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

EPA NPDES Permit Number: **MAR041072**

MaDEP Transmittal Number: **X260849**

Annual Report Number
& Reporting Period: **No. 14: March 2017 - March 2018**

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Beth Rudolph, PE Title: Town Engineer

Telephone #: 781-721-7120 Email: brudolph@winchester.us

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: Mark Twogood

Title: Assistant Town Manager

Date: 5/1/18

Part II. Self-Assessment

The Town of Winchester understands that the 2003 Small MS4 General Permit expired on May 1, 2008. However, since a new general permit has not yet been issued, affected communities are required to submit an annual report for March 2017 through March 2018. This document is intended to fulfill this annual reporting requirement.

The Town of Winchester has completed the required self-assessment and has determined that our municipality is in substantial compliance with all permit conditions.

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 15 (Reliance on non-municipal partners indicated, if any)
1-1	Include an article/brochure about stormwater in the Consumer Confidence Report (CCR)	DPW	Article/brochure distributed annually to all residents and businesses	An educational write-up on stormwater management was included in Winchester's portion of the CCR distributed by the MWRA.
Revised	*Or other appropriate delivery method*			
1-2	Send information about proper disposal of lawn waste to landscape contractors in Winchester	DPW	Flyers delivered to landscape contractors	Flyers were mailed in April 2006 (Permit Year 3).
1-3	Staff a table a with information about stormwater at Town Day each year	DPW	Table staffed each year; number of brochures handed out	Information provided at Town Day booth held in June 2017.
1-4	Offer to give a stormwater education presentation to all classes of a middle school grade.	DPW	Middle school principal contacted; presentation given if principal approves	Met with middle school principal and middle school science coordinator during Permit Year 4. This BMP was met through the educational presentation given annually to students by the MWRA.
1-5	Install and maintain "Do not feed the waterfowl" signs at popular feeding areas	DPW	Number of signs installed, number of signs inspected	Signs were inspected (installation was completed during Permit Year 1).
1-6	Annual update of the Stormwater Management Plan at a televised Selectman's meeting	DPW	Annual update of the SWMP at a televised Selectman's meeting	Drainage and stormwater management topics were discussed at televised Selectmen's meetings at various times throughout the year.

1a. Additions

1-7	During the permit term, the Town developed a flood hazard webpage that is served publicly from the Town's website.	Engineering	Webpage posted on Town web site.	The Town implemented a flood hazard webpage, which contains stormwater and drainage related content.
1-8	Catch Basin Stenciling	Engineering/DPW	Number of basins stenciled.	Working with a local Boy Scout troop, 100 catch basin stencils were installed in the heavily travelled downtown area and areas adjacent to the Aberjona River. Work was completed in Fall 2011.

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)
2-1	Comply with state public notification guidelines at MGL Chapter 39 Section 23B	DPW	Continue to follow	Continue to comply.
2-2	Give prize to a water or environment-themed artwork in the Middle School Art Fair	DPW	Student participation	Winchester students participated in the MWRA-sponsored "Water Conservation Poster Contest".
Revised	*This BMP is accomplished through participation in MWRA's Water Conservation Poster Contest*			
2-3	Provide in-kind assistance to river and pond clean-ups	DPW	Letters sent to local groups offering clean-up assistance	DPW participated in clean-ups as requested by local groups.
Revised			*Instead of advertising this service through letters, the Town has posted this service on its Website*	

