**Municipality/Organization:** Town of Norwell, MA

**EPA NPDES Permit Number:** MAR041052

**MaDEP Transmittal Number: W035900** 

**Annual Report Number** 

& Reporting Period: No.15: April 1, 2017-March 31, 2018

# NPDES PII Small MS4 General Permit Annual Report

#### **Part I. General Information**

Contact Person: Glenn Ferguson Title: Highway Surveyor and Director

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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: Glenn Ferguson

Title: Highway Surveyor and Director

Date: May 1, 2018

#### Part II. Self-Assessment

In the past year, the Town of Norwell has continued implementation of the tasks outlined in the 5-year Plan under the 2003 NPDES Small Municipal Separate Storm Sewer Systems (MS4) permit. Over the past few years, the Town has worked with engineering consultants to prepare for the new EPA permit (latest effective date postponed to July 1, 2018). Preparation has included: multiple stormwater improvement construction projects, mapping of the drainage system, development and implementation of an IDDE plan including outfall inspection, screening and sampling for water quality and development of stormwater pollution prevention and O&M manuals for parks and open space and the MS4 system. The plans and programs prepared will be updated and implemented as required by the new permit to comply with the new regulations.

In October of this past year, dry weather field screening and sampling and catchment investigation was conducted at 6 outfall locations based on recommendations from the 2014 outfall screening and sampling program. BETA issued a "Norwell, MA – IDDE Follow-up Investigation" letter dated October 10, 2017 summarizing the results of the investigation and providing recommendations including spring sampling at four outfalls and homeowner interview and inspection at two residences to further investigate suspected sources of dry weather flow.

The Town is committed to working with local watershed associations, particularly the North and South River Watershed Association (NSRWA) to advance their goals and for public education and outreach and on possible funding sources and ways in which to promote volunteerism. The Town receives educational pamphlets that NSRWA sends out annually.

This year the Town submitted a grant application for culvert replacement at Tiffany Road for a culvert crossing an unnamed tributary to Third Herring Brook where significant river and wildlife habitat restoration efforts are underway. This is a potential opportunity to improve the drainage system and contribute to the ongoing restoration efforts of Third Herring Brook, a major category 5 waterbody on the border of Norwell and Hanover.

The Town continues to provide opportunity for residents to dispose of household hazardous waste once during the year in the fall. This helps prevent illegal and detrimental disposal of oils, paints and chemicals into our environment and ultimately to our waterways.

The Town continues to provide updates to the public through water bill mailings and postings to the local website.

The Town continues to follow good housekeeping and pollution prevention procedures with street sweeping, catch basin cleaning and other municipal operations.

# Part III. Summary of Minimum Control Measures

## 1. Public Education and Outreach

BMP	BMP Description	Responsible	Measurable Goal(s)	Progress on Goal(s) –	Planned Activities –
ID#		Dept./Person		Permit Year 14	Permit Year 15
		Name		(Reliance on non-municipal partners	(if applicable)
				indicated, if any)	
1	Partnership with local	Con. Comm.,	Regular Meeting	Continued partnership with North and	Continue partnership with North and
	Watershed Associations	Highway, BOH	Attendance	South Coastal Watershed Association	South Coastal Watershed
				including collaboration for the culvert	Association.
				restoration grant application.	
2	Develop Brochures	Highway	Mailings	Informational stormwater flyer issued	Continue issuing stormwater
				to residents within water bill mailings	education materials in accordance
				and through NSRWA.	with the new EPA permit.
3	Web Site Public Service	Highway	Web Site Publication	No updates to website since previous	Provide website postings for public
	Postings		& Maintenance	permit year.	outreach in accordance with the new
					EPA permit.

## 2. Public Involvement and Participation

BMP	BMP Description	Responsible	Measurable Goal(s)	Progress on Goal(s) –	Planned Activities –
ID#		Dept./Person		Permit Year 14	Permit Year 15
		Name		(Reliance on non-municipal partners	
				indicated, if any)	
4	Water Quality Testing	Highway	2 Rounds of Water	Goal of 2 rounds of sampling	Continue to follow-up on IDDE
			Quality Sampling of	completed in 2014 and 2015. In	recommendations from previous
			Priority Water Bodies	October, conducted follow-up on	sampling results. Prepare for IDDE
				sampling results to further investigate	program requirements of the new
				for possible illegal connections at 6	EPA permit.
				locations.	
5	Community Cleanup	Highway	Annually	A Town-wide Cleanup Day, hosted by	8 <sup>th</sup> annual "Trash Bash" to be
	Days			the Beautification Committee, also	completed on May 5, 2018.
				known as the "Trash Bash," was	
				completed on May 6, 2017.	

