

Municipality/Organization: Maynard, MA

EPA NPDES Permit Number: MA041208

MassDEP Transmittal Number: W-035581

**Annual Report Number
& Reporting Period:** April 1, 2007 – March 31, 2008

8
4/30/08

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2008)

Part I. General Information

Contact Person: John Curran **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: John P. Curran

Printed Name: John P. Curran

Title: Town Administrator

Date: 4/28/2008

Part II. Self-Assessment

From April 1, 2007 – May 1, 2008, the Town of Maynard made substantial progress implementing BMPs and meeting the General Permit requirements. The Town mobilized its three new municipal employees (DPW Director, Conservation Commission Agent, and Planning Board Assistant), hired last year, to meet four times, and to focus on the activities that were behind schedule. The Town passed a Storm Drain System By-law regulating illicit discharges and illegal dumping to the storm sewer system.

The Town is still in progress implementing a few BMPs, including those related to press releases about stormwater (1.4.1), the poster contest for 5th graders (BMP 2.2.1), the regulatory mechanisms for Construction Site Stormwater Runoff Control (2.5.1, 3.1.4, 4.1.1, 4.1.2, 4.1.3) and Post-Construction Stormwater Management in New Development and Redevelopment (2.5.1 and 5.1.1), and evaluation of operations at Public Works facility, transfer station, and WWTF (6.4.1). These BMPs are in progress and many of them will be completed during Spring 2008. The regulatory mechanisms are planned to be included on the warrant for Fall 2008 Town Meeting.

During this permit year's review process, BMP 2.3.2 was identified as infeasible, because SuAsCo did not hold a watershed-wide stormwater summit.

Notes on the Permit Year 5 Annual Report:

1. This report summarizes the activities scheduled for the prior four permit years and documents the Town's progress in each permit year.
2. 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.

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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
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. YR02-05: None.	YR01: Stormwater Matters sent out with water bills on March 20, 2003. SuAsCo sent community survey on December 18, 2003. YR02: BMP complete. YR03: BMP complete. YR04: BMP complete. YR05: BMP complete.	BMP complete.
Revised					
1.1.2	Homeowner Focus – Brochures available at Town Hall	SWMT	YR04-05: Brochures available at Town Hall.	YR04: BMP added. Stormwater Matters brochures available at Town Hall. YR05: Stormwater Matters brochures continued to be available at Town Hall. This year, the Town also added EPA's <i>After the Storm</i> brochure and <i>Make your home the Solution to Stormwater Pollution</i> brochure, which are available both at Town Hall and the Library. Also available at the Library is EPA's bookmark titled <i>Clean Water – Everybody's Business</i>.	BMP complete.
Revised					

1.2.1	Student Focus – Teach stormwater lesson to 5 th grade students	SuAsCo Council and SWMT	YR01: None YR02: Prepare and implement lesson. YR03-05: None	YR01: N/A YR02: Stormwater Matters lesson prepared and implemented. YR03: Completed YR04: Completed YR05: Completed	BMP complete.
Revised					
1.3.1	Business Focus – Mail educational flyer with a stormwater survey	SuAsCo Council and SWMT	YR01-02: None. YR03: Flyer distribution. YR04-05: None.	YR01: N/A YR02: N/A YR03: Mailed flyers with water bills (Stormwater Matters). Insufficient response to warrant analysis of survey responses. YR04: Completed YR05: Completed	BMP complete.
Revised					

