanings that were stored at the Millis Tree Farm for reuse through the existing Beneficial Use Determination (BUD) approval.</p> <p>4 Stormceptors were also cleaned, yielding approximately 9 cubic yards of cleanings.</p>	<p>Continue catch basin cleaning program annually and 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 25 cubic yards of sweepings were reused through the Town's BUD.</p> <p>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>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	<p>Road salt materials are stored under cover at the Highway Garage and the loading area is cleaned as needed.</p> <p>Improvements to the doors for the salt shed were completed.</p>	<p>Continue existing practices and conduct repairs as needed.</p>
6D Revised	Calibrate Salt Spreading Equipment	DPW	Prevent over-application of salt as shown with calibration records.	<p>Equipment is calibrated annually. Salt use is tracked through purchase records. 2,444.43 tons of salt and 357.75 tons of sand were purchased this winter.</p>	<p>Continue to calibrate equipment and record quantities annually.</p>

<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 11</b>	<b>Planned Activities – Next Permit Term</b>
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 are sanded less often than the main streets in an effort to reduce the amount of sand and salt used each year.	Continue existing practices and evaluate appropriate application rates for various routes and watersheds while maintaining safe winter drivability.
Revised				Continued to use the rear-mounted spreader to reduce salt application rates significantly (estimated greater than 10% reduction) compared to arterials and major roads.	
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.	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				The Town reduced chemical applications at fields from 4 at the start of the program to 2 applications during this permit year. The Town conducted 1 application of pesticides along public rights-of-way.	

<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 11</b>	<b>Planned Activities – Next Permit Term</b>
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 continues to limit fertilizer application to just two applications at Town fields.	The Town will monitor ways to reduce the use of chemical applications if possible.
Revised					
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. Spill prevention and response training was conducted in August 2013.  Routine inspections were completed and the annual plan evaluation was completed in Summer 2013.  The SPCC Plan will be recertified within the Permit Year.	Recertify the SPCC Plan.  Follow the updated SPCC Plan and continue with DPW employee training.
Revised					
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 2,896,976 gallons of water was lost to fire fighting/training, hydrant flushing, street cleaning and water main breaks this permit year.  The Town also requires contractors to use filter socks during excavations to prevent excess sediment discharge.	Continue existing practices.
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 11</b>	<b>Planned Activities – Next Permit Term</b>
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 to ensure 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					
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. The Town secured \$25K in funding for Phase II of the BUD site. Phase II is now underway. Land has been cleared and some material has been spread. Phase II will be completed in summer of 2014.  The Town continued to conduct beaver control activities (e.g., pipe & catch basin cleaning) to address clogged pipes and culverts.	Operate BUD site in accordance with DEP permit, SOPs, and Inspection & Maintenance Plan.
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 11</b>	<b>Planned Activities – Next Permit Term</b>
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.	Follow in-house protocol for the review of flood projects to ensure that new projects consider water quality improvements.
Revised				The Causeway Street culvert was replaced in July 2013.	Replace culverts as necessary and as funding allows.  Continue to apply for flood control project grants to replace flooded infrastructure.
6O	Conduct Town Employee Stormwater Training	DPW	Attendance Sheet & Copy of Program.	SPCC and NPDES Phase II Stormwater Training took place in August 2013.	Continue to conduct SPCC and stormwater training for DPW employees. Establish a Stormwater Training program and track attendance annually.
Revised					

### 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 11</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 11	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 11	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 previous reports, the Town developed a preliminary strategy to meet TMDL requirements for the Charles River and impairments for Bogastow Brook, 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**

Three 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; the Pathogen TMDL for the Charles River Watershed, CN 0156.0, January 2007; and the Nutrient TMDL for the Upper/Middle Charles River, CN 272.0, May 2011. Bogastow Brook is listed as impaired for pathogens and was addressed as part of the Charles River pathogen TMDL. The recommendations in this TMDL apply to Bogastow Brook. In general, the Town is working to address identified sources that contribute to the impairment of water bodies and notable accomplishments in Year 11 include and continued I/I activities throughout Town.

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. Further action is pending the release of the final Phase II Permit for North Coastal Watersheds.

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

- Number of Outfalls Inspected for Illicit Discharges: N/A, addressed in Year 8.
- Number of Outfalls Re-sampled: N/A
- Number of Illicit Discharges Found: 3 identified during this permit term
- Millis Beautification Day (4/12/14): volunteers removed 113 cubic yards of trash and brush: 200 leaf bags, 140 bags of trash, 5 small dump truck loads of brush 1 couch and 2 TVs.
- CRWA Earth Day Cleanup Event (4/26/14): 35 volunteers from Millis, 35 gallon trash bags.
- 930 catch basins were cleaned, generating 145 yards of catch basin cleanings during this permit term.
- All streets in town were swept, generating 25 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)	N
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	(#)	1*
• community participation	(%)	13 cars
• material collected	(tons or gal)	5 full carloads 7 partial carloads
School curricula implemented	(y/n)	N

\*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. Thirteen (13) 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	(%)	100%
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	100%
Outfalls inspected/screened	(# or %)	0
Illicit discharges identified	(#)	3
Illicit connections removed	(# ) (est. gpd)	3
% of population on sewer	(%)	50%
% of population on septic systems	(%)	50%

## 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 %)	Multiple
Tickets/Stop work orders issued	(# or %)	1
Fines collected	(# and \$)	Donation to Public Library
Complaints/concerns received from public	(#)	1

## 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/yr
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	1-2/yr*
Total number of structures cleaned	(#)	930
Storm drain cleaned	(LF or mi.)	NA
Qty. of cleanings /debris removed from storm sewer infrastructure	(lbs. or tons)	145 CY
Disposal or use of cleanings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		DEP BUD
Cost of cleanings disposal	(\$)	\$0
*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/yr
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)	25 CY
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	DEP BUD
Cost of sweepings disposal	(\$)	\$0
Vacuum street sweepers purchased/leased	(#)	1 owned
Vacuum street sweepers specified in contracts	(y/n)	N

## Operations and Maintenance (con't.)

Reduction in application on public land of: (“N/A” = never used; “100%” = elimination)*		
▪ Fertilizers	(lbs. or %)	0
▪ Herbicides	(lbs. or %)	0
▪ Pesticides	(lbs. or %)	0
*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 continued its reduced chemical applications at fields from 4 at the start of the program to 2 applications during this permit year.		

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)	N
Manual control spreaders used	(y/n)	Y
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)	Y
Storage shed(s) in design or under construction	(y/n)	N