# 3. Illicit Discharge Detection and Elimination

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 15
6	Catch Basin/Outfall and Receiving Water Mapping	Highway	GIS Mapping	No updates since previous permit year.	Update mapping in accordance with the new EPA permit.
7	Water Quality Testing	Highway	Testing of Priority Water Bodies	NSRWA samples water quality at sites along the North River on a bi-weekly basis in the summer months. Two sampling locations are in Norwell and two are just downstream of the town line.	Update IDDE program as required by the new EPA permit and incorporate sampling results as required.
8	Regulatory Review	Highway, Planning Board, BOH, Con. Comm.	Regulatory Revisions and Action	Finalized BOH regulation to confirm with requirements for preventing Illicit Discharge in Year 13. BMP complete.	Prepare for regulatory revisions to be required by the new EPA permit.
9	Permit Enforcement	Highway, Planning Board, BOH, Con. Comm.	Local Construction Site Oversight and Enforcement	Ongoing to comply with local bylaws, state and federal requirements.	Ongoing to comply with local bylaws, state and federal requirements.
10	Misconnection/Illegal Dumping and Correction	Highway, BOH	Connectivity Mapping, Bylaw Enforcement and Fines	The IDDE Plan was enforced by the Town during Permit Year 14.	Continue to implement IDDE Plan and update to meet the requirements of the new EPA permit.

# **4.** Construction Site Stormwater Runoff Control

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 15
11	Regulatory Review	Highway, Planning Board, BOH, Con. Comm.	Regulatory Revisions to Bylaws as Necessary	Approved bylaw at Town Meeting in May 2012. No goals related to this item were planned for Permit Year 14. BMP Complete.	Consider regulatory revisions if required by the new EPA permit.
12	Permit Enforcement	Highway, Planning Board, BOH, Con. Comm.	Local Construction Site Oversight and Enforcement	Ongoing to comply with local bylaws, state and federal requirements. The permit was enforced by the Town during Permit Year 14.	Ongoing to comply with local bylaws, state and federal requirements.
13	Improved As-Built Review	Highway, Planning Board	Electronic As-Built Submittals on Town GIS System	Bylaw approved by Town Meeting in May 2012 included requirement for submittal of as-built drawings. BMP Complete.	Continue collection as-built drawings electronically.

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

BMP	BMP Description	Responsible	Measurable Goal(s)	Progress on Goal(s) –	Planned Activities –
ID#		Dept./Person		Permit Year 14	Permit Year 15
		Name		(Reliance on non-municipal partners	
				indicated, if any)	
14	Regulatory Review	Highway,	Regulatory Revisions	Approval of bylaw at Town Meeting in	Consider regulatory revisions if
		Planning	to Bylaws as	May 2012. No goals related to this	required by the new EPA permit.
		Board, BOH,	Necessary	item were planned for Permit Year 14.	
		Con. Comm.		BMP Complete.	
15	Permit Enforcement	Highway,	Local Construction	Ongoing to comply with local bylaws,	Ongoing to comply with local
		Planning	Site Oversight and	state and federal requirements. The	bylaws, state and federal
		Board, BOH,	Enforcement	permit was enforced by the Town	requirements.
		Con. Comm.		during Permit Year 14.	

# 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 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 15
16	Improved Street Sweepings	Highway	# Streets Swept	Town swept all of its streets(~80 miles) in Permit Year 14.	Continue sweeping streets in compliance with the new EPA permit.
17	Improved Catch Basin Cleanings	Highway	# Catch Basins cleaned	Town cleaned all of its catch basins (~1,510) in Permit Year 14.	Continue cleaning catch basins in compliance with the new EPA permit.
18	Household Hazardous Waste Days	Highway	Hazardous Waste Collection Days	Waste Oil/Paint collected manifested off-site at the Town-run recycling area.	Continued collection of waste oil/paint at recycling area.
19	Drain Stenciling	Highway	Aquifer Protection Area	No stenciling conducted or needed during this permit year.	Continue stenciling program as needed.
20	Employee Training	Highway	Seminar Attendance	Highway Department staff take Right to Know classes and are trained in good housekeeping and maintenance related to stormwater.	Will continue to identify and attend appropriate training sessions in compliance with the new EPA permit.

### 6a. Additions

21	Additional HHHW	Department of	Number of drop off	Participating in the South Shore	Continue to participate in the South
	drop off locations/days	Public Works	locations	Recycling Cooperative, where 14 local	Shore Recycling Cooperative.
				communities open up their local	
				HHHW collection days to members of	
				the cooperative.	

#### **Additional Information:**

The Town of Norwell Highway continues to coordinate with the Plymouth County Mosquito Control Program to remove blockages, brush and other obstructions from ditches and streams.