1.4.1	General Public Focus – Hold a stormwater media campaign	SuAsCo Council and SWMT	YR01-03: None YR04: Press releases planned for YR05. YR05: 2 press releases related to stormwater program.	YR01: N/A YR02: N/A YR03: N/A YR04: Due to staffing changes and budget constraints, the schedule was revised during YR04. Schedule revision met same goal as original schedule. YR05: Two press releases are in the process of being submitted to <i>The Beacon Villager</i>. These press releases cover the following topics:	BMP still in progress. One press release has been submitted to <i>The Beacon Villager</i> and will be printed soon. The other press release is drafted, and will be submitted to <i>The Beacon Villager</i> in Summer 2008.
Revised				<ul style="list-style-type: none"> • EPA Phase II Stormwater Requirements • Why stormwater matters • Town’s stormwater management program activities, particularly public education activities • Phosphorus pollution in the Assabet River • Stormwater Program contact information • Volunteer information 	
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.	YR01: N/A YR02: N/A YR03: N/A YR04: N/A YR05: <i>After the Storm</i> video and <i>Reigning in the Storm-One Building at a Time</i> were obtained from EPA in previous years. These videos are aired on the Town’s public access cable television station. This year, Town obtained additional copy of <i>After the Storm</i> to potentially show in other venues.	BMP complete.
Revised					

1a. Additions

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2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
2.1.1	Homeowner Focus – circulate stormwater traveling display	SuAsCo Council and SWMT	YR01: Develop display and feature at 3 locations. YR02-05: None.	YR01: Display created and displayed at Town Hall. YR02: N/A YR03: N/A YR04: N/A YR05: Town developed new display titled <i>Maynard's Stormwater Management Program</i> and exhibited it at Town Hall and plans to display it at Spring 2008 Town Meeting. In addition, copies of this display are posted at the Library.	BMP complete.
Revised					

2.2.1	Student Focus – Poster contest for 5 th graders	SuAsCo Council and SWMT	YR01: None. YR02: Hold poster contest YR03-04: None. YR05: Approach school with contest materials and request contest is held.	YR01: N/A YR02: SuAsCo delivered contest rules and flyers. YR03: None. YR04: Schedule revised. YR05: SWMT continued to work on this BMP. Attempted to organize contest.	BMP still in progress. Town will approach school or local scout troop and request contest is held.
Revised					
2.3.2	General Public Focus – Hold a watershed-wide stormwater summit	SuAsCo Council and SWMT	YR01-04: None. YR05: Advertise and hold summit.	YR01: N/A YR02: N/A YR03: N/A YR04: N/A YR05: SuAsCo did not hold a watershed-wide stormwater summit, and therefore this BMP is not feasible.	BMP not feasible, because SuAsCo Watershed Community Council did not hold watershed-wide stormwater summit. No further action (BMP not feasible).
Revised					

2.4.1	General Public Focus – Annual River Cleanup Day	SuAsCo Council and SWMT, DPW	YR03-05: Annual cleanup.	YR03: BMP added to replace BMP 2.3.1 – General Public Focus (Hold a local stormwater summit). Assabet River Cleanup day held with SuAsCo. 20-30 people in attendance. DPW removed waste collected during cleanup. YR04: Assabet River Cleanup day held with OAR. YR05: The Annual Assabet River Cleanup Day was held with OAR on Saturday September 15, 2007. In addition, OAR sponsored a cleanup on Saturday October 13 that focused on the area upstream of the Power Mill dam.	BMP complete.
2.5.1	General Public Focus – LID By-law Meetings	SWMT	YR04: Hold meetings to create a stormwater and LID by-law	YR04: BMP added. Held several posted public meetings to develop a stormwater and LID by-law (see BMPs 4.1.1 and 5.1.1). Participants include a cross-section of residents and representatives from various Town offices. YR05: Held meetings to support adoption of Storm Drain System By-law. Continued to hold meetings through Spring 2008 to finish draft by-law and regulations. Public meetings are planned to be held as needed to finalize and adopt by-law. Inclusion of the by-law is planned on the Fall 2008 Town Meeting warrant.	BMP still in progress. Meetings will be held as needed to finalize and adopt LID By-law.

