Municipality/Organization: Town of Franklin

EPA NPDES Permit Number: MAR041117

MaDEP Transmittal Number: W- 041238

**Annual Report Number** 

& Reporting Period: No. 15: May 1, 2017-April 30, 2018

# NPDES PII Small MS4 General Permit Annual Report

#### Part I. General Information

Contact Person: Robert Cantoreggi

Title: DPW 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: Jeffrey D. Nutting

Title: Town Administrator

Date: 4/30//8

#### Part II. Self-Assessment

The Town of Franklin has completed the required self-assessment and has determined that our municipality complies with all permit conditions with the following provisions related to BMP schedules:

- 1. As discussed in Part III, Section 7 of this report, the schedule has been modified for developing BMPs associated with meeting Total Maximum Daily Load (TMDL) studies and Waste Load Allocations (WLA). In Year 13, the Town of Franklin applied for and received s319 Grant funding (Project 16-01/319) for the "Upper Charles River Regional Stormwater Finance Phase II Feasibility Study" with the participating Towns of Franklin, Medway, and Milford, MA. The project began in early 2017 and is anticipated to be completed in June 2018. This project will leverage past work under the 2011 study, the 2016 Stormwater Utility Feasibility Study for the Town of Medway, and recent work by the Town of Franklin to evaluate stormwater management needs. The results of this project will assist in the development of the Town of Franklin's approach for meeting the MS4 Permit, TMDL studies, and associated WLA.
- 2. As discussed in previous Annual Reports, a Stormwater Utility Feasibility Study was completed in 2007 and the Town updated the utility project in 2008 and 2009. The "Upper Charles River Regional Stormwater Finance Phase II Feasibility Study" anticipated to be completed in June 2018.

In addition to the information discussed for each BMP in this report, the Town would like to note the following additional activities during the Year 15 reporting period:

- o The Franklin DPW received a Charles River Watershed Association (CRWA) grant to conduct training about constructing residential rain gardens in permit year 11. A webpage on the Town website remains available for education on residential rain gardens.
- o In 2014, the Franklin DPW applied for and was awarded a grant through the Massachusetts Department of Environmental Protection 319 Nonpoint Source Pollution Grant Program for "Phase II of Stormwater BMP Retrofits". The stormwater retrofits include three detention basin retrofits located at the Jefferson Elementary and Remington Middle Schools and a green infrastructure retrofit along Cottage Street near Union Street. The project will support the Town's watershed-based stormwater management strategy to improve water quality and build upon past studies and retrofit projects. The proposed BMPs continue work within the Mine Brook sub-watershed, a major tributary to the Upper Charles River in Franklin. The Jefferson Elementary and Remington Middle Schools retrofits were constructed in Spring 2017. The Cottage Street BMPs were constructed in the fall of 2017 and final planting is planned for spring 2018.
- The Town was awarded a s319 grant in the fall of 2017 for the design and construction of BMPs along Dean Ave as part of an adjacent redevelopment project and Griffin Road to reduce pavement at an under-utilized dead end road. The Dean Ave project is considered to be a public-private partnership since the land owner has agreed to grant an easement for the Town to better manage stormwater from Dean Ave in an area that is otherwise constrained by the limit of the public right-of-way. Design is anticipated to begin in Summer 2018 with construction in Fall 2018 or Spring 2019.

The Franklin DPW completed several projects that incorporated stormwater improvements:

- o Orchard St, Garden St, Squire St: installed new catch basins
- o Maple St: installed four underground infiltration systems
- o Cottage St neighborhood (portion of Cottage St, Geb St, Joy St, Worsted St, Metcalf St, A St): installed new catch basins, rain gardens, and tree wells

#### The DPW began planning for the following projects:

- o Intersection of Beaver and Grove Street: pavement reduction, replace three catch basins, and add two catch basins
- o Elm Street: add infiltration galleries
- o Linda Lane: reduce cul-de-sac, replace two catch basins, and add two tree wells
- o Lincolnwood: replace one catch basin, reduce roadway, and add a rain garden
- o Alpine neighborhood: replace catch basins with deep sump catch basins
- o Griffin Rd: install a rain garden

#### The Franklin DPW Director made 5 stormwater presentations during the permit year:

- o 10/24/2017 Maine Stormwater Conference, Portsmouth ME
- o 5/5/2017 Suffolk University, Boston MA
- o 11/29/2017 Town Council Meeting, Franklin MA
- o 4/11/2018 Neponset Stormwater Partnership Meeting, Canton MA
- o 4/11/2018 NBM Highway Association Meeting, New Bedford MA

