

Municipality/Organization: Maynard, MA
EPA NPDES Permit Number: MA041208
MassDEP Transmittal Number: W-035581
Annual Report Number & Reporting Period: Year 11
April 1, 2013 – March 31, 2014

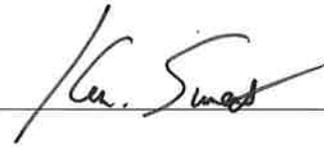
NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2014)

Part I. General Information

Contact Person: Kevin Sweet **Title:** Town Administrator
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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: 
Printed Name: Kevin Sweet
Title: Town Administrator
Date: 4-30-14

Part II. Self-Assessment

During Permit Year 11, the Town of Maynard continued its focus on our Stormwater Management Program and continued to meet the conditions of the Permit. The Town's Stormwater Management Team (SWMT) consists of representatives from the DPW (Water, Sewer, Highway), Conservation Commission, Open Space Committee, Selectmen's Office, and Board of Health. Town Staff mainly from the DPW and Conservation Commission. The SWMT members coordinate regularly and focus on stormwater management activities. As required by Part II.D.1 of the 2003 *NPDES General Permit for Stormwater Discharges from Small MS4s*, the Town has evaluated compliance of its Stormwater Management Program with the conditions of the Permit as part of developing this annual report. The Town has made substantial progress implementing BMPs and meeting permit requirements.

Also, as required by Part II.D.2 of the General Permit, the Town evaluated the appropriateness of selected BMPs in efforts towards achieving the defined measurable goals and has determined that BMPs and measurable goals continue to be appropriate.

Notes on the Permit Year 11 Annual Report:

1. Measurable goals by Permit Year were extrapolated from the "Time Frames" page in the original NOI and are based on revisions made in prior Annual Reports.
2. Planned activities for the next permit term have been designated if a BMP under the 2003 General Permit was not completed, is still under progress for completion, or is expected to continue. Once the General Permit is re-issued by EPA, the Town will prepare and submit a Notice of Intent for compliance.
3. The Conservation Commission continues to coordinate with MassDOT on state highway projects within the town, specifically on stormwater design impacting Maynard water ways.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
1.1.1	Homeowner Focus – Mail educational flyer with stormwater survey	SuAsCo Council and Stormwater Management Team (SWMT)	YR01: Flyer distribution. Compile and evaluate survey results. YR02-11: None.	BMP complete. No measurable goals planned for Permit Year 11 - BMP completed in Permit Year 1 by distributing Stormwater Matters brochure. Also, SuAsCo sent community survey in December 2003. Due to limited survey response, compilation and evaluation was infeasible.	Measurable goals for the 2003 General Permit have been met.
Revised					
1.1.2	Homeowner Focus – SWMT Brochures available at Town Hall	SWMT	YR04-11: Brochures available at Town Hall.	<p>Measurable goal met. Brochures continued to be available at the Town Hall:</p> <ul style="list-style-type: none"> • <i>Stormwater Matters;</i> • <i>After the Storm;</i> • <i>Don't Trash the Grass!;</i> • <i>Butterfly Gardens;</i> • <i>Rain Gardens;</i> • <i>Maynard's Wetlands & You: A Guide to Living with Wetlands;</i> • <i>Improving Wildlife Habitat in your Backyard;</i> • <i>Green Lawns Without Green Waters!;</i> • <i>When it Rains... You Save;</i> • <i>Friends of the Assabet River National Wildlife Refuge;</i> • <i>What's going down YOUR storm drain?;</i> • <i>Native Species for Waterside Plantings & Vegetative Buffers; and</i> • <i>Support Land and Water Conservation with the New Land & Water License Plate.</i> 	Measurable goals for the 2003 General Permit have been met. Town will continue to keep relevant brochures available at the Town Hall and keep the Conservation Commission page on the town website up to date with stormwater related links..
Revised				In addition, the Conservation Commission website continues to have stormwater-related links and SuAsCo bookmarks were periodically available at the Town library.	

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
1.2.1	Student Focus – Teach stormwater lesson to 5 th grade students	SuAsCo Council and SWMT	YR01: None YR02: Prepare and implement lesson. YR03-11: None	BMP Complete. No measureable goals planned for Permit Year 11. BMP completed in Permit Year 02.	Measurable goals for the 2003 General Permit have been met.
Revised					
1.3.1	Business Focus – Mail educational flyer with a stormwater survey	SuAsCo Council and SWMT	YR01-02: None. YR03: Flyer distribution. YR04-11 None.	BMP complete. No measurable goals planned for Permit Year 11. BMP was completed in Permit Year 3 with distribution of SuAsCo flyer and survey, but there was an insufficient response to warrant analysis of survey responses.	Measurable goals for the 2003 General Permit have been met.
Revised				In Permit Year 11, each household was mailed a copy of the Water Quality Report for Maynard. A copy of this report is included with this report and includes information on source control and water conservation. WQ Report http://www.townofmaynard-ma.gov/2013/06/27/2012-water-quality-report/	
1.4.1	General Public Focus – Hold a stormwater media campaign	SuAsCo Council and SWMT	YR01-03: None YR04: 4 press releases planned for YR05 YR05: 2 press releases related to stormwater program YR06-11: Press releases related to stormwater program.	In Permit Year 11, the following articles related to stormwater were released in local media. <ul style="list-style-type: none"> • <i>Beacon Villager: Household Hazardous Waste Collection Day in Maynard</i> • <i>Maynard can! Resources on Water</i> • www.cisma-suasco.org: Invasive species control information posted • Maynard Litter League Litter Busters cleanup dates via email. • <i>Beacon Villager: Scoop the poop – pick it up! by MayDOG</i> The second press release planned for Permit Year 5 continues to be delayed until EPA issues the new General Permit.	Measurable goals for the 2003 General Permit have been met. Press release and local newspaper articles related to stormwater initiatives are expected to continue.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
1.4.2	General Public Focus – Show a stormwater video on a local cable station	SuAsCo Council and SWMT	YR01-04: None. YR05: Obtain and air stormwater video. YR06-11: None	BMP complete. No measurable goals planned for Permit Year 11. <i>After the Storm</i> video and <i>Reigning in the Storm-One Building at a Time</i> were obtained from EPA in previous permit years and were aired on the Town's public access cable television station.	Measurable goals for the 2003 General Permit have been met.
Revised					