2a. Additions

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3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
3.1.1	Stormwater System Mapping – Map outfalls and maintain GIS map as updates occur	DPW	YR01-03: Field check GIS map locations of outfalls. YR04: None YR05: 100% of outfalls will be field checked	YR01: Dufresne-Henry to map entire system. Draft map is complete, and 50% of outfalls have been field checked. YR02: Final draft map completed. YR03: None. YR04: BMP revised to include BMP 3.1.5. Storm sewer updates included in GIS system annually.	BMP complete.
Revised				YR05: All outfalls have been mapped. The Town continued consultant's work to field verify outfall locations and update GIS mapping. A new Stormwater & Drainage System map was completed by Stantec in July 2007, which shows pipe sizes, connectivity, catch basins, manholes, outfalls, and receiving water bodies.	

3.1.2	Stormwater System Mapping – Map storm sewer system and maintain GIS map as updates occur	DPW	YR01: Build GIS system for stormwater planning. YR02-05: None	YR01: Dufresne-Henry to map entire system. Draft map is complete, and 50% of outfalls have been field checked. YR02: Final draft map completed. YR03: GIS map of storm sewer system is 100% complete. YR04: BMP revised to include BMP 3.1.5. Storm sewer updates included in GIS system annually.	BMP complete.
Revised				YR05: Town is working to obtain ArcGIS capacity. The new Stormwater & Drainage System map developed by Stantec in July 2007 included storm sewer system recent updates.	
3.1.3	Stormwater System Mapping – Map structural BMPs	DPW	YR01-05: New BMP structures will be identified and included in GIS system.	YR01: None. YR02: Received final draft map. YR03: None (BMP complete). YR04: None (BMP complete).	BMP complete.
Revised				YR05: The new Stormwater & Drainage System map developed by Stantec in July 2007 incorporated any updates, including new structural BMPs.	

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: Adopt Regulations.	YR01: N/A YR02: None. YR03: None. YR04: None. YR05: These provisions are being considered as part of the on-going by-law and regulation development. Regulations may include provisions requiring developers to provide digital mapping.	BMP still in progress.
Revised					
3.2.1	Regulatory Mechanism – Develop by-law prohibiting illegal non-stormwater discharges into MS4. Include enforcement procedures in by-law.	Selectmen’s Office / SWMT	YR01-02: Review existing by-laws and recommend revisions YR03: None YR04: Implement recommendations for regulatory revisions. YR05: Draft and adopt by-law.	YR01: SWMT and Selectmen’s office reviewed EPA model by-laws. YR02: Reviewed MACC models. Need to draft by-law with enforcement procedures. YR03: Reviewed Office of the Attorney General model by-laws. YR04: Schedule revised and BMP revised to include BMP 3.2.2 (Regulatory Mechanism – Develop enforcement procedures for illicit discharges to MS4). YR05: Town of Maynard Storm Drain System By-law was passed at the October 29, 2007 Special town Meeting by a vote of 96 to 4. The by-law is awaiting final approval from the Massachusetts Attorney General.	BMP complete.
Revised					
3.3.1	IDDE Plan – Organize SWMT to monitor the Town’s compliance with permit requirements.	Selectmen’s Office	YR01-05: Meetings held.	YR01: Two meetings held. YR02: Several meetings held. YR03: None. YR04: SWMT did not meet due to changes in Town staff. YR05: SWMP met four times.	BMP complete.
Revised					

3.3.2	IDDE Plan – Identify procedures for locating areas likely to have illicit discharges and illegal dumping.	SWMT/DPW	YR01-05: 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.	YR01: DPW receives complaints and visually inspects sites. Town conducts several visual inspections annually. YR02: None. YR03: None. YR04: Schedule revised. BMP revised to include BMPs 3.3.3, 3.3.4, and 3.3.5). Illicit discharges are currently handled on a case-by-case basis, and are identified by visual inspections and public comment. YR05: Formalized IDDE Plan, including procedures to identify illicit discharges, sample, identify sources of illicit discharges, and methods to remove/correct illicit discharges. Priority areas were identified. Current IDDE actions are continuously documented. Illicit discharges continued to be handled on a case-by-case basis. One complaint about illegal dumping was received and was addressed.	BMP complete.
Revised					
3.4.1	Educational Outreach – Inform public employees, business, and general public of hazards of illicit discharges	SuAsCo Council and SWMT	YR01: None. YR02: Information materials distributed. YR03-05: None.	YR01: N/A YR02: None. YR03: Brochure on hazards of illicit discharges available at Town Hall. YR04: Provided annual mailing to residents for the Annual Household Hazardous Waste day. YR05: BMP complete. Continued mailings from Board of Health promoting the annual household Hazardous Waste day. Provided information on illicit discharges and illegal dumping on new display titled <i>Maynard's Stormwater Management Program</i> and as part of new brochures (See BMPs 1.1.2 and 2.2.1).	BMP complete.
Revised					

