

Municipality/Organization: Town of Norfolk

EPA NPDES Permit Number: MAR041141

Mass DEP Transmittal Number: W-040563

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

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2017)

Part I. General Information

Contact Person: Robert J McGhee Title: Director Dept. of Public Works

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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: Robert J McGhee.

Title: Director of Public Works

Date: 4-11-17

Part II. Self-Assessment

The Town of Norfolk has completed the required self-assessment and has determined that our municipality is in compliance with current permit conditions. As mentioned in each Annual Report since 2003, Part II. Self-Assessment, specific considerations were given to the following:

Part I. D. 4 - The Town of Norfolk is familiar with the *Final TMDL for Nutrients in the Lower Charles River Basin*, which mandates phosphorus reductions in stretches of the Charles River, and tributaries, within the Norfolk town borders. There are pathogen/bacteria reductions also mandated under the pathogen TMDL for the Charles River. The Town will incorporate the necessary measures to address these pollutants of concern in subsequent permit periods, presumably under the terms and conditions of the renewed North Coastal Watersheds NPDES permit.

Norfolk is pleased to present the following report describing its success during Year 14 at implementing the actions laid out in its Notice of Intent and its plans for moving forward.

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 – Beyond Permit Year 14
1	Create a Stormwater Program	Department of Public Works Planning Board Conservation Commission Board of Health Board of Selectmen	Norfolk will present its draft Comprehensive Stormwater Management Program to the public at a public meeting.	<ul style="list-style-type: none"> o Measurable Goal complete year 1. o The Comprehensive Storm water Management Program is underway. 	The Comprehensive Stormwater Management Program will continue.
2	Create a Stormwater Program	Department of Public Works	Norfolk will identify appropriate sources of funding assistance (SRF, 319 Grant Program, 604(b) Grant Program, Lakes & Ponds Grant Program, Source Water Protection Grant Program, Recycling Grant Program) and apply for assistance in implementing portions of its Comprehensive Stormwater Management Program, including public education and outreach.	<ul style="list-style-type: none"> o No additional funding has been acquired by Norfolk for year 14. 	The Town of Norfolk will make use of allocated funding and continue to identify appropriate funding sources.
3	Address specific groups	Department of Public Works	Distribute EPA and other relevant educational brochures to targeted audiences. Distribution points include Town Hall, Library, and Transfer Station.	<ul style="list-style-type: none"> o The Town has implemented all public education tasks identified in our original SWMP. Further public education opportunities will be developed in preparation for the next permit term program. 	<ul style="list-style-type: none"> o Stormwater protection brochures will continue to be printed and made available at Town buildings.
4	Target groups likely to impact storm water	Department of Public Works	Brochures targeting specific audiences and activities will be available. These target groups include homeowner and lawn maintenance activities, disposal of household waste, and pet maintenance.	<p>The Town of Norfolk produced and distributed the following brochures (also available on the Town website):</p> <ul style="list-style-type: none"> o “Town of Norfolk Recycling/Transfer Station Newsletter for Spring 2017” o “Protecting Water Quality in Norfolk’s Lakes and Streams.” 	A warrant article will be prepared to allow the Town to move forward with a storm water utility. If this study proceeds, the Town will provide public information and solicit public input. On going

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 – Beyond Permit Year 14
5	Identify alternative information sources	Department of Public Works IT Department	Norfolk will post links to stormwater BMPs and other water quality education resources, including EPA and DEP on its website. http://www.virtualnorfolk.org/	Norfolk’s website includes links to EPA NPDES Program, EPA public education information on storm water, Center for Watershed Protection and MA DEP.	The Town of Norfolk will continue to post links to stormwater BMPs and other water quality education resources, including EPA and DEP on its website through the Comprehensive Storm Water Program.
6	Identify alternative information sources	Department of Public Works IT Department	Norfolk will also post links on its website to the Upper Charles River Stormwater Assessment Report upon its completion. http://www.virtualnorfolk.org/	A link to the Upper Charles River Storm water Assessment Report was added to the Town’s website during Year 5.	No additional activities are proposed during upcoming permit year.
7	Utilize local public access channel	Department of Public Works	Public meeting notice and a meeting reviewing Norfolk’s Comprehensive Stormwater Management Program will be posted/broadcast on Norfolk’s local access channel.	Information regarding public meeting to review the Norfolk Comprehensive Stormwater Management Program was advertised on local cable access. The Town of Norfolk posted Storm water Management Program notices and meetings on local cable access.	o The Town of Norfolk expects to continue posting Stormwater Management Program notices and meetings on local cable access as the new permit is being drafted