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
2.1.1	Homeowner Focus – circulate stormwater traveling display	SuAsCo Council and SWMT	YR01: Develop display and feature at 3 locations. YR02-04: None. YR05-11: Stormwater display. YR11: Rain Barrel sales	Display titled <i>Maynard's Stormwater Management Program</i> continued to be exhibited at Town Hall. The Town of Maynard, the Maynard Climate Action Network and the Great American Rain Barrel Company teamed together in Permit Year 11 to offer homeowners. A sale of Rain Barrels was held on August 3 rd . Rain Barrel Program: http://www.townofmaynard-ma.gov/2013/07/02/rain-barrel-program/#more-7655	Measurable goals for the 2003 General Permit have been met. The Town will continue to exhibit stormwater posters/ displays and offer rain barrels to homeowners. Continue to offer the Rain Barrel Program for residents.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
2.4.1	General Public Focus – Annual River Cleanup Day	SuAsCo Council and SWMT, DPW	YR03-11: Annual cleanup and other cleanups across town.	<p>The 25th Assabet River Cleanup was held on September 21, 2013. The Maynard DPW supported waste removal efforts during this cleanup. In 2013, 18 bags of trash, 4 tires on rims, ~30 tires without rims, car parts: transmission, steering wheel, battery, seat, a bicycle, a scooter, 2 shopping carts, a metal cage, a refrigerator, an air conditioner, an ax, a very large rug, a fishing pole, lots of bottles, clothing/shoes, cinderblocks, a filter cylinder, and scrap metal rods and parts, was removed in Maynard.</p> <p>The Maynard Litter League held a townwide cleanup from April 13th-April 21st and four other cleanups (July 28th, August 18th, September 29th, and November 9th) in various locations throughout town during the year. The Maynard Litter League, Maynard's year-round anti-litter organization is working towards the goal of a litter-free Maynard by engaging all members of the community in litter prevention, cleanup, and education efforts.</p> <p>OARS organized invasive species removal efforts in the Assabet River on July 30th and August 3rd.</p>	<p>Measureable goals for the 2003 General Permit have been met.</p> <p>The Annual Clean-up and other town group clean-up efforts are expected to continue.</p>
2.5.1	General Public Focus – LID By-law Meetings	SWMT	YR04-07: Hold meetings to create a stormwater and LID Bylaw. YR08-11: None.	BMP Complete. Throughout Permit Years 4, 5, 6, and 7, the Town held numerous stakeholder and public meetings as part of the extensive process to develop the local stormwater bylaw. Originally, the Town planned to develop a stormwater and LID bylaw, but ultimately adopted one Stormwater Management Bylaw that does not include LID provisions (see BMPs 4.1.1 and 5.1.1).	Measureable goals for the 2003 General Permit have been met.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
3.1.1	Stormwater System Mapping – Map outfalls	DPW	YR01-03: Field check GIS map locations of outfalls. YR04: None YR05: 100% of outfalls will be field checked. YR06-011: Drainage mapping maintained.	Outfall mapping has been completed for approximately 70% of the system. Map includes all outfalls and receiving waterbodies. In Permit Year 11, the Town has attained a consultant to identify, map using GPS technology, and photograph each outfall to the Assabet River in the Town. The outfall mapping will be incorporated to the existing Town GIS drainage mapping system.	Measureable goals for the 2003 General Permit have been met. The Town will complete outfall mapping and continue to update the drainage mapping as necessary.
Revised					
3.1.2	Stormwater System Mapping – Map storm sewer system	DPW	YR01-11: Build GIS system for stormwater planning.	In previous permit years, the Town built a GIS system with assistance from consultants. Map includes all catch basins, manholes, and connectivity (including pipe sizes) that drain to the outfalls identified.	The Town plans to update the entire drainage system in GIS included updated and complete outfall information.
Revised					
3.1.3	Stormwater System Mapping – Map structural BMPs	DPW	YR01-11: New BMP structures will be identified and included in GIS system as budget allows..	New BMPs were installed in Maynard in Permit Year 11. A vegetated filter strip was installed at a residential home to mitigate for the effects of paving a previously gravel driveway. Additionally, two large infiltration chambers under new parking lots at the Maynard High School were installed. The Town will obtain records for the new BMPs and will update the GIS drainage mapping where budget allows.	Measureable goals for the 2003 General Permit have been met. The Town plans to update the drainage mapping, as necessary and as budget allows.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
3.1.4	Stormwater System Mapping – Develop regulations to have developers pay Town’s cost for GIS updates caused by the development	Planning Board	YR01: None YR02 Draft recommended Planning Board Regulations. YR03-04: None. YR05-06: Adopt Regulations. YR07-11: Adopt Bylaw with consideration for regulations.	Town continued to develop regulations for the <i>Stormwater Management Bylaw</i> approved at Fall 2009 Town Meeting.	Town plans to continue development of regulations.
3.2.1	Regulatory Mechanism – Develop bylaw prohibiting illegal non-stormwater discharges into MS4. Include enforcement procedures in Bylaw.	Selectmen’s Office / SWMT	YR01-02:Review existing bylaws and recommend revisions YR03: None YR04: Implement recommendations for regulatory revisions. YR05-06: Draft and adopt Bylaw. Receive Attorney General approval. YR07-11: None.	BMP complete. In Permit Year 5, the Town of Maynard <i>Storm Drain System By-law</i> was passed at the October 29, 2007 Special Town Meeting by a vote of 96 to 4. The By-law was approved by the Massachusetts Attorney General in Permit Year 6. Town continues to implement bylaw and enforcement procedures as necessary.	Measureable goals for the 2003 General Permit have been met. Town plans to continue to implement bylaw and enforcement procedures as necessary