3.5.1	Allowable Non-stormwater Discharges – Determine if any EPA-listed non-stormwater flows need to be addressed by illicit discharge program	SWMP	YR01: Decision made YR02-04: None YR05: If necessary, address through illicit discharge program.	YR01: Decision will be made after by-law is incorporated and stormwater system map is completed. YR02: DPW determined that allowable non-stormwater discharges are not a problem. YR03: BMP complete YR04: BMP complete YR05: BMP complete	BMP complete.
Revised					
3.6.1	Waste Disposal Programs – Hazardous waste management and drop-off program	Board of Health	YR01-05: Conduct twice a year.	YR01-03: Monthly drop-off date for some hazardous materials and others are accepted at Annual Hazardous Waste Drop Off event. Details outlined in BoH mailing. YR04: In June, held Annual Hazardous Waste Drop Off event. Continued monthly collection (every second Saturday) of select hazardous materials. YR05: Held Annual Hazardous Waste Day. Continued monthly collection of hazardous materials from residents as done in previous years.	BMP complete.
Revised					

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
4.1.1	Regulatory Mechanism – Develop and implement Town by-laws regulating erosion and sediment control for construction sites utilizing appropriate BMPs	SWMT	YR01: None YR02-03: Develop by-laws YR04: None YR05: Implement by-laws	YR01: None. YR02: Reviewed MACC models. YR03: Schedule revised. YR04: By-law drafted. YR05: Development of the LID By-law and regulations continued as part of EOE Smart Growth grant received by Town, including application controls for construction site stormwater runoff. Drafts are developed, and the by-law is planned to be included on the Fall 2008 Town Meeting warrant.	BMP still in progress. Revisions of draft by-law and regulations will continue. By-law is planned to be included on the Fall 2008 Town Meeting warrant.
Revised					
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	YR01: ConComm reviewed possible BMPs. Construction site erosion control, design standards, and BMPs are already incorporated in NOI process. YR02: Need to develop Planning Board regulations with sanctions. YR03: None. YR04: None. YR05: As part of development of LID By-law, the Town has drafted regulations that include design standards and criteria regarding construction site erosion control. Town plans to modify local by-laws and regulations as necessary to eliminate conflicts with the LID By-law.	BMP still in progress. Revisions of draft by-law and regulations will continue. By-law is planned to be included on the Fall 2008 Town Meeting warrant.
Revised					

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.	YR01: SWMT reviewed goals and draft for 2005. YR02: Sanctions are part of WPA regulations and wetland by-law. YR03: None. YR04: None. YR05: The draft LID By-law and regulations include sanctions for enforcement.	BMP still in progress. Revisions of draft by-law and regulations will continue. By-law is planned to be included on the Fall 2008 Town Meeting warrant.
Revised					
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.	YR01: None. YR02: Part-time building inspector hired, ConComm versed in stormwater, DPW cited as additional inspection department. YR03: None. YR04: Full-time Building Inspector hired. YR05: Building Inspector coordinated with Conservation Commission and DPW to review and enforce SWPPPs throughout projects.	BMP complete.
Revised					
4.3.1	Site Inspection/ Enforcement Procedures – Conduct construction site inspections		YR01: None YR02-05: Identify and train staff. Review each project.	YR01: Budget reviewed for Site Inspection Training Course. YR02: Part-time building inspector hired, ConComm versed in stormwater, DPW cited as additional inspection department. YR03: None. YR04: Full-time Building Inspector hired. YR05: Depending on the projects local jurisdiction, trained Town staff conducted inspections.	BMP complete.
Revised					