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 – Beyond Permit Year 14
8	Promote Household Waste Recycling	Department of Public Works	The Town of Norfolk will work with the consortium to identify a permanent site for the location of a regional transfer station and hazardous waste collection center. Consortium meets monthly and is dependent on available funding.	<ul style="list-style-type: none"> ○ The Town has made contact with the Town of Wrentham regarding creation of a regional Transfer Station on state property near the Town Line. The discussions are informal thus far, but will be pursued as opportunities to advance the project are identified. ○ The town collects oil, batteries, CRT, mercury, paints, and any household hazardous waste. The waste is stored for up to 6 months when a hazardous waste hauler disposed of the collected wastes. Unknown substances are collected and the town calls to have the waste identified by the hazardous waste haulers and disposed of. 	<ul style="list-style-type: none"> ○ The Town of Norfolk will continue to work with the consortium and the Town of Wrentham specifically. Other communities have indicated an interest in joining the consortium. ○ The Town of Norfolk will continue to sponsor Hazardous Waste Collection.
9	Storm drain stenciling	Department of Public Works	Norfolk will work with local Scout groups to develop a stenciling program. Stenciling will target Norfolk's sub watersheds.	Measurable Goal not complete year 6. Outfall and drainage system mapping is now complete. The Town does plan to involve volunteer groups along with Town staff when stencil design, types, methods of application and cost have been reviewed. The Town has contacted the SuAsCo Watershed Community Council to obtain information about their successful program.	The Town of Norfolk has purchased a GPS Unit and will update storm water assets
10	Community clean-ups	Department of Public Works Norfolk Conservation Commission Mirror Lake Committee	Town of Norfolk will encourage local stream team cleanups, such as those performed at Mirror Lake, with local residents and area Scout groups. Town will provide notice of event on local access channel and website.	<ul style="list-style-type: none"> ○ The Pondville Pre-Release Center holds a semi-annual town wide litter pick-up. The DPW collects litter from this pick-up. The Norfolk DPW also picks up trash collected by volunteer neighborhood groups. ○ The Charles River Watershed Association conducts annual clean-ups every Spring. 	The Town of Norfolk will continue to support clean-up events by supplying bags and disposal.
11	Community clean-ups	Department of Public Works Audubon Society	The Town of Norfolk will support Audubon's annual Earth Day cleanup in Stony Brook Wildlife Sanctuary through posting of event on website and local access channel.	<ul style="list-style-type: none"> ○ The Town of Norfolk supports the annual Audubon Earth Day cleanup at Stony Brook Wildlife Sanctuary through posting of the event on website and local access channel. ○ The Town of Norfolk provided support to the Audubon clean-up efforts. 	The Town of Norfolk will continue to provide support to the Audubon clean-up efforts.
12	Community clean-ups	Department of Public Works	Town will provide trucks and other material to support cleanup efforts and disposal of materials.	The Town of Norfolk provides trailer, containers, and trash disposal for the annual Earth Day clean up.	The Town of Norfolk expects to continue supporting clean up efforts.