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
3.3.1	IDDE Plan – Organize SWMT to monitor the Town’s compliance with permit requirements	Selectmen’s Office	YR01-05: Meetings held. YR06-11: Town Departments separately and together monitor compliance.	Members of SWMT continued to separately monitor compliance with permit requirements and carry out Stormwater Management actions. The Planning Board, Conservation Commission, and DPW continue to accept complaints from the public for potential illicit discharges and illegal dumping. The DPW conducts any necessary field investigations as budget allows. In Permit Year 11, one case of illegal dumping was reported to the DPW. The DPW was able to respond quickly and contain all materials in the catch basin where it was dumped. No dumped materials were discharged to the drainage system and outfalls.	Measureable goals for the 2003 General Permit have been met. The Town will continue to monitor and respond to complaints associated with IDDE.
3.3.2	IDDE Plan – Identify procedures for locating areas likely to have illicit discharges and illegal dumping.	SWMT/DPW	YR01-5: Develop and implement procedures to identify sources of and remove illicit discharges. Procedures to include identification of priority areas, documentation of actions, evaluation of impacts to MS4, and inspection of outfalls during dry-weather flows. YR06-11: Document illicit discharges and illegal dumping.	In Permit Year 5, the Town worked with a consultant to develop a written Illicit Discharge Detection and Elimination (IDDE) Plan. This plan identifies what an illicit discharge is, why illicit discharges matter, and presents a six-step IDDE plan to: <ul style="list-style-type: none"> • Prioritize Areas for Outfall Inspections. • Identify Illicit Discharges & Source Connections. • Sampling Procedures. • Investigate Illicit Connection Sources. • Document Actions and Evaluate Impacts. In Permit Year 11, the DPW continued to check outfalls and catch basins in problem areas prior to 1" or more storm events. No signs of illicit discharges or illegal dumping were observed during cleaning and/or inspections of catch basins and outfalls. During Permit Year 11, the Town attained a consultant to implement the Town’s Inflow/Infiltration 5-year plan. The 1 st year of the 5-year plan will include identifying and TVing segments of the sewer system where infiltration or inflow is likely.	Measureable goals for the 2003 General Permit have been met. The Town will continue to address known illicit discharges and illegal dumping activities as budget allows. The Town will continue to implement the Infiltration/Inflow 5-year plan to reduce any infiltration or inflow associated with the sewer system.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
3.4.1	Educational Outreach – Inform public employees, business, and general public of hazards of illicit discharges	SuAsCo Council and SWMT	YR01: None. YR02-11: Information materials distributed.	Town Staff continue to be aware of hazards of illicit discharge and illegal dumping. Town continues to educate businesses and public about illicit/illegal dumping. <ul style="list-style-type: none"> Advertisement regarding Board of Health's annual (June 15, 2013) household hazardous waste day was provided in the Beacon Villager. Local notices provided at the Town Hall and Fire Station bulletin boards, and in the 2013- 2014 Maynard Recycling Information pamphlets provided to residents/businesses. Local Boy Scout Troop 130 held Electronics Recycling and Bottle Drives in October 2013 and March 2014 	Measurable goals for the 2003 General Permit have been met. The Town will continue to hold the annual household hazardous waste day and provide local notices as budget allows.
3.5.1	Allowable Non-stormwater Discharges – Determine if any EPA-listed non-stormwater flows need to be addressed by illicit discharge program	SWMT	YR01: Decision made YR02-04: None YR05-11: If necessary, address through illicit discharge program.	In Permit Year 2, DPW determined that allowable non-stormwater discharges are not a problem. BMP complete.	Measurable goals for the 2003 General Permit have been met. This BMP will be reassessed for the next General Permit.
3.6.1	Waste Disposal Programs – Hazardous waste management and drop-off program	Board of Health	YR01-05: Conduct twice a year. YR05-11: Conduct Annual Hazardous Waste Day.	The Town held their Annual Hazardous Waste Collection Day on June 15, 2013 with fifty people participating. In addition, local Boy Scout Troop 130 held two Electronics Recycling and Bottle Drives.	Measurable goals for the 2003 General Permit have been met. The Town plans to continue to hold the annual household hazardous waste day and provide local notices as budget allows.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
4.1.1	Regulatory Mechanism – Develop and implement Town bylaws regulating erosion and sediment control for construction sites utilizing appropriate BMPs	SWMT	YR01: None YR02-03: Develop bylaws YR04: None YR05-11: Implement bylaws	In Permit Year 7, the <i>Stormwater Management Bylaw</i> was approved at the Fall 2009 Town Meeting. The Attorney General approved the Bylaw in Spring 2010. BMP complete. Town is implementing bylaw.	Measurable goals for the 2003 General Permit have been met.
4.1.2	Regulatory Mechanism – Add design standards and criteria as necessary to Town department regulations regarding construction site erosion control.	Planning Board/ Conservation Commission/ SWMT	YR01-02: Determine standards, draft regulations YR03: None YR04-05: Update regulations YR06-11: Implement Bylaw.	The Town continues to implement the <i>Stormwater Management Bylaw</i> . The Bylaw includes performance standards by referencing the Massachusetts Stormwater Management Handbook and Massachusetts Stormwater Management Standards, which include design standards and erosion controls. Draft stormwater regulations were developed by the Maynard conservation commission in Permit Year 11.	Measurable goals for the 2003 General Permit have been met. The Town will work to finalize the draft stormwater regulations.
4.1.3	Regulatory Mechanism – Evaluate sanctions for enforcement of erosion and sediment controls	SWMT/ Selectmen’s Office	YR01: Develop goals. YR02: Draft YR03: None. YR04: Develop final sanctions. YR05: Develop draft. YR06-11: Develop and implement final Bylaw.	BMP complete. Town continues to implement the <i>Stormwater Management Bylaw</i> , approved at Fall 2009 Town Meeting and by Attorney General in Spring 2010. Bylaw includes sanctions for enforcement of erosion and sediment controls	Measurable goals for the 2003 General Permit have been met.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
4.2.1	Site Plan Review Procedures – Implement pre-construction review of project storm water pollution prevention plan (SWPPP)		YR01: None YR02-05: Identify and train staff. YR06-11: Conduct inspections.	Town conducts "round table" pre-construction reviews of proposed development. At reviews, Planning, Building, Health, Fire, ConCom, and DPW raise questions and concerns. Pre-construction review and enforcement of SWPPPs via inspections was continued by Conservation Commission with assistance from Building Inspector and DPW.	Measurable goals for the 2003 General Permit have been met.
Revised					
4.3.1	Site Inspection/ Enforcement Procedures – Conduct construction site inspections		YR01: None YR02-05: Identify and train staff. Review each project. YR06-11: Conduct inspections.	Depending on jurisdiction (Conservation, DPW, Building, Board of Health), construction site inspections continued to be conducted. Also, Qualified Site Inspectors may conduct inspections for compliance with local, state, and federal permit requirements.	Measurable goals for the 2003 General Permit have been met. The Town will continue to conduct site inspections as budget allows.
Revised					
4.3.2	Site Inspection/ Enforcement Procedures – Develop a procedure for handling reports from the public of non-compliance	SWMT	YR01: None. YR02-11: Determined complaints to be handled on a case-by-case basis.	During Permit Year 11, one demolition project was completed without receiving a permit. The Maynard conservation commission coordinated with the EPA and conducted a site visit with an EPA inspector and did not find any non-compliance issues (EPA Tracking Number MAR12A187). The conservation commission issued a SW permit for this project which requires regular monitoring. Monitoring records are collected by the Maynard conservation commission. The EPA inspector also inspected the Maynard High School construction site and noted a few issues which were addressed.	Measurable goals for the 2003 General Permit have been met. The Town will continue to address construction related complaints as budget allows.
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 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
5.1.1	Regulatory Mechanism – Develop and implement bylaws regulating controls for post-construction runoff utilizing appropriate BMPs	SWMT	YR01: Draft bylaw YR02-03: Revise bylaw YR04-11: Pass and implement bylaws	The <i>Stormwater Management Bylaw</i> , approved at the Fall 2009 Town Meeting, regulates post-construction stormwater runoff. The Attorney General approved the Bylaw in Spring 2010. In Permit Year 11, the Town continued to implement the <i>Stormwater Management Bylaw</i> . Three projects applied for coverage under this bylaw (Fowler Street subdivision project, 213 Main Street project, and 129 Parker Street).	Measurable goals for the 2003 General Permit have been met. The Town will continue to conduct peer reviews of drainage designs for appropriate BMPs.
Revised					
5.2.1	Review BMP Designs – Pre-construction review for conformance with standards/regulations	Planning Board/ Conservation Commission	YR01-11: Review each project.	Town continued to coordinate permitting and development review process for each project for conformance with standards and regulations, including “round table” discussions where Planning, Building, Health, DPW, and Conservation raise questions and concerns.	Measurable goals for the 2003 General Permit have been met. The Town will continue coordinate permitting and development review process for projects.
Revised					
5.3.1	Site Inspection/ Enforcement Procedures – During construction, inspect that BMPs are properly constructed	Planning Board/ Conservation Commission	YR01-11: Inspect each project	Post-construction site inspections for permitted projects are conducted by Conservation, DPW, Building Department, or Board of Health depending on jurisdiction. In accordance with the Stormwater Management Bylaw, permitted BMPs installed under the Bylaw are inspected in accordance with their approved maintenance plan by a private entity. Also, Qualified Site Inspectors may conduct inspections for compliance with local, state, and federal permit requirements.	Measurable goals for the 2003 General Permit have been met. The Town will continue to conduct construction inspections as budget allows.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
5.3.2	Site Inspection/ Enforcement Procedures – Post-construction provide inspection to be assured that BMP's O&M procedures have been followed	DPW	YR01: None YR02-YR03: Identify and train staff. YR04-11: Inspection as required.	ConCom and/or DPW conduct pre- and post-construction inspections for permitted projects. The <i>Stormwater Management Bylaw</i> references the Massachusetts Stormwater Management Handbook and Regulations for BMP O&M and enforcement. Post construction site inspections may also be conducted by Qualified Site Inspectors for compliance with local, state, and federal permit requirements.	Measurable goals for the 2003 General Permit have been met.
Revised					
5.4.1	O&M Procedures for Stormwater BMPs – Develop procedures for O&M requirements for structural BMPs	SWMT	YR01: None YR02-04: Develop procedures. YR05-11: None	BMP complete- no further action required. Town's <i>Stormwater Management Bylaw</i> requires O&M procedures consistent with the Massachusetts Stormwater Management Handbook.	Measurable goals for the 2003 General Permit have been met.
Revised					