4.3.2	Site Inspection/ Enforcement Procedures – Develop a procedure for handling reports from the public of non-compliance	SWMT	YR01: None. YR02: Determined complaints to be handled on a case-by-case basis.	YR01: None. YR02: Procedure no longer necessary, schedule revised. YR03: No complaints received. YR04: No complaints received. YR05: BoH and DPW continued to address complaints related to construction site runoff, as necessary.	BMP complete.
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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
5.1.1	Regulatory Mechanism – Develop and implement by-laws regulating controls for post-construction runoff utilizing appropriate BMPs	SWMT	YR01: Draft by-law YR02-03: Revise by-law YR04-05: Pass and implement by-laws	YR01: Infiltration policy already adopted by ConComm. Town working to develop new policies. YR02: None. YR03: Schedule revised. YR04: By-law drafted. YR05: Development of the LID By-law and regulations continued as part of EOEAs Smart Growth grant received by Town, including controls for post-construction site stormwater runoff. Drafts are developed, and the by-law is planned to be included on the Fall 2008 Town Meeting warrant.	BMP still in progress. Revisions of draft by-law and regulations will continue. By-law is planned to be included on the Fall 2008 Town Meeting warrant.
Revised					
5.2.1	Review BMP Designs – Pre-construction review for conformance with standards/regulations	Planning Board/ Conservation Commission	YR01-05: Review each project.	YR01: ConComm conducted pre-construction and construction inspections through NOI process. YR02-04: Coordinated review by DPW, Planning, and ConComm. YR05: Coordinated local permitting and development review process.	BMP complete.
Revised					

5.3.1	Site Inspection/ Enforcement Procedures – During construction, inspect that BMPs are properly constructed	Planning Board/ Conservation Commission	YR01-05: Inspect each project	YR01: ConComm conducted pre-construction and construction inspections through NOI process. YR02: DPW, Planning, and ConComm identified as primary site inspectors. YR03: None. YR04: None. YR05: DPW Director conducts inspections. Plan to train other staff on inspections in Spring 2008 as part of Good Housekeeping Workshop (see BMP 6.1.1). The draft LID By-law and regulations incorporate language to require construction inspections and enforcement.	BMP complete.
Revised					
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. YR04-05: Inspection as required.	YR01: N/A YR02: DPW, Planning, and ConComm identified as primary site inspectors. YR03: None. YR04: None. YR05: DPW Director conducts inspections. Plan to train other staff on inspections in Spring 2008 as part of Good Housekeeping Workshop (see BMP 6.1.1). The draft LID By-law and regulations incorporates language to require post-construction inspections and enforcement.	BMP complete.
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: None	YR01: None. YR02: No Town-specific procedures developed. Town relies on State and Federal O&M guidelines. YR03: No further action required. YR04: No further action required. YR05: No further action required.	BMP complete.
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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
6.1.1	Employee Training Program – Training on oil spill reporting and response, hazardous materials, and pesticide and fertilizer application	DPW/Fire Department	YR01-05: Conduct annual training.	YR01: Hazardous material discharge responsibility transferred to Fire Department, who received annual training. Goal is to obtain pesticide application license at DPW. YR02: None. YR03: Fire Department trained. Town no longer uses pesticides. DPW staff attended LID Training Workshop by CEI in October 2005. YR04: One DPW employee trained in fertilizer application.	BMP complete. Good Housekeeping Workshop is planned for Spring 2008.
Revised				YR05: Training program was expanded to include a Good Housekeeping Workshop, which included a review of spill response, hazardous materials, and pesticide/fertilizer application BMPs. Program also includes vehicle maintenance BMPs, and proper roadway and stormwater system maintenance. Also includes procedures for addressing illicit discharges/illegal dumping. Good Housekeeping Workshop is planned for Spring 2008. One DPW employee continues to be annual trained in proper fertilizer application. Fire Department had annual training on oil spill reporting and response.	