2a. Additions

2-4	In May 2009, the Winchester DPW assisted the non-profit group the Friends of Winter Pond with a stormdrain stenciling program. Drain markers labeled "No dumping – Drains to Pond" were purchased by the friends group and installed by DPW on approximately 100 catchbasins in the Winter Pond drainage area.	DPW	Installation of drain markers.	Installation complete in May 2009.
2-5	In 2010, the Town began involvement in the Mystic River Steering Committee. The Committee is composed of municipal, state and federal agencies, local non-profit and advocacy groups, and business groups. The group's mission is "to serve as a coordinating and information-sharing body to help establish strategic direction and priorities as well as to recommend and promote key projects and actions needed to improve environmental conditions in the Mystic River Watershed."	Engineering	Number of meetings attended.	The Town attended several meetings during the permit year.
2-6	On-line posting of Annual Reports	Engineering	Number of reports posted	Beginning with the Permit Year 9 annual report, the Town is posting annual reports on its website.
2-7	Sustainable Winchester Presentation	Engineering	Presentation Held	The Engineering Department gave a presentation to the Sustainable Winchester environmental group on April 25, 2012, discussing the Town's stormwater management program.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)
3-1	Conduct dry weather outfall screening	DPW	Percent of outfalls screened	Completed second round of dry-weather screening during Permit Year 5. The Town has worked with MyRWA over the years to perform additional dry-weather sampling.
3-2	Map stormwater outfalls and receiving waters	DPW	Map created	Map created during Permit Year 1. Updates performed as needed, including the mapping of 20 additional outfalls identified during the dry-weather sampling in Permit Year 5. An updated GIS drainage and outfall layer was created in 2015.
3-3	Map the stormwater collection system in a GIS	DPW	GIS of stormwater system created	Map completed during Permit Year 3. The Town conducted a new aerial flyover in 2012 that picked up surface drainage structures. An updated GIS drainage and outfall layer was created in 2015.
3-4	Develop and implement a plan to identify and remove non-stormwater discharges to the MS4.	DPW	Number of illicit connections found and removed	Dry-weather inspections completed during Permit Year 5 identified dry-weather discharges at six of the 89 inspected outfalls. Discharge from one of the outfalls was identified as discharge from an MWRA water main blow-off. Water quality analysis of discharge from four of the five other outfalls did not indicate elevated concentrations of ammonia-nitrogen, bacteria, or surfactants that would indicate the potential for illicit connections. Bacteria levels at the sixth outfall were slightly below the state's criteria for swimming and boating. The Winchester DPW investigated this location and found no signs of illicit connections. Given the land use in the drainage area, it is likely that the elevated bacterial levels can be attributed to wildlife.
3-5	Develop a Water and Sewer Regulation to allow Town inspectors into a building to check for illicit connections to the stormdrain.	Town Engineer and Town Attorney	Draft regulation developed and presented to the Board of Selectman	Regulation adopted by the Board of Selectmen on April 9, 2007 as part of the revised "Rules and Regulations Regarding the Use of Public Sewers and Stormdrains in the Town of Winchester, Massachusetts".

3-6	Develop a Water and Sewer Regulation to make it illegal to improperly connect a sanitary sewer to the stormdrain system and to dump pollutants into them.	Town Attorney	Draft regulation developed and presented to the Board of Selectman	Regulation adopted by the Board of Selectmen on April 9, 2007 as part of the revised "Rules and Regulations Regarding the Use of Public Sewers and Stormdrains in the Town of Winchester, Massachusetts".
3-7	Develop a Water and Sewer Regulation to require inspection of new construction for correct connection to the sanitary sewer	Town Attorney	Draft regulation developed and presented to the Board of Selectman	Regulation adopted by the Board of Selectmen on April 9, 2007 as part of the revised "Rules and Regulations Regarding the Use of Public Sewers and Stormdrains in the Town of Winchester, Massachusetts".

