

Municipality/Organization: WAYLAND, MASSACHUSETTS

EPA NPDES Permit Number: MAR041169

MassDEP Transmittal Number: W-041312

Annual Report Number
& Reporting Period: April 1, 2011 – May 1, 2012

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2012)

Part I. General Information

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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: Frederic Turkington

Title: Town Administrator

Date: 4-27-12

Part II. Self-Assessment:

This report has been prepared to summarize stormwater activities in the Town of Wayland for the past year. This narrative includes a summary of the activities that various boards and Commissions involved in stormwater and water quality have been conducting. The boards include the Conservation Commission, Board of Health, the Surface Water Quality Committee (SWQC), the Public Works Board, and the Planning Board. The Planning Board, through subdivision review, has a role in reviewing proposed best management practices (BMPs) with some design standards relating to storm events. The Conservation Commission has standards that relate directly to water quality. Through the Massachusetts Wetlands Protection Act the Commission evaluates BMPs based upon the design for total suspended solids removal as a target for pollutant reduction.

The Surface Water Quality Committee (SWQC) also engages in planning activities as well as efforts directly related to the health and wellbeing of larger bodies of water in Wayland – in particular, Dudley Pond, Lake Cochituate, and Heard Pond. The SWQC oversees actual projects related to invasive weed eradication. The SWQC has increasingly been evaluating contributing factors to the nutrient loads in the water bodies which includes an ongoing assessment of drainage – both from point and non-point sources. The SWQC will conduct a study to determine the major sources of phosphorous flow into Dudley Pond, a Category 5 impaired water body. Dudley Pond discharges through a weir into a stream that flows towards the Sudbury River. The stream flows by a set of the Town's well fields and, while considered perennial, the well pumping can impact the continued flow of the stream.

The Town acquired a Vactor truck, used to clean catch basins, outfalls, and other drainage components, in 2011 after voting funds for its purchase at the April 2011 Annual Town meeting. After taking delivery of the equipment, the Department of Public Works has begun an organized effort to clean outfalls, manholes, and catch basins in a methodical manner. Working with the Town Surveyor and GIS Coordinator, the field staff is collecting data on the drainage system, including the outfalls. There is a request for the field crews to make a note of discharges that may reflect illicit discharges, i.e. looking for dry weather flows. As the use of the Vactor progresses and field crews collect data, the process can be evaluated to determine if more information can be gathered. The Public Works Department will also be informed of a pending need to keep records of the maintenance of the drainage system in anticipation of future requirements.

At the Town Beach, an area along Lake Cochituate that is operated by the Town of Wayland and within the urbanized area of Wayland, there were recent drainage improvements made in conjunction with the reconstruction of a beach house. The drainage from the parking lot now discharges through a newly installed Vortech stormwater unit as well as a leaching drain for runoff from the building. In addition to all of the catch basins in Wayland were cleaned in 2011 according to the DPW Superintendent.

There are portions of the town where the drainage system has not been fully mapped. The Town has an effort to update its mapping and geographic information system including aerial photography, topography, and housing information, which will be used to supplement and improve the existing drainage data. The information is being done both by contract with a mapping company and using town staff. When the product is complete, the information available to assess development and changes in the urbanized areas of the town is expected to be significantly enhanced allowing for more information to be available for planning efforts and of review of applications by the applicable boards and/or commissions. The Town may also wish to consider expanding an educational effort to acquaint board and commission members with the tools available with the GIS system and the many data layers as they relate to improved review of projects and potential impacts.

Construction of a new wastewater treatment plant which improves the discharge of water to the Sudbury River is almost complete. There is a new outfall for the treatment plant that was permitted by other agencies, and in February of 2012 the Conservation Commission approved the construction of the outfall. Construction of the outfall commenced in April, 2012. There is mitigation proposed that will contribute to an improvement of the wetlands where the outfall discharges into the Sudbury River. Concurrently, the new outfall location should be less intrusive as viewed from the Sudbury River which is a Wild and Scenic River.

The new high school construction, which could have been presented as redevelopment, instead includes the following features: removal of asphalt from the Zone I of well fields, pulling back drainage outfalls from the existing stream, and BMPs compliant with the MA DEP 80% TSS removal. The new high school building is complete and work continues on demolition of the old buildings where much of the new parking and drainage best management practices (BMPs) will be located. There is a large parking lot that is to be removed (a final phase of construction as some of the new parking will be where the existing buildings are located), which will improve water quality by removing impervious surface from an area close to the stream. The natural area is to be maintained as a meadow which would not require the use of fertilizers, improving runoff from the site by the new use of this buffer area.

The Town continues its commitment to reduce the use of phosphates on town land along the Sudbury River. Documentation of reduced use of phosphates would be through the Department of Public Works now overseeing the maintenance of recreational facilities.