6.2.1	Stormwater Sewer System Operation and Maintenance – Storm sewer system and catch basin inspection and cleaning program.	DPW	YR01-05: Annual inspection and cleaning.	YR01: Outside contractor (Sam’s Catch Basin Cleaning) hired. YR02-03: Contractor inspected and tracked 450 catch basins of 901 total catch basins. YR04: BMP revised to include BMP 6.2.2 (Storm sewer system and catch basins cleaning program). Sam’s Catch Basin Cleaning inspected and cleaned 100% of Town’s 901 catch basins. Approximately \$30,000 spent on annual catch basin cleaning.	BMP complete.
Revised				YR05: Town continued catch basin inspection and cleaning through contract with Sam’s Catch Basin Cleaning. 100% of Town’s catch basins were cleaned. Approximately \$20,000 spent on annual cleaning.	
6.2.3	Stormwater Sewer System Operation and Maintenance – Structural BMP inspection and maintenance program	DPW	YR01: Develop and implement record keeping. YR01-05: Inspect all BMPs once a year.	YR01: Outside contractor (Sam’s Catch Basin Cleaning) hired. YR02: Need to develop long term record keeping procedures. YR03-04: DPW inspected structural BMPs annually. Rebuilt 14 catch basins.	BMP complete.
Revised				YR05: Forms for documenting structural BMP maintenance have been drafted. Continued annual inspections.	

6.3.1	Parks and Open Space – Fertilizer and pesticide application and management controls	DPW/Forestry	YR01-05: Annually summarize applications.	YR01: Minimize pesticide and fertilizer application. YR02: Need to draft a management program. YR03: DPW will create spreadsheet to track fertilizer applications and maintain the invoices. Trained in pesticide application.	BMP complete.
Revised				YR04: One DPW staff trained in proper fertilizer and pesticide application and management. YR05: Town applies organic fertilizer on Town-owned land. One DPW employee is trained on proper fertilizer application. Town no longer uses pesticides.	
6.4.1	Municipal Industrial Operations – Evaluate operations at the Public Works Facility, transfer station, and the WWTF	DPW Consultant	YR01-05: Develop and implement a program to reduce pollutant runoff from municipal operations.	YR01-02: DPW installed series of sediment basins, stone trenches, and sediment ponds at highway garage. Installed fence to discourage illegal dumping, resloped river bank to reduce erosion at WWTP. YR02: None. YR03: None. YR04: DPW reviewed individual SWPPP requirements and determined it is not necessary under the general permit to develop SWPPPs for each facility.	BMP is in progress. Municipal facility inventory is planned to be complete in Spring 2008. Schedules and procedures are planned to be developed by Summer 2008.
Revised				YR05: A municipal facility inventory, including identification of applicable good housekeeping BMPs for municipal operations is being developed. BMPs will be reviewed as part of Good Housekeeping Workshop. Schedules and procedures are in development for municipal maintenance activities and inspections of long-term structural controls.	