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 – Beyond Permit Year 14
13	Inventory and mapping of storm drain system	Department of Public Works	Norfolk will identify appropriate sources of funding assistance (SRF, 319 Grant Program, 604(b) Grant Program, Lakes & Ponds Grant Program, Source Water Protection Grant Program, Recycling Grant Program) and apply for assistance in implementing portions of its Comprehensive Stormwater Management Program, including public education and outreach.	<ul style="list-style-type: none"> o No further funding beyond the original SRF loan has been sought at this time. o The Town has sought Ch. 90 Funds for the purchase of GIS instrumentation and re-survey Drainage Assets etc. Funding was approved. 	The Town will be reviewing progress of the comprehensive plan and attempt to identify funding opportunities to support activities in the next permit term. As mentioned BMP # 9. The Town of Norfolk has purchased a GPS Unit and will update storm water assets
14	Mapping and identification of outfalls and receiving waters	Department of Public Works	Norfolk has developed and is implementing a plan to map all outfalls and receiving bodies of water.	<ul style="list-style-type: none"> o No additional dry weather flow inspections were conducted in Year 9. The Town has sought Ch. 90 Funds for the purchase of GIS instrumentation and re-survey Drainage Assets etc. Funding was approved.	The Town anticipates conducting additional investigations and sampling at identified locations when new state and federal permit conditions are finalized.
15	Identification / description of problem areas	Department of Public Works	Norfolk will develop and implement an Illicit Discharge Detection and Elimination (IDDE) plan, contingent on Town Meeting approval of funding.	No further progress on this BMP in Year 14.	The Town anticipates formalizing scope of additional effort when state and federal permits define water quality parameters.
16	Enforcement procedures addressing illicit discharges	Planning Board Town Counsel Board of Health By-Law Study Committee	Norfolk will review whether local authority is appropriate and able to respond to potential illicit discharges. New by-laws, if necessary, will be proposed to Town Meeting.	The Town implemented the new by-law prohibiting non-stormwater discharges, which was passed at Fall 2006 Town Meeting. No illicit discharges were identified during the permit year.	The Town will continue to implement and enforce the new by-law.
17	Public information program regarding hazardous wastes and dumping	Department of Public Works Consortium Board of Health	Norfolk and the consortium will provide educational brochures to residents within the member communities promoting proper disposal of household hazardous wastes and conditions for utilization of the consortium facility, currently located in Norfolk.	Transfer Station brochures are sent out annually. Two annual letters (one in spring and one in fall) are sent out to the consortium members.	Norfolk will continue to print and distribute the current brochures in place and will add more brochures to its annual mailings regarding Hazardous Waste, as appropriate.

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18	Initiation of recycling programs	Department of Public Works Consortium	Norfolk will apply for funding assistance from DEP's Recycling Grant Program for assistance in public education and the purchase of recycling materials.	<ul style="list-style-type: none"> ○ The Town of Norfolk has applied and did receive funding from DEP's Recycling Grant Program this year. A Recycling compactor container was applied for and granted ○ The Town has installed the proposed of Solar Panels located on the Landfill and also in a site assigned area east of the land fill – Total 8 Acres. 	The construction of the Solar Panels have created a new source landscape and construction materials along with a General Construction Permit that identifies with Storm Water on the site.
19	Watershed assessments and studies	Department of Public Works Conservation Commission Board of Health	Norfolk will identify opportunities for funding assistance from DEP's 604(b) and 319 grant programs and the Department of Environmental Management's Lakes and Ponds Grant Program to support watershed assessment and implementation activities.	○ No further action has been taken in this permit year.	The Town of Norfolk will continue to identify appropriate funding sources especially in relation to remediation of stormwater related problems within the DEP identified 303d water bodies.
20	Watershed assessments and studies	Department of Public Works Water Department	The Town of Norfolk Water Department will apply for funding assistance from DEP's Source Water Protection Program for grant assistance to develop wellhead protection plans and stormwater management plans within Zone II's.	The Town already has a SWPP in place and does not intend to update it at this time. The Town did not apply for or receive the DEP SWPP grant assistance for Year 14.	The Town of Norfolk will ascertain the availability of funds from the Water Protection Program during the upcoming Permit Year.

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 – Beyond Permit Year 14
21	Bylaw: Storm water management regulations for construction sites 1 acre or larger	Planning Board Conservation Commission Town Counsel By-Law Study Committee Board of Health Zoning Board of Appeals	Norfolk will review model by-law developed by DEP in consultation with the Attorney General's Office.	<ul style="list-style-type: none"> ○ The Town sought and obtained approval of a bylaw that requires a storm water permit for any sites that disturb 1 acre or more at the Fall 2007 Town Meeting. The new permit addresses requirements for site controls during construction. ○ A potential violation of the by-law was identified during Year 6. During this reporting period, the incident was investigated and the violation was corrected by the property owner through tree replanting. 	<ul style="list-style-type: none"> ○ Implement requirements of new bylaw ○ Implement reviews of storm drainage system through DPW. ○ Review recent cases and pursue by-law improvements if warranted.