The Town of Wayland adopted a Stormwater Bylaw at their April 2008 Annual Town Meeting. The purpose of the Bylaw, as stated in the text, is to: protect the quantity and quality of water recharge to our Town's water supply aquifers; protect our cold water fisheries and other designated outstanding water resources from discharges of toxic pollutants, nutrients, and temperature changes; and protect our streams, rivers, and private property from additional flood damage from changed

flow patterns. The Commission is working with a consultant to continue to move forward on implementing more of the Bylaw.

There is still an outstanding need to consider a program for the detection of illicit discharges – which would likely be incorporated into any proposed amendments to the existing Stormwater Bylaw or in regulations now being explored by the Conservation Commission. The Conservation Commission has been working on developing regulations for the Stormwater Bylaw Chapter 193.

The Town prepared a wellhead protection plan as recommended by MADEP. The report addresses impacts to the water supply and the Town's wells and sets forth plans to protect these resources. The data from that study is used to evaluate proposals within the aquifer given the Town's reliance on groundwater for its drinking water.

Part III. Summary of Minimum Control Measures

1. Public Education and Outreach

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
PEO-3	SuAsCo			Distribute material as appropriate	Evaluate the effectiveness of participation in SuAsCo
Revised					
Revised					
PEO-2	Stormwater Flyer	SuAsCo	Flyer	Continues to be available.	Explore options for other means of education and outreach.
Revised					
Revised					

Revised					
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1a. Additions

PEO 3	Introduction to possible changes to MS4 Permit	ConCom and others	Press release on proposed changes		Create a press release or summary document and circulate it.
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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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
Revised					
PP-2 Revised	Storm water web page	All	Link or links on Town of Wayland Web page	Check links, add additional material	Continue same
Revised					

2a. Additions

PP-3	Interdepartmental Coordination	Land Use Depts.	Compatible standards and implementation	Reviewing application intended to address flooding.	Continued participation in meetings. Attempt to have a more defined stormwater concept among different boards.
PP-4	Coordination of regulatory boards	BOPW, BOH, CONCOM, et.al	Meeting attendance by representative - minutes	New goal – initial evaluation will be based upon attendance at other board meetings	Attempt to have a more defined stormwater concept among different boards.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
IDE-1 Revised	Storm water Mapping	ConCom/GIS, Others	Have map available	Working with new GIS system to attempt to get improved access to data.	Funding obtained to complete mapping – process to begin to secure consultant.
IDE-3 St	Illicit Discharge Detection	DPW	Identification of illicit discharges	Some data collection done during permitting process	
Revised					Report on activities of DPW as a result of drainage system maintenance
IDE-3	Illicit Discharge Detection	All Town Depts.	Coordinate efforts to identify illicit discharges	Review information collected by the DPW as part of their drainage maintenance program	Evaluate the effectiveness of data collection to date.
Revised					

3a. Additions

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
Revised					

BMP CSW- 3 Revised	Dept. site inspections	Planning Bd, Con. Comm. Add BOH and Building	Site inspections	Limited use of a tracking system – effectiveness not clear.	Evaluate and report on other means of inter-departmental cooperation and communication and report on same.
Revised					

4a. Additions

BMP- 1A	Implementation of Stormwater Bylaw	Conservation and others	Creation of regulations and general permit	Initial meetings have been held.	Have regulations and general permit operational.

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

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
GH-1 Revised	Develop controls for reducing discharge	Various Depts.	On-site implementation	Depts. are generally aware of requirements and using BMPs	Seek continued compliance
GH-2 Revised	Landfill SWPP	Public Works Board	By others	Ongoing.	Continue to maintain BMPs at site.
Revised					
GH-4	Record depository	Undefined	Annual Reports	Reporting by deadline	Assess reporting methodology for more effective tool. Submit report by

Revised						deadline
Revised						
Revised						

5a. Additions

	Coordinated O&M efforts for BMPs	Land Use Dept and DPW	Undefined – Land Use minutes, anecdotal	New Goal	Report on status of coordination with planning/permitting, and implementation among Town Depts. Evaluate data collection methods being used as a tool for tracking bmp maintenance.
GH-7			Use of vactor for bmp maintenance.	Use of vactor just beginning	
GH-8		DPW	Use of vactor for bmp maintenance.		

6. Pollution Prevention and Good Housekeeping in Municipal Operations

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
GH-2 Revised	Interdepartmental Efforts	B.O.H./Conservation/Public Works/Building Department		Report was submitted	Capping of landfill being done. Facility being operated as transfer station. Will assess any further needs or requirements
GH-3 Revised		Various Town Depts.	Identifiable activities or exercises		
GH3 Revised	Development of Stormwater Regulations	ConCom	Set of regulations and general permit		Create regulations and general permit

6a. Additions

GH#	Interdepartmental Coordination	B.O.H./Conservation/Public Works/Building Department		

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

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 10
Revised					
Revised					

7a. Additions

7b. WLA Assessment: Currently no TMDL applicable however, with new permit Charles River Basin may have TMDL. Conservation Commission, through assessment of drainage, considers water quality and attempts to ascertain if WLA are applicable. Aware of no change in status of TMDL. Consideration of phosphorous removal by ConCom, Surface Water and others continues to be applicable.