## 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	Planned Activities – Next Permit Term
1A Revised	Recycling Education for Home Owners	DPW/Solid Waste Coord.	Distribute 3 times/year	A recycling mailer was sent to residents on a quarterly basis. The mailer discussed proper waste disposal & recycling practices in addition to advertising the additional recycling and composting services that are available at the Beaver Street Recycling Center. The recycling section of the Town website was updated with additional information.  In July 2010, the town moved to a single stream automated trash and recycling program that has increased the tonnage of recyclable materials. Styrofoam is accepted for recycling and removed approximately 1.3 tons from the waste stream in 2017. 55 tons of rigid plastic were also recycled. Toilets, sinks and bathtubs are also accepted for recycling, in addition to the composting program at the facility.	Continue to update website with additional information and educational materials. Increase recycling tonnage through public awareness campaigns.
				The recycling center continues to accept mattresses, furniture items, and limited household hazardous wastes daily.	

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15	Planned Activities – Next Permit Term
1B Revised	Education Information on the Web Site	DPW	Web Site Information developed and posted for year 2	The stormwater management web page was maintained with information about the EPA "Sustainable Stormwater Funding Project for the	Continue to update web page with new topics and the progress of the Stormwater Management program as needed. Track the number of hits on
Revised			Increase # of web site hits each year	Upper Charles River communities of Bellingham, Franklin and Milford". The web page also contains a general description of stormwater with links on "tips for keeping stormwater clean" and educational brochures for various pollution prevention topics. The website has recorded a total of 2,019 hits to date. The link to the "Franklin Rain Garden" web pages was maintained. The rain garden link provides information on the purposes of rain gardens, as well as how to	the stormwater web page to gauge effectiveness.
				create your own, along with assistance provided to the residents.  The Franklin DPW created a website dedicated to promoting stormwater awareness titled "Soak It Up Franklin", which provides information on the importance of water conservation, Town stormwater projects, the rain garden program, and information on the Town Rain Barrel initiative and workshops. A hit counter was added to the website and averages approximately 120 hits per week. The Franklin DPW maintained a group on Facebook to share stormwater information and events.	

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15	Planned Activities – Next Permit Term
1C Revised	Education on Waste Disposal & Water Conservation	DPW/Solid Waste Coord.	Materials Available in all Public Buildings	<ul> <li>Water conservation materials are available at the DPW Building.</li> <li>Water Conservation Kits (toilet tank displacement bags, low-flow showerheads, leak detection tablets, faucet aerators) are available at the DPW.</li> <li>Stormwater education materials continue to be displayed at the Town Hall, High School and DPW Administrative Office.</li> <li>Recycling flyers are sent quarterly to residents.</li> <li>Water conservation information is broadcast daily on local cable channel during months of May through October.</li> <li>Mandatory water conservation notices in quarterly newsletter.</li> <li>The mercury thermometer replacement program was maintained; residents can turn in old mercury thermometers for digital units.</li> <li>The fluorescent bulb turn in program was maintained.</li> <li>Recycling facts and updates are broadcast daily on the local cable channel year-round.</li> <li>Educational info. is available on specific websites for stormwater management and recycling.</li> <li>Phone and e-mail address provided for citizen inquiries (dpw@franklin.ma.ugov).</li> <li>A \$50 rebate is now offered on high water efficiency appliances, toilets, and rain barrels.</li> </ul>	Continue to make materials available at public buildings, Town events and post information on the Town's website.

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15	Planned Activities – Next Permit Term
1D	Water Resource Information and Protection Signs	DPW	Five signs posted per year, beginning in year 3	A new sign was installed at the Regent Circle rain garden in Spring 2017. Three educational signs were	Continue to evaluate additional locations for signs.
Revised			Begin posting signs in year 4; post/maintain signs annually	installed at the Jefferson Elementary and Remington Middle School for the BMP retrofits that were constructed.	Two educational signs are planned to be installed at Cottage Street once planting is completed in spring 2018.
1E	Public Education with Charles River Watershed Association	DPW Director, Town Engineer	Number of Coordinated Programs	In Year 14, the Town completed a public outreach and assistance program to build rain gardens on	Continue to coordinate public education efforts and pursue grant opportunities with the CRWA, as
Revised			# attendees & audience	residential properties. A webpage on the Town website remains available with educational material on residential rain gardens.  In Year 1, the Franklin DPW in partnership with the CRWA, the Coca Cola Company, and River Network began a program to encourage the domestic use of rain barrels. Two free workshops were held on May 6, 2017 to construct rain barrels. A total of 40 rain barrels were constructed for home use by participants. One rain barrel session featured a presentation by the CRWA