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 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Beyond Permit Year 14
22	Bylaw: Require post-construction runoff controls	Planning Board Conservation Commission Town Counsel By-Law Study Committee Board of Health Zoning Board of Appeals	Norfolk will review model by-law developed by DEP in consultation with the Attorney General's Office.	<ul style="list-style-type: none"> ○ Town obtained approval of a bylaw governing post-construction runoff controls at the Fall 2007 Town Meeting. The new Bylaw requires a storm water permit for any sites that disturb 1 acre or more. ○ Town included a warrant article for Spring 2011 Town Meeting to allow development of Storm water utility and redevelopment of downtown parcels under specific site drainage conditions. 	<ul style="list-style-type: none"> ○ Implement requirements of new bylaw. ○ Pursue implementation of downtown storm water district and utility to allow economic development with environmental protections for water quality. Continued discussions and further action will be determined by possible future Mass Works Infrastructure Grants

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 – Beyond Permit Year 14
23	Develop a municipal Operations and Maintenance Plan	Department of Public Works	Using regulations and recommendations from DEP and EPA, Norfolk will develop and update an operations and maintenance plan to include proper disposal of street sweepings, catchbasin cleanout, snow disposal, roadway de-icing procedures, vehicle washing, and outside storage of materials.	No further activity in Year 10.	The DPW Administration will continue to keep maintenance logs for sweeping and stormwater activities. The DPW Administration will continue to utilize the BUD program to evaluate and reuse soils. A new O&M plan is in place at the Towns transfer Sta. as of 2010.
24	Develop a municipal Operations and Maintenance Plan	Department of Public Works	Norfolk will implement a formal inspection program, including maintenance logs and scheduling, for catchbasin cleaning, repairs, and new installation.	o The Town of Norfolk contracts with a vendor to clean all catch basins annually. Vendor provides the Town with a maintenance log.	The DPW Administration will continue to keep maintenance logs for sweeping and stormwater activities. This information will become part of the Town's new database and reviewed periodically for updating.
25	Develop a municipal Operations and Maintenance Plan	Department of Public Works	Norfolk will review and incorporate appropriate recommendations of USGS Report: <i>Potential Effects of Structural Controls and Street Sweeping on Stormwater Lands to the Lower Charles River, 2002.</i>	Goal completed. No further activity in this permit year.	No additional activity proposed until such time as new permit is finalized and new required O&M procedures confirmed.
26	Develop and implement training programs for municipal employees	Department of Public Works	Norfolk will send a minimum of 5 public works employees annually to training seminars sponsored by MassHighway, BayState Roads, and other relevant agencies or vendors.	The Department recently hired a Highway Superintendent and he will be working with members of the staff regarding training and supporting the BMP's currently in place.	The Town of Norfolk will continue to support training and continue with employee education requirements as described in the SWPPP and SPCC plan. Town of Franklin & Millis work shop may 26, 2012

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 – Beyond Permit Year 14
27	Identify applicable structural and non-structural long-term runoff control strategies BMPs	Department of Public Works	Norfolk will review and implement recommendations within EPA required Spill Control and Countermeasure Plans (SPCC).	The Town of Norfolk has an SPCC Plan for its fuel depot and a Stormwater Pollution Prevention Plan (SWPPP) for the transfer station. Both plans contain BMPs, good housekeeping practices, and employee education	The Town of Norfolk will continue to comply with plan requirements.
28	Review storm drainage infrastructure needs	Department of Public Works	Norfolk will incorporate storm drain infrastructure review in its Chapter 90 project utilizations.	<p>See BMP 22 above. Infrastructure needs were investigated as part of a Downtown drainage system project to determine current condition and future capacity of existing drainage infrastructure. The result of the investigation is the warrant article to promote a storm water district within the B-1 business district in downtown Norfolk.</p> <p>As part of the existing Town regulations. Private property owners who wish to tie into the drainage system must install a Stormceptor (oil water separator combined with a deep sump) prior to the connection to the municipal drain lines.</p>	<p>The Town of Norfolk will continue to consider stormwater management in the design and construction of roadway improvements.</p> <p>Further survey of the outfalls and headwalls for condition will be undertaken and funding for rehabilitation undertaken.</p>