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
6.1.1	Employee Training Program – Training on oil spill reporting and response, hazardous materials, and pesticide and fertilizer application	DPW/Fire Department	YR01-06: Conduct annual training. YR07-11: Implement training program initiatives.	A Good Housekeeping Workshop was held on June 3, 2008 and included DPW, Water, Sewer, Police, Fire, Public School representative, Conservation Commission, and Board of Health. Workshop reviewed Town's stormwater management program and good housekeeping Best Management Practices (BMPs) for municipal facilities and street drainage maintenance. Workshop included a review of spill response, hazardous materials, pesticide/fertilizer application BMPs, vehicle maintenance BMPs, proper roadway and stormwater system maintenance, and procedures for addressing illicit discharges/illegal dumping.	Measurable goals for the 2003 General Permit have been met. Town will continue to keep employees trained and implement training program initiatives, as budget allows
Revised				<p>Throughout Permit Year 11, Town employees continued to be aware of proper spill reporting/response, hazardous materials, and pesticide/fertilizer application. The Fire Dept. addresses major spills throughout Town and notifies DPW. DPW responds to assist with cleanup and close off MS4 system to prevent contamination. Minor spills are addressed with spill containment equipment and materials at DPW Garage. Pesticides and fertilizers were not used on public lawns in Year 11, and therefore training was not needed.</p> <p>During Permit Year 11, the Town of Maynard worked to update their pollution prevention procedures for each municipal facility to ensure all employees are adhering to preferred practices in the Town.</p>	The Town will continue to update and implement the procedures for municipal pollution prevention procedures.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
6.2.1	Stormwater Sewer System Operation and Maintenance – Storm sewer system and catch basin inspection and cleaning program.	DPW	YR01-11: Annual inspection and cleaning.	<p>In Permit Year 5 and 6, forms for documenting structural BMP maintenance were drafted and finalized and Town began use of forms for documenting inspections. In Permit Year 11, the Town continued to inspect and maintain structural stormwater BMPs. The town re-built five catch basins in Permit Year 11.</p> <p>The Town continued to optimize catch basin and outfall cleanings to focus on problem areas. Town inspects catch basins in problem areas before 1" of rain or more is expected. In Permit Year 11, all of the town's catch basins (~ 750) were cleaned by Sam's Catch Basin Cleaning Company and approximately 325 cubic yards of sediment and debris were removed.</p>	<p>Measurable goals for the 2003 General Permit have been met.</p> <p>The Town will continue to maintain their drainage system, as budget allows, and document repairs.</p> <p>The Town plans to rebuild 2 catch basins and complete storm drain cleaning at various locations in Permit Year 12.</p>
Revised					
6.2.3	Stormwater Sewer System Operation and Maintenance – Structural BMP inspection and maintenance program	DPW	<p>YR01: Develop and implement record keeping.</p> <p>YR01-08: Inspect all BMPs once a year.</p> <p>YR09-11: Inspect BMPs in accordance with long-term O&M plans.</p>	Towns structural BMPs currently consist of catch basins and are addressed under BMP 6.2.1. New structural BMPs were included as part of construction of the high school (two underground infiltration chambers), and will be inspected and maintained in accordance with the long-term operation and maintenance plan prepared in accordance with the Massachusetts Stormwater Standards and local <i>Stormwater Management Bylaw</i> .	Measurable goals for the 2003 General Permit have been met
Revised					
6.4.1	Municipal Industrial Operations – Evaluate operations at the Public Works Facility, transfer station, and the WWTF	DPW Consultant	<p>YR01-05: Develop and implement a program to reduce pollutant runoff from municipal operations</p> <p>YR06-11: Continue to implement schedules and procedures.</p>	<p>In Permit Years 5 and 6, a municipal facility inventory, including identification of applicable good housekeeping BMPs for municipal operations was developed. BMPs were reviewed as part of the Good Housekeeping Workshop (see BMP 6.1.1) Schedules and procedures for municipal maintenance activities and inspections of long-term structural controls were developed and implemented.</p> <p>In Permit Year 11, DPW began updating their pollution prevention procedures for each municipal facility.</p>	<p>Measurable goals for the 2003 General Permit have been met.</p> <p>The Town will continue to update and implement the procedures for municipal pollution prevention procedures.</p>
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 11 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 12
6.4.2	Municipal Industrial Operations – Review maintenance/repair programs for municipal vehicles, vehicle washing controls, and vehicle fueling operations.	DPW	YR01: None. YR02-03: Develop program controls and record keeping. YR04: None. YR05-11: Implement program controls and record keeping.	In Permit Years 5 and 6, reviewed maintenance and repair programs at municipal facilities. Reviewed recommended BMPs for vehicle repair/maintenance, vehicle washing, and vehicle fueling at the Good Housekeeping Workshop (see BMP 6.1.1). In Permit Year 11, DWP continued to implement BMPs and recommendations related to maintenance and repair programs at municipal facilities. DPW follows proper procedures for repairs/maintenance, washing, and fueling vehicles.	Measurable goals for the 2003 General Permit have been met. The Town will continue to implement BMPs and recommendations related to maintenance and repair program at municipal facilities, as budget allows.
Revised					
6.4.4	Municipal Industrial Operations – Review salt storage operations	DPW	YR01-11: No longer need to develop and implement program controls and record keeping, due to revised salt operation practices.	In Permit Year 5, salt storage and application procedures were reviewed at the Good Housekeeping Workshop (see BMP 6.1.1). The Town previously purchased an additional new deicing unit, which is designed to reduce the amount of sand and deicing agent applied. In Permit Year 11, no sand was applied and approximately 700 tons of magnesium chloride/sodium chloride mix was used for winter deicing. Salt mixture storage operation continued to be conducted under cover. .	Measurable goals for the 2003 General Permit have been met. Salt operations are conducted under a covered building.
Revised					
6.5.1	Municipal Roads – Street sweeping	DPW	YR01: None YR02-11: Annual street sweeping.	In Permit Year 8, the Town purchased a new sweeper. In Permit Year 11, all Town roads were swept twice. Downtown roads were swept multiple times in the year and prior to special town events. In Permit Year 11, approximately 230 cubic yards of material was captured from street sweeping.	Measurable goals for the 2003 General Permit have been met. Town will continue to sweep Town streets as budget allows.
Revised					