3a. Additions

3-8	Participate in 604(b) grant	Engineering, DPW, Conservation, MyRWA, Tufts		The Town participated in a 604(b) grant to identify sources of pollutants in the Aberjona River and identify and locate BMPs to improve water quality. Conceptual designs were developed for the Jenks Lot, but design and construction funding was not obtained.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15 (Reliance on non-municipal partners indicated, if any)
4-1	Require Erosion and Sediment Control Plan (ESCP) for construction sites greater than one-acre in area	Town Engineer	Requirement of an ESCP included in the Engineering Department Construction Standards	All subdivisions reviewed by the Engineering Department were required to provide an ESCP, regardless of size. The requirement for an ESCP is included by the Planning Board in the revised Subdivision regulations, adopted in fall 2011.
4-2	Require a waste management plan at construction sites larger than one-acre	Town Engineer	Waste management plan for each construction site larger than one-acre	Waste management plans were incorporated into the erosion and sedimentation plan, and the construction phasing plan for projects approved during Permit Year 14, regardless of the site's size.
4-3	Continue to review site plans for stormwater impacts	Town Engineer	Percent of site plans reviewed for stormwater impacts	All projects subject to site plan review or subdivision approval were reviewed for stormwater impacts by the Engineering Department.
4-4	Hold a public hearing for each new construction project that disturbs more than one acre of land	Planning Board	Public hearing held for each construction project	Public hearings were held for all definitive subdivision plans and special permit/site plan review projects filed with the Town, regardless of size.
4-5	Inspect and enforce erosion and sediment controls.	Town Inspector	Number of inspections conducted.	All major construction projects were inspected for adequate erosion and sediment controls in accordance with the approved plans.

4a. Additions

	None.			

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 15 (Reliance on non-municipal partners indicated, if any)
5-1	Develop a draft Water and Sewer Regulation to apply Standards 2, 3, 4, and 7 of the Massachusetts Stormwater Policy to the entire Town. Present the regulation to the Board of Selectman.	Town Attorney	Draft regulation developed and presented to the Board of Selectman.	Regulation adopted by the Board of Selectmen on April 9, 2007 as part of the revised "Rules and Regulations Regarding the Use of Public Sewers and Stormdrains in the Town of Winchester, Massachusetts".
5-2	Specify a stormwater BMP manual to be used for consistent design and performance standards.	Engineering	BMP manual selected	During Permit Year 1, the Town selected "Stormwater Management, Volume Two: Stormwater Technical Handbook", dated March 1997 and published by MADEP. In February 2008, MADEP released a revised "Massachusetts Stormwater Handbook". The Town now uses this manual as the standard.
5-3	Develop a draft Water and Sewer Regulation that ensures long-term maintenance of structural BMPs	Town Attorney	Draft regulation developed and presented to Board of Selectman.	Regulation adopted by the Board of Selectmen on April 9, 2007 as part of the revised "Rules and Regulations Regarding the Use of Public Sewers and Stormdrains in the Town of Winchester, Massachusetts".
5-4	Continue to allow conservation restrictions on private land.	Planning Board and Conservation Commission	Policy already developed; number acres protected per year	Continued to allow conservation restrictions.

5a. Additions

5-5	Runoff Volume Control Standard	Engineering	Draft regulation developed and presented to the Board of Selectmen	Regulation adopted by the Board of Selectmen on April 9, 2007 as part of the revised "Rules and Regulations Regarding the Use of Public Sewers and Stormdrains in the Town of Winchester, Massachusetts".
5-6	Revised Subdivision Regulations and Construction Standards.	Planning Board Engineering	Revised Subdivision Regulations and Construction Standards adopted.	As part of the Planning Board's review of the Town's Subdivision Regulations, the stormwater reporting, management, erosion and sediment control and post-construction maintenance requirements for new subdivisions have been revised. Completed Fall 2011.

5-7	Revised Conservation Commission Stormwater Guidelines	Conservation Commission and Engineering	Revised Stormwater Standards	The Conservation Commission and Engineering Department updated the stormwater management guidelines for WPA and Winchester Wetlands Protection By-law filings. The revised guidelines are consistent with the standards adopted by the Planning Board. Completed Fall 2011.

