

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

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**EPA NPDES Permit Number:** MAR041052

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**MaDEP Transmittal Number:** W035900

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**Annual Report Number  
& Reporting Period:** No.14: April 1, 2016-March 31, 2017

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## NPDES PII Small MS4 General Permit Annual Report

### Part I. General Information

Contact Person: Glenn Ferguson Title: Highway Surveyor and Director

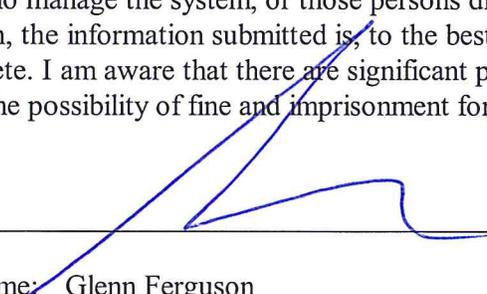
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Telephone #: 617-645-7710 Email: Glenn.Ferguson@townofnorwell.net

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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: 5/10/2017 \_\_\_\_\_

## **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. The first five years were focused on obtaining necessary funding to implement the tasks. Since then, the Town has developed a Stormwater Management Plan with priority programs for 2003-2016. In recent years, significant efforts have 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, development of stormwater pollution prevention and O&M manuals for parks and open space and the MS4 system including predictive catch basin cleaning, street sweeping program, winter road maintenance procedures, BMP maintenance, record keeping and training. Over the past few years, the Town has continued to work with engineering consultants on these efforts to prepare for the new EPA permit effective in July 1, 2017. The plans and programs prepared will be updated and implemented as required by the new permit during the upcoming year. Upon application for the new General Permit, the Town's staff will be working to plan and implement a new stormwater program that will comply with all new regulations.

The Town has been conducting screening of its outfalls to better confirm the absence of illicit discharges entering the Town's streams and wetland resources. During field screening of outfalls in April-June 2014 by an engineering consultant, 6 outfalls and their catchment areas were identified through water quality sampling for further investigation for possible illegal connections due to levels of E. Coli, Ammonia, surfactants and/or Chlorine that did not meet water quality thresholds. This year, 2017, the Town will further investigate the catchment areas of these 6 outfalls to identify possible illegal connections in accordance with the Town's IDDE plan.

The Town is committed to working with local watershed associations, particularly the North and South River Watershed Association to advance their goals and for public education and outreach and on possible funding sources and ways in which to promote volunteerism.

The Town provides 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 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 (if applicable)
1	Partnership with local Watershed Associations	Con. Comm., Highway, BOH	Regular Meeting Attendance	Continued partnership with North and South Coastal Watershed Association.	Continue partnership with North and South Coastal Watershed Association.
2	Develop Brochures	Highway	Mailings	Informational stormwater flyer issued to residents within water bill mailings.	Continue issuing stormwater education materials in accordance with the new EPA permit.
3	Web Site Public Service Postings	Highway	Web Site Publication & Maintenance	No updates to website since previous permit year.	Provide website postings for public outreach in accordance with the new EPA permit.

#### 2. Public Involvement and Participation

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
4	Water Quality Testing	Highway	2 Rounds of Water Quality Sampling of Priority Water Bodies	Goal of 2 rounds of sampling completed in 2014 and 2015.	Follow-up on sampling results to further investigate for possible illegal connections at 6 locations. Prepare for IDDE program requirements of the new EPA permit.
5	Community Cleanup Days	Highway	Annually	A Town-wide Cleanup Day, hosted by the Beautification Committee, also known as the “Trash Bash,” was completed on April 9, 2016.	“Trash Bash” to be completed on May 6, 2017.

### 3. Illicit Discharge Detection and Elimination

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 14</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – Permit Year 15</b>
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	No testing completed since previous permit year.	Follow-up on 6 locations identified during previous outfall sampling to further investigate for possible illegal connections. Update IDDE program as required by of the new EPA permit.
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

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 14</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – Permit Year 15</b>
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.	Continue collection as-built drawings electronically.

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

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 14</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – Permit Year 15</b>
14	Regulatory Review	Highway, Planning Board, BOH, Con. Comm.	Regulatory Revisions to Bylaws as Necessary	Approval of 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.
15	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.

## 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 during this permit year.	Continue stenciling program as needed.
20	Employee Training	Highway	Seminar Attendance	No specific trainings held during this permit year.	Will continue to identify and attend appropriate training sessions in compliance with the new EPA permit.

### 6a. Additions

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

The Town of Norwell Highway coordinated 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).

## **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 stormwater 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.