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA)

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
7.1.1	Address Assabet River Nutrient TMDL Report	SWMT	YR05: Review TMDL Report and select appropriate BMPs for Town to address recommendations from report. YR06-11: Implement BMPs.	BMP completed in Permit Year 5. BMPs to address impaired waters and TMDLs were identified in a memorandum to the Director of Public Works dated March 2008. BMPs were added to the report at that time. In addition, the Assabet River Nutrient TMDL continues to be addressed through BMPs implemented and identified under Minimum Control Measures 1 through 6.	Measurable goals for the 2003 General Permit have been met.
Revised					
7.1.2	Phosphorus Specific Education - Distribute brochures at Town Hall and include education about phosphorus reduction activities for homeowners and businesses as part of Public Education and Outreach Program.	SWMT	YR05-11: Record locations of brochure distribution and posters.	Display titled <i>Maynard's Stormwater Management Program</i> continued to be available at Town Hall and Library, and describes phosphorus in the Assabet River and phosphorus reduction activities. EPA and SuAsCo brochures continued to be available at Town Hall. SuAsCo Stormwater Matters posters, bookmarks, and postcards include information about proper fertilizer use and lawn care. Conservation also makes these brochures available at Public Meetings and Town events.	Measurable goals for the 2003 General Permit have been met. Stormwater displays and brochures are continuously used.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
7.1.3	Press Release - Develop a press release that mentions phosphorus, why it matters, and directs readers to public education materials describing what homeowners and businesses can do to reduce phosphorus loading to the Assabet River.	SWMT	YR05-06: Record date of press release. YR07-11: None.	BMP complete. No measurable goals planned for Permit Year 11. A press release was published on May 2, 2008 (Permit Year 6) in the Beacon Villager.	Measurable goals for the 2003 General Permit have been met.

7b. WLA Assessment

Per Part I.D.3 of the General Permit, "if the MS4 is required to implement storm water waste load allocation provisions of the TMDL, the permittee must assess whether the WLA is being met through implementation of existing storm water control measures or if additional control measures are necessary. The permittee's assessment of whether the WLA is being met is expected to focus on the adequacy of the permittee's storm water controls (implementation and maintenance), not on the response of the receiving water."