In 2013-2014, over a dozen Stormwater BMP's were completed on Summer, Lincoln, South, and Winter Streets and at the Hope/Mount Blue intersection.

In 2014-2015, stormwater improvements were constructed along Main Street (Route 123). During Spring/Summer 2014, outfall inspections were conducted at 156 structures, with 40 locations field-screened and sampled for water quality information.

In 2015-2016, stormwater improvements were constructed on Main Street from Norwell/Hanover Townline to Norwell Center and Stormwater BMPs were installed on Grove Street (3), Pleasant Street (1) and Forrest Street (2).

In 2016-2017, stormwater improvements including BMPs are under design for River Street near Wanton Shipyard. Follow-up investigations were conducted on previous outfall sampling results and recommendations.

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

The Town has reviewed the local, state and federal bylaws relative to stormwater and aquifer protection, and appears to be adequately regulated and in conformance with the Massachusetts Stormwater Management Policy.

### Permit Years 1 through 3 Activities and Information

During Permit Year One, the Town focused on preparing a Stormwater Management Plan (dated June 26, 2003). During Years Two and Three, the Town focused on obtaining local approval to borrow stormwater management funds (\$300,000) from the Massachusetts Water Abatement Trust State Revolving Fund Program; reviewing current regulations; improving local good housekeeping programs; and communicating the Town's Plan to local watershed associations. This required communication among the various departments in town.

### **Permit Year 4 Activities and Information**

During Permit Year 4, the Town obtained funding through the Massachusetts Water Abatement Trust State Revolving Fund for \$300,000. Using this funding, the Town developed a scope of work to initiate the activities outlined in the Storm Water Management Plan and began implementing those activities, including the completion of an aerial flyover of the Town and the development of full planimetric mapping of the Town. This mapping is being used as the basis for the development of town-wide drainage system mapping and the performance of outfall inspections and water quality screening and testing as outlined in the DEP approved scope of work.

### **Permit Years 5 and 6 Activities and Information**

During Permit Years 5 and 6, the Town successfully completed its aerial planimetric mapping program, and mapped and sampled its stormwater outfalls. The water quality screening and testing program was conducted in accordance with a DEP-approved scope of work.

The Town provided updates to the public through water bill mailings and postings on the local Web site, and continued to work with local watershed associations on possible funding sources and ways in which to promote volunteerism. The Town took part in employee training seminars sponsored by the Plymouth County Highway Association and continued to improve its good housekeeping programs.

### **Permit Years 7 thru 14 Activities and Information**

During Permits Years 7 through 13, the Town updated its local bylaws and finalized mapping of its MS4 system within its 2000 Urbanized Area including outfalls, catch basins, manholes and Stormwater BMP's. All MS4 system updates were loaded into the

Town's GIS system, with the conditions/photos and previous sampling results of the outfall structures. Additionally during this period, the Town completed drafting a Stormwater Pollution Prevention Plan and an SPCC Plan for its Highway Garage.

In Permit Year 10, the Town drafted an IDDE Plan, which includes ranking of all catchment areas within the urbanized areas of the Town of Norwell. The Town also drafted an O&M MS4 Infrastructure Plan for their compliance with the MS4 General Permit requirements. In 2012-2013, the Town constructed ten BMP's (infiltration systems) to treat first flush stormwater along heavily trafficked arteries in the Town (Summer and Lincoln Streets).

In Permit Year 11, the Town completed over a dozen Stormwater BMP's that were installed on Summer, Lincoln, South and Winter Streets and at the Mount Hope/Mount Blue intersection to treat first flush stormwater along heavily trafficked arteries. The Town has also commenced inspections and partial sampling on 160 Outfalls throughout Town to characterize flow, structure integrity and to check mapping for accuracy.

In Permit Year 12, the Town installed and constructed stormwater improvements along Main Street (Route 123) and 156 Outfalls were located and surveyed for condition, material type, and other physical characteristics. 40 Outfalls were field-screened and sampled for water quality information.

In Permit Year 13 and 14, the Town performed stormwater system upgrades on Main Street from Norwell/Hanover Townline to Norwell Center and installed stomwater infiltration BMPs on Grove Street, Pleasant Street and Forrest Street. The Town has improved progress on catch basin cleaning and street sweeping and has been coordinating with Town staff and engineering consultants to plan for the new permit.

In Permit Year 15, the Town conducted follow-up investigation from outfall sampling results at 6 locations and continued coordination with Board of Health for property investigation of dry weather flows at these locations. The Town has been working on a plan to update its GIS mapping of the drainage system and coordinating with Town staff and engineering consultants to plan for the new permit.