

Municipality/Organization: WAYLAND, MASSACHUSETTS

EPA NPDES Permit Number: MAR041169

MassDEP Transmittal Number: W-041312

**Annual Report Number
& Reporting Period:** April 1, 2012 – May 1, 2013

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: 4/29/12

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 Town of Wayland Board of Health held a public hearing and adopted Floor Drain Regulations on February 25, 2013. Adoption of the Floor Drain Regulation is a preventative measure for the purposes of preserving and protecting the Town of Wayland's drinking water resources from discharges of pollutants to the ground via floor drains, and minimizing the threat of economic losses due to such discharges. The Board of Health adopted the regulation pursuant to authorization granted by M.G.L. c. 111 Section 31 and Section 122. **Purpose of the Regulation:** floor drains in industrial and commercial facilities are often tied to a system leading to a leaching structure (e.g. dry well, cesspool, leach field) or a septic system. Accidental and/or intentional discharges may lead petroleum and other toxic or hazardous materials into these drainage systems in facilities managing these products; and improper maintenance or inappropriate use of these systems may allow the passage of contaminants or pollutants entering the drain to discharge from the leaching structure or septic system to the ground; and discharges of hazardous wastes and other pollutants to floor drains leading to leaching structures and septic systems have repeatedly threatened surface and ground water quality throughout Massachusetts; and surface and ground water resources in the Town of Wayland contribute to drinking water supplies; the proposed regulation will include concerns for commercial pesticides. A copy of the regulation can be found on the Health Department website: http://waylandma.virtualtownhall.net/Pages/WaylandMA_Health/regs

There has been one new project large project that was reviewed pursuant to the Wetlands Protection Act regulations as well as the local wetlands bylaw regulations and the Commission sought a peer review and evaluated the project. The project was reviewed by other Boards as well and is currently under construction. There was considerable scrutiny given to the quantity and quality of runoff from the project particularly given its location abutting a cold water stream. As a rule for smaller storm events no increase in the volume or rate of runoff is accepted.

There is also a municipal project that was permitted by the Conservation Commission and through the wetlands regulations and laws as well as the stormwater bylaw considerable attention was given to the drainage design, recharge, and

water quality. . There was a small two-lot subdivision created in North Wayland within the urbanized area. While the Commonwealth’s stormwater regulations under the Wetlands Protection Act did not affect this project the subdivision, as approved, did include a review of the drainage using the MA DEP Stormwater Standards as a basis for the review.

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 Department of Public Works, generally the custodians of much of the stormwater best management practices such as catch basins, drain outfalls, and other water quality devices provided a summary of their activities during the past MS\$ year. The activities included: installation of a 1780 gallon capacity “Hydroguard” storm water separator, which receives water from several neighborhoods in close proximity to the Town Beach; yearly cleaning of over 2500 Catch basins with clam style catch basin cleaning vehicle; cleaned and cleared 14550 linear feet of drain pipe, cleaned 102 Man holes, cleaned 24 outfalls all using Vactor sewer cleaning vehicle; measured, inspected and mapped 182 catch basins; regularly scheduled road sweeping of 96 miles of roadway a minimum of twice a year or as needed; and regular inspection of drainage systems for any illicit or illegal discharge into the towns systems. The DPW purchased “Utility Cloud” software to be used for upgrading data, including but not limited to mapping all drainage systems, inventory of all drainage assets, and work flow data to keep scheduled maintenance regularly and has just started implementing this new cloud system. There should be a co-ordination component with this process that needs to be defined.

In April of 2012, the town of Wayland contracted with the James W. Sewall Company to perform aerial mapping for the entire town. One component of this project was to map visible drainage structures. This process mapped approximately 60% the town’s manholes and catch basins. The remaining structures and outfalls are being located by the Town Surveyor’s office using GPS and terrestrial surveying techniques. At the same time, the town’s Public Works Department is obtaining invert size, material condition, and elevation data as part of their normal maintenance schedule. To date, approximately 500 structures have been observed. This data will be incorporated into the mapping information through the town’s GIS. The town is continuing its effort to map all drainage structures in a timely manner.

Construction of a new wastewater treatment plant which improves the discharge of water to the Sudbury River is complete including a new outfall on the south side of Route 20 in Wayland. Plantings to enhance the outfall, which is located such that the visual impact on the Sudbury River, a wild and scenic river, should be less also be completed shortly. In addition a drain outfall at the former combined outfall location has been replaced. That outfall now discharges drainage water through a sand filter and other devices that are designed to meet the MA DEP stormwater standards. The Conservation Commission, through a local permit, and MA DEP, through a superceding permit, both have monitoring requirements for the stormwater from that outfall.

As was noted in the last MS4 report the new high school construction, which could have been presented as redevelopment, instead includes the following features: removal of asphalt from the Zone 1 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 has been removed improving water quality by removing impervious surface from an area close to the stream and within a Zone 1 of some of the Town's wells. 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.

On an annual basis the Town reviews streets for consideration as public ways. These generally are roadways built as part of the subdivision of land. During the process this past year the Board of Public Works sought information regarding the status of the drainage and as well as what might exist for bmps. This process furthered the dialogue between Boards and Commissions who each have a roll with Stormwater. And, as has been added as a task, the process also illustrates two additional needs: defining what each board or commission's roll is with stormwater i.e. regulatory, maintenance, review, including what standards that board or commission applies to the review as well as the need to have a system that tracks Operations and Maintenance requirements for many of the bmps associated with projects and subdivisions approved by the various boards.

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.

There is still an outstanding need to consider if the existing bylaws and regulations adequately address a program for the detection of illicit discharges which could also be incorporated into any proposed amendments to the existing Stormwater Bylaw or in regulations now being explored by the Conservation Commission. The Wetlands and Water Resources Protection Bylaw does address water quality and an illicit discharge would constitute a violation of that bylaw. The Conservation

Commission has been working on developing regulations for the Stormwater Bylaw Chapter 193.

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 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 11
PEO-3	SuAsCo			Distribute material as appropriate when provided by SuAsCo	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					

1a. Additions

PEO 3	Introduction to possible changes to MS4 Permit	ConCom and others	Press release on proposed changes	Status of new MS4 permit is unchanged.	Create a press release or summary document and circulate it when new Permit is promulgated.

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 11
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	Participated in any convened Land Use meeting. Contact other permitting departments about existing Stormwater and Land Disturbance Bylaw.	Continued participation in meetings. Prepare an chart of each applicable department/Board roll in drainage and stormwater.
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	Continued work with other permitting or review Boards and/or Commissions.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 11
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	Illicit Discharge Detection	DPW	Identification of illicit discharges	Some data collection done during permitting process	

St							Report on activities of DPW as a result of drainage system maintenance
Revised							Evaluate the effectiveness of data collection to date.
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	
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 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 11
Revised					
BMP CSW-3	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					

Revised							
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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 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 11
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 Revised	Record depository	Undefined	Annual Reports	Reporting by deadline	Assess reporting methodology for more effective tool. Submit report by deadline
Revised					
Revised					

5a. Additions

GH-7	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.
GH-8		DPW	Use of vactor for bmp maintenance.	Use of vactor just beginning	Evaluate data collection methods being used as a tool for tracking 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 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 11
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 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 11
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. NO CHANGE IN THIS AT THE PRESENT TIME.