Maynard's MS4 discharges into the Assabet River, which has an approved Final TMDL for Total Phosphorus. Because the TMDL is for a pollutant likely to be found in storm water discharges from Maynard's MS4, their Stormwater Management Program includes BMPs that address the waste load allocation (WLA). The TMDL includes a load allocation of 1.0 lbs/day for watershed non-point source (NPS) pollution, but provides no BMP recommendations or other performance requirements for stormwater discharges. In addition, there are no Performance Agreements or Memorandum of Understandings for BMP and performance standard modifications of the TMDL provided on the MassDEP website.¹

Maynard's Stormwater Management Program includes a number of existing stormwater control measures, as reported in the above Annual Report, that address pollutants of concern in water quality impaired waters and total phosphorus. The BMPs identified under Minimum Control Measures (MCMs) 1 through 6, including, but not limited to, those relating to public education, implementation and enforcement of the Storm Drain System By-law that regulates illicit discharges, Stormwater Management Bylaw, construction and post-construction inspections, employee training, and the good housekeeping measures such as street sweeping, catch basin cleaning, and the

¹ MassDEP Total Maximum Daily Load website: <http://www.mass.gov/dep/water/resources/tmdls.htm>

elimination of pesticide and fertilizer use help prevent phosphorus, pathogens, organics, and metals from entering the water bodies within Town that include the Assabet River. In addition, the BMPs identified in the Town's Stormwater Management Program help reduce taste, odor, and color problems and modifications to temperature within water bodies.

Part IV. Summary of Information Collected and Analyzed

No additional information was collected in Permit Year 11.

Part V. Program Outputs & Accomplishments (OPTIONAL)

(Since beginning of permit coverage unless specified otherwise by a **, which indicates response is for period covering April 1, 2013 through March 31, 2014)

Programmatic

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	N
Annual program budget/expenditures **	(\$)	~\$10,000 disposal and estimated \$30,000 in employee labor
Total program expenditures since beginning of permit coverage	(\$)	Not calculated
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		General Fund

Education, Involvement, and Training

Estimated number of property owners reached by education program(s)	(# or %)	Not calculated
Stormwater management committee established	(y/n)	Y
Stream teams established or supported	(# or y/n)	Y
Shoreline clean-up participation or quantity of shoreline miles cleaned **	(y/n or mi.)	Y
Shoreline cleaned since beginning of permit coverage	(mi.)	
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	1
▪ community participation **	(# or %)	50 residents
▪ material collected **	(tons or gal)	n/a
School curricula implemented	(y/n)	Y

Legal/Regulatory

	In Place Prior to Phase II	Reviewing Existing Authorities	Drafted	Draft in Review	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					N/A
▪ Erosion & Sediment Control			X		
▪ Post-Development Stormwater Management			X		

Mapping and Illicit Discharges

	(Preferred Units)	Response
Outfall mapping complete	(%)	70%
Estimated or actual number of outfalls	(#)	50
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	70%
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	100%
Outfalls inspected/screened **	(# or %)	50%
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	70%
Illicit discharges identified **	(#)	0
Illicit discharges identified (Since beginning of permit coverage)	(#)	0
Illicit connections removed **	(#); and (est. gpd)	n/a
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	
% of population on sewer	(%)	99%
% of population on septic systems	(%)	1%

Construction

	(Preferred Units)	Response
Number of construction starts (>1-acre) **	(#)	3
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)	100%
Site inspections completed **	(# or %)	~800 (building and site inspections)
Tickets/Stop work orders issued **	(# or %)	0
Fines collected **	(# and \$)	0
Complaints/concerns received from public **	(#)	0

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	100%
Site inspections (for proper BMP installation & operation) completed **	(# or %)	20
BMP maintenance required through covenants, escrow, deed restrictions, etc.	(y/n)	
Low-impact development (LID) practices permitted and encouraged	(y/n)	Y

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets) **	(times/yr)	<1
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	<1
Qty of structures cleaned **	(#)	750
Qty. of storm drain cleaned **	(%, LF or mi.)	0
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	325 cu. yd.

Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Reuse/recycle/proper disposal by contractor.
Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	\$9,020
• Hourly or per basin contract rate **	(\$/hr or \$ per basin)	\$70/hr
• Disposal cost**	(\$)	Part of above
Cleaning Equipment		
• Clam shell truck(s) owned/leased	(#)	1, leased
• Vacuum truck(s) owned/leased	(#)	1, owned
• Vacuum trucks specified in contracts	(y/n)	0
• % Structures cleaned with clam shells **	(%)	100%
• % Structures cleaned with vector **	(%)	0%

(Preferred Units) Response

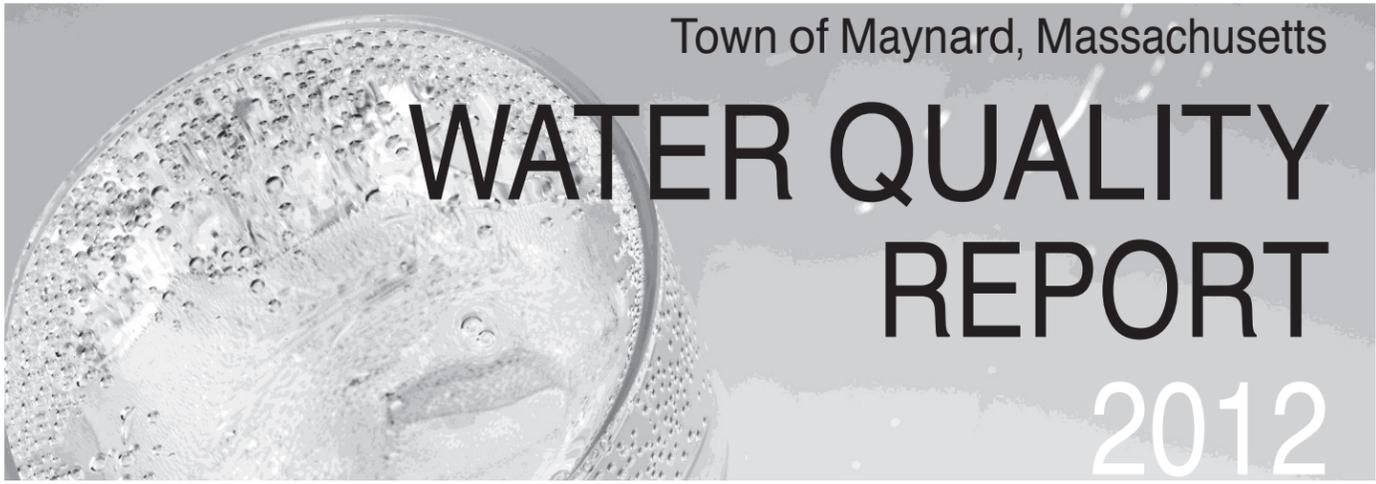
Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	2
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	>2
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	230 cu. yd.
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Beneficial use/compost
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	In house
• Hourly or lane mile contract rate **	(\$/hr. or ln mi.)	n/a
• Disposal cost**	(\$)	
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	1, owned
• Vacuum street sweepers owned/leased	(#)	0
• Vacuum street sweepers specified in contracts	(y/n)	0
• % Roads swept with rotary brush sweepers **	%	100%
• % Roads swept with vacuum sweepers **	%	0%