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: Implement program controls and record keeping.	YR01: N/A YR02: Need to develop a recording system for vehicle repair. YR03: None. YR04: BMP revised to include BMP 6.4.3 (review municipal vehicle washing controls) and 6.4.5 (review fueling operations). Vehicle fueling sensing equipment reviewed 2x/year, records kept.	BMP complete.
Revised				YR05: Reviewed maintenance and repair programs at municipal facilities. Reviewed recommended BMPs for vehicle repair/maintenance, vehicle washing, and vehicle fueling at good housekeeping workshop. Continued to review vehicle fueling sensing equipment.	
6.4.4	Municipal Industrial Operations – Review salt storage operations	DPW	YR01-05: No longer need to develop and implement program controls and record keeping, due to revised salt operation practices.	YR01-04: Salt operation reviewed, conducted under salt shed cover. YR05: Continued conducting salt operations under salt shed cover. Reviewed salt storage and application procedures at Good Housekeeping Workshop (see BMP 6.1.1). Purchased 2,177.27 tons of NaCl for winter de-icing operations.	BMP complete.
Revised					
6.5.1	Municipal Roads – Street sweeping	DPW	YR01: None YR02-05: Annual street sweeping. Strengthen record tracking system. Evaluate frequency in urban areas.	YR01: None. YR02: None. YR03: Conducted annually and as needed. YR04: Conducted 2x/year. Frequency of street sweeping increased throughout town from 1x/year to 2x/year. YR05: Continued street-sweeping all Town roads 2x/year (Spring and Fall) and continued record keeping.	BMP complete.
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 5 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
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.	YR04: BMP added. YR05: SWMT reviewed Assabet River TMDL report and selected appropriate BMPs to address recommendations from report.	BMP complete.
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: Record locations of brochure distribution and posters.	YR05: BMP added. The new display titled <i>Maynard's Stormwater Management Program</i> includes language about phosphorus in the Assabet River and phosphorus reduction activities. New EPA brochures at Town Hall describe practices including lawn and garden care, home repair and improvement, pet care, and septic system use and maintenance.	BMP complete.
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: Record date of press release.	YR05: Press release drafted and submitted to The Beacon Villager.	BMP complete.

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 which modify BMPs or performance standards 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, construction and post-construction inspections, employee training, and the good housekeeping measures such as street sweeping, catch basin cleaning, and pesticide and fertilizer application, all help prevent phosphorus, pathogens, organics, and metals from entering the water bodies within Town. 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.

This year the Town developed a poster and brochures that include language on phosphorus and practices to reduce phosphorus from entering the river. In addition, a press release for *The Beacon Villager* was prepared that mentions total 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. BMPs that reflect these two actions were added to MCM 7 of Maynard’s Year 5 Annual Report.

² MassDEP Total Maximum Daily Load website: <http://www.mass.gov/dep/water/resources/tmdls.htm>

Part IV. Summary of Information Collected and Analyzed

N/A

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, 2007 through March 31, 2008)

Programmatic

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

Education, Involvement, and Training

Estimated number of property owners reached by education program(s)	(# or %)	
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 %)	
▪ material collected **	(tons or gal)	
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	(%)	Y
Estimated or actual number of outfalls	(#)	~90
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	Y
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	100%
Outfalls inspected/screened **	(# or %)	
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	
Illicit discharges identified **	(#)	
Illicit discharges identified (Since beginning of permit coverage)	(#)	
Illicit connections removed **	(#); and (est. gpd)	
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	
% of population on sewer	(%)	~99%

% of population on septic systems	(%)	~1%
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Construction

	(Preferred Units)	Response
Number of construction starts (>1-acre) **	(#)	
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)	100%
Site inspections completed **	(# or %)	
Tickets/Stop work orders issued **	(# or %)	
Fines collected **	(# and \$)	
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 %)	100%
BMP maintenance required through covenants, escrow, deed restrictions, etc.	(y/n)	
Low-impact development (LID) practices permitted and encouraged	(y/n)	N, but in progress through By-law.

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 **	(#)	901
Qty. of storm drain cleaned **	(%, LF or mi.)	

Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Reuse/recycle

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	
• Hourly or per basin contract rate **	(\$/hr or \$ per basin)	\$90/hr
• Disposal cost**	(\$)	\$0
Cleaning Equipment		
• Clam shell truck(s) owned/leased	(#)	1, leased
• Vacuum truck(s) owned/leased	(#)	0
• 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)	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Beneficial use
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	
• Hourly or lane mile contract rate **	(\$/hr. or ln mi.)	
• 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 %)	
▪ Herbicides	(lbs. or %)	N/A
▪ Pesticides	(lbs. or %)	100%
Integrated Pest Management (IPM) Practices Implemented	(y/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	100%
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/ln mi. or %)	
Estimated net reduction or increase in typical year sand application rate **	(±lbs/ln mi. or %)	-100% (sand no longer used)
% 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

	(Preferred Units)	Response
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)	