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA)- *NOT APPLICABLE*

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 – Beyond Permit Year 14
				No final TMDLs have been published for water bodies within the Town of Norfolk. However, several stretches of the Charles River, Mill River and Stop River have been identified as impaired and requiring a TMDL. In addition, the Town will be subject to phosphorus reductions associated with WLA’s for the TMDL associated with the Lower Charles River Basin. The Town will address requirements of the new permit upon publication	The Town recognizes that proposed state regulations pertaining to TMDLs for the Charles River Watershed will be applicable to the community and will seek ways to meet the performance standards contained within the final regulations when promulgated.

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

Sampling and analysis has not been performed. Expenditures exclusively on water quality improvements, such as catch basin cleaning, installation of water quality devices, improved roadway drainage and waterway maintenance in year 13

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	no
Annual program budget/expenditures	(\$)	\$40,000

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	100%
Stormwater management committee established	(y/n)	yes
Stream teams established or supported	(# or y/n)	yes
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	yes
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	26
▪ community participation	(%)	100%
▪ material collected	(tons or gal)	207 gals
School curricula implemented	(y/n)	no

Legal/Regulatory

	In Place Prior to Phase II	Under Review	Drafted	Adopted
Regulatory Mechanism Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination				X
▪ Erosion & Sediment Control				X
▪ Post-Development Stormwater Management				X
Accompanying Regulation Status (indicate with "X")				
▪ Illicit Discharge Detection & Elimination				
▪ Erosion & Sediment Control		X		
▪ Post-Development Stormwater Management		X		

Mapping and Illicit Discharges

Outfall mapping complete	(%)	100% (accessible)
Estimated or actual number of outfalls	(#)	160
System-Wide mapping complete	(%)	95%
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	95%
Outfalls inspected/screened	(# or %)	10%
Illicit discharges identified	(#)	
Illicit connections removed	(#) (est. gpd)	
% of population on sewer	(%)	
% of population on septic systems	(%)	100%
(note: approximately 5% of population on "sewer" which is disposed through groundwater discharge)		

Construction

Number of construction starts (>1-acre)	(#)	
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	
Site inspections completed	(# or %)	
Tickets/Stop work orders issued	(# or %)	
Fines collected	(# and \$)	
Complaints/concerns received from public	(#)	

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	
Site inspections completed	(# or %)	
Estimated volume of stormwater recharged	(gpy)	

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	annually
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	annually
Total number of structures cleaned	(#)	1567
Storm drain cleaned	(LF or mi.)	300 LF
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	350 cy
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		BUD
Cost of screenings disposal	(\$)	inhouse

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	annually
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	annually
Qty. of sand/debris collected by sweeping	(lbs. or tons)	620 tons
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	BUD

Cost of sweepings disposal	(\$)	In house
Vacuum street sweepers purchased/leased	(#)	
Vacuum street sweepers specified in contracts	(y/n)	

Reduction in application on public land of: (“N/A” = never used; “100%” = elimination)		
▪ Fertilizers	(lbs. or %)	2500 lbs
▪ Herbicides	(lbs. or %)	150 lbs
▪ Pesticides	(lbs. or %)	80 lbs

Anti-/De-Icing products and ratios	% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand	25% 75%
Pre-wetting techniques utilized	(y/n)	yes
Manual control spreaders used	(y/n)	no
Automatic or Zero-velocity spreaders used	(y/n)	yes
Estimated net reduction in typical year salt application	(lbs. or %)	500 lbs/mile
Salt pile(s) covered in storage shed(s)	(y/n)	yes
Storage shed(s) in design or under construction	(y/n)	n/a