Reduction (since beginning of permit coverage) in application on public land of: ("N/A" = never used; "100%" = elimination)		
▪ Fertilizers	(lbs. or %)	100%
▪ Herbicides	(lbs. or %)	N/A
▪ Pesticides	(lbs. or %)	100%
Integrated Pest Management (IPM) Practices Implemented	(y/n)	N

	(Preferred Units)	Response
Average Ratio of Anti-/De-Icing products used ** (also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)	% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand	65% 35%
Pre-wetting techniques utilized **	(y/n or %)	N
Manual control spreaders used **	(y/n or %)	Y
Zero-velocity spreaders used **	(y/n or %)	N
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/l _n mi. or %)	
Estimated net reduction or increase in typical year sand application rate **	(±lbs/l _n mi. or %)	
% of salt/chemical pile(s) covered in storage shed(s)	(%)	100%
Storage shed(s) in design or under construction	(y/n or #)	
100% of salt/chemical pile(s) covered in storage shed(s) by May 2008	(y/n)	Y

Water Supply Protection

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



The Quality of Your Drinking Water

The Maynard Water Department is committed to providing our customers with water that meets or surpasses all state and federal drinking water standards. The Maynard water system is a registered public water supply with ID#2174000. To ensure that we continue to deliver this quality product, the Water Division continues to make investments in water quality monitoring, water source protection, water mains, and the water treatment plants. We are pleased to report the results of our 2012 water testing to inform you about your drinking water. We will be mailing you a report each year with information about annual water quality.

Maynard's Water System

Maynard's drinking water comes from seven groundwater sources. Wells #1-4 are constructed in sand and gravel deposits that overlie bedrock. These wells are 40-70 feet deep and are located in the southern half of Maynard. The remaining three wells, #5 -7, are approximately 400 feet deep into bedrock and are located in the northern half of Maynard. White Pond, a surface water supply located in Hudson and Stow, is no longer in service; however it remains available as an emergency backup supply. The Town has the infrastructure to supply 2.75 million gallons per day (MGD) of high quality treated water from the following facilities:

- **Old Marlboro Road Treatment Facility: Wells # 1-3: 1.0 MGD**
- **Green Meadow Treatment Facility: Well #4: 0.65 MGD, expandable to 1 MGD**
- **Rockland Avenue Treatment Facility: Wells #5-7: 1.1 MGD**

Maynard's Water Treatment

To meet state and federal requirements for public drinking water, our source water receives treatment before it is supplied to our customers. All three water treatment facilities disinfect water and have greensand filters to remove iron and manganese. In addition, the Old Marlboro Road and Green Meadow facilities add potassium hydroxide to control corrosion from household plumbing, and the Rockland Avenue facility is equipped with an air stripper to remove radon, a common contaminant in bedrock wells.

Help Protect Our Drinking Water Supply

The MassDEP has completed a Source Water Assessment and Protection (SWAP) Report for our system. The SWAP report assesses the susceptibility of public water supplies to potential contamination by microbiological pathogens and chemicals. A susceptibility ranking of high was assigned to our system using information collected during the assessment by the DEP. A source's susceptibility to contamination does not imply poor water quality. The report states the high vulnerability to contamination is due to the absence of hydrogeologic barriers (i.e. clay) that can prevent contamination migration. The complete SWAP Report is available online at the following website: <http://www.mass.gov/dep/water/drinking/2174000.pdf>

Protecting our water sources is just as important as conserving drinking water. You play an important role in protecting your water resources. To help us protect your water sources:

- Use fertilizers, insecticides, and herbicides sparingly and follow the manufacturers' instructions.
- Never pour harsh chemicals, oils or cleaners down your toilet, sink or storm drains. Instead, dispose of them and other materials, such as paints and thinners, during household hazardous waste collections programs.
- If you have a septic system, have it pumped out every two years and do not use septic system cleaners.
- Immediately notify the DPW if you notice anyone trespassing or riding motorized vehicles near the wells, trespassing near or vandalizing any water supply facilities.

Water Conservation Tips

Here's how you can do your parts to conserve water at home:

- Fix Leaking faucets, pipes, toilets, etc.
- Install water-saving devices.
- Wash only full loads of laundry
- Don't use the toilet for trash disposal.
- Take shorter showers. Do not let the water run while shaving, washing, or brushing teeth.
- Run the dishwasher only when full
- Water the lawn as little as possible.
- Choose plants that don't need much water,
- Obey water bans or regulations.

Any Questions?

Want to know more about the Maynard water supply system or interested in participating in the decision-making process? Please call Chris Okafor, Operations Manager at the Maynard Department of Public Works, at 978-897-1317 with any questions, comments, or concerns. Our offices are located at 195 Main Street.

Total Water Pumped 293 Million Gallons
(as pumped through the water treatment facilities)
Average Day Usage: 0.8 Million Gallons



Maynard 2012 H2O Facts

Further Information

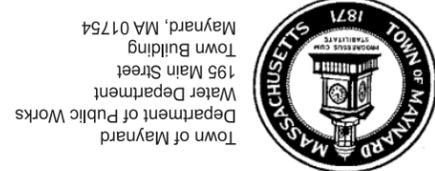
- MassDEP: www.mass.gov/dep
- MA Drinking Water Education Partnership: www.madwep.org
- American Water Works Association: www.awwa.org
- U.S. Environmental Protection Agency: www.epa.gov/safewater

Cross-Connection Contamination

Cross-connections that could contaminate drinking water distribution lines are a major concern. A cross-connection is formed at any point where a drinking water line connects to equipment (boilers), systems containing chemicals (air conditioning systems, fire sprinkler systems, irrigation systems), or water sources of questionable quality. Cross-connection contamination can occur when the pressure in the equipment or system is greater than the pressure inside the drinking water line (backpressure). Contamination can also occur when the pressure in the drinking water line drops due to fairly routine occurrences (main breaks, heavy water demand), causing contaminants to be sucked out from the equipment and into the drinking water line (backsiphonage). Community water supplies are continually jeopardized by cross-connection unless appropriate valves, know as backflow prevention devices, are installed and maintained. For more information, visit the Web site of the American Backflow Prevention Association (www.abpa.org) for a discussion on current issues.