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 15 (Reliance on non-municipal partners indicated, if any)
6-1	Continue employee training program	DPW	Number/percent of DPW employees who receive stormwater training each year	Continued stormwater training program. Typical training included proper jetting of stormdrains and proper orientation of catchbasin cleaning equipment
6-2	Identify sensitive receptors (such as wetlands, beaches, etc.) within the Town	DPW	List of sensitive receptors developed, staff notified	No action scheduled. List developed and staff notified in Permit Year 1.
6-3	Conduct street and parking lot sweeping	DPW	All streets swept in spring; all streets swept at least one other time per year; municipally-owned parking lots swept in spring	Swept streets and parking lots in accordance with revised permit requirements.
Revised	*This BMP is being modified to take account of budgetary constraints*		*Streets will be swept a second time per year on an as-needed basis*	
6-4	Calibrate salt spreaders and monitor industry "smart salting" standards	DPW	Amount of deicers used.	Calibrated spreaders for winter season. Monitored salting standards during winter 2017 to 2018.
6-5	Clean all catchbasins at least once every five years and clean drain pipes as necessary	DPW	Number of catchbasins cleaned annually	Cleaned at least 20% of the Town's catchbasins during Permit Year 15.
6-6	Train staff in the proper application of herbicides, pesticides, and fertilizers	DPW	Training conducted; amount of herbicides/fertilizers used	Completed annual training. All staff associated with such chemical applications are licensed.
6-7	Hold Annual Household Hazardous Waste Drop-off Day	Board of Health	At least one household hazardous waste drop-off day held per year	Held Hazardous Waste Drop-off Day in April 2017.
6-8	Continue proper snow removal	DPW	Continue existing practices.	Disposed of snow properly

6-9	Develop and implement a plan for catchbasin and street sweeping residual disposal	DPW	Plan developed; training held	The Town implemented its disposal plan for all residual materials collected as a result of catchbasin cleaning and street sweeping activities. Materials are temporarily stockpiled in the DPW yard and then transported by a private contractor to an approved landfill for disposal.
6-10	Evaluate the Town Yard and Transfer Station for stormwater good housekeeping practices	DPW	Assessment conducted twice per year	Continued implementation of recommendations and conducted bi-annual inspections. Capping of the former landfill at the Transfer Station was completed in 2008/2009 in accordance with DEP requirements. This work included construction of sediment forebay and drainage swale to mitigate the quantity and quality of stormwater runoff leaving the capped area. In early 2012, DPW performed a cleanup of the 25-foot buffer between Horn Pond Brook and the Town Yard, removing stockpiled materials, protecting from equipment, and loaming and seeding the area. The Town also recently completed construction of a new, covered salt shed.
Revised	*The Town conducted an assessment of these two properties and will follow-up the assessment with twice-yearly inspections.*			

6a. Additions

6-11	Free mercury thermometer replacement	Board of Health	Number of thermometers replaced	The Board of Health has a partnership with a waste management company to replace old mercury thermometers turned in by residents with new thermometers for free. The goal of this program is to remove mercury from the waste stream. Thermostats, thermometers, and other mercury products are also collected at the Town Transfer Station.
6-12	Municipal Infiltration Projects	DPW, Engineering Dept.	Use of infiltration systems with appropriate site conditions and pretreatment	In 2010, the Town of Winchester constructed a stormwater detention/infiltration system under the track and basketball courts at McCall Middle School. Approximately 1.14 acre-feet of storage was provided as a result of this project. An additional detention/infiltration system was constructed at the McCall School parking lot, providing an additional 1.21 acre-feet of storage. This work was completed in the summer of 2012.

6-13	Residential Rain Barrel Program	Engineering Dept.	Number of Rain Barrels and Bins Sold	In Permit Year 4, the Town initiated a program designed sell rain barrels to residents at a discounted rate over retail value. The Town has worked with the Great American Rain Barrel Company in administering this program.
6-14	Municipal Drainage Operations and Maintenance Plan	Engineering Dept. & DPW	Preparation of Plan	In 2012, the Town developed a written Operations and Maintenance Plan for the drainage system, with a description of the system, department responsibilities, and inspection and maintenance routines.