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Town of Maynard
Department of Public Works
Water Department
195 Main Street
Town Building
Maynard, MA 01754

Water Quality Summary

Listed below are the 6 contaminants detected in Maynard's drinking water in 2012. Not listed are over 100 other contaminants which we tested, but which we did not detect. The complete list of contaminants that we test for is available at the Department of Public Works office.

Samples Collected from Our Water Supply							
Substance (Contaminate)	Date(s) Collected	Highest Level Detected	Range Detected	Average Detected	SMCL	ORSG	Possible Source(s) of Caontamination
Barium, ppm	9/19/12	0.0037	0.0037	0.0037	2	-	Erosion of natural deposits
WATER QUALITY TESTING RESULTS <i>What Does This Data Represent?</i>							
The water quality information presented in the following table(s) is from the most recent round of testing done in accordance with the regulations. All data shown was collected during the last calendar year unless otherwise noted in the table(s).							
Mass DEP has reduced the monitoring requirements for inorganic contaminants and the lead and copper rule because the source is not at risk of contamination. The last sample collected for these contaminants were taken in 2009 and were found to meet all applicable US EPA and MassDEP standards.							
Substance (Contaminate)	Date(s) Collected	Result or Range Detected	Average Detected	SMCL	ORSG		Possible Source(s) of Caontamination
Chloroform ¹ , ppb	3/29/12	10.8 - 27.6	20.8	-	-		By-product of drinking water disinfection
	5/10/12						
	8/22/12						
	12/11/12						
Bromodichloromethane ² , ppb	3/29/12	5.4 - 11.3	8.7	-	-		By-product of drinking water disinfection
	5/10/12						
	8/22/12						
	12/11/12						
Dibromochloromethane ² , ppb	3/29/12	2.7 - 3.0	2.8	-	-		By-product of drinking water disinfection
	5/10/12						
	8/22/12						
	12/11/12						
Perchlorate ³ , ppb	9/4/12	0 - 0.775	0.26	-	-		Naturally occurring chemical commonly found in fertilizer
	9/14/12						
Sulfate ⁴ , ppm	9/19/12	10.9	10.9	250	-		Naturally present in the environment

Notes:
¹Unregulated contaminants are those for which the Environmental Protection Agency (EPA) has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining their occurrence in drinking water and whether future regulations are warranted.

²The Massachusetts Office of Research and Standards has set a guideline concentration of 20 ppm for sodium.

³Massachusetts has set a secondary Maximum Contaminant Level of 250 ppm for sulfate. This level was established to protect the aesthetic quality of drinking water and is not health based.

Substances Found in Tap Water

Sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, brooks, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up contaminants resulting from the presence of animals or human activity.

Contaminants that may be present in source water include:

- Microbial contaminants -such as viruses and bacteria which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants - such as salts and metals,

which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil or gas production, mining, or farming

- Pesticides & herbicides - which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- Organic chemical contaminants - including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants - which can be naturally recurring or be the results of oil and gas production and mining activities.

Samples Collected from Your Faucets						
Substance (Contaminate)	Date(s) Collected	Highest Quarterly Running Annual Average	Range Detected	Highest Level Allowed (EPA's MCLs)	Ideal Goals (EPA's MCLGs)	Possible Source(s) of Contamination
Disinfectants and Disinfection By-Products						
Total Trihalomethanes (TTHMs), ppm	Quarterly in 2012	35.8	30.1 - 41.9	80	-	By-product of drinking water chlorination
Haloacetic Acids (HAA5), ppm	Quarterly in 2012	20.2	17.6 - 23.6	60	-	By-product of drinking water chlorination
Chlorine, ppm	Monthly in 2012	0.34	.03 - 1.98	4	4	Water additive to control microbes
Important Definitions						
Maximum Contaminant Level (MCL) - The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.						
Maximum Contaminant Level Goal (MCLG) - The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.						
Maximum Residual Disinfection Level (MRDL) - The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectants is necessary for control of microbial contaminants (ex. chlorine, chloramines, chlorine dioxide).						
Maximum Residual Disinfection Level Goal (MRDLG) - The level of drinking water disinfectant below which there is no known expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.						
Secondary Maximum Contaminant Level (SMCL) - These standards are developed to protect the aesthetic qualities of drinking water and are not health based.						
Massachusetts Office of Research and Standards Guidelines (ORSG) - The concentration of a chemical in drinking water, at or below which, adverse health effects are unlikely to occur after chronic (lifetime) exposure. If exceeded, it serves as an indicator of the potential need for further action.						
Action Level (AL) - The concentration of a contaminant, which, if exceeded, triggers a treatment or other requirements that a water system must follow. The action level for lead and copper is the 90th percentile of all samples taken at one time.						
90th Percentile - Out of every 10 homes sampled, 9 were at or below this level.						

ppm = One part per million or milligrams per liter (mg/L); one part per million is equivalent to \$1 in \$1,000,000.
ppb = One part per billion or micrograms per liter (ug/L); one part per billion is equivalent to \$1 in \$1,000,000,000.
ND = Substance not detected in the sample.

In order to ensure that tap water is safe to drink, the Department of Environmental Protection (MassDEP) and the U.S. Environmental Protection Agency (EPA) prescribe regulations, which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) and the Massachusetts Department of Public Health (DPH) regulations establish limits for contaminants in bottled water that must provide the same protection for public health. All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 800-426-4791.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as people with cancer undergoing chemotherapy, those who have undergone organ transplants people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about

drinking water from their health care providers. More information about contaminants and potential health effects along with the EPA/Center for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available by calling the EPA's Safe Drinking Water Hotline at 800-426-4791.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Maynard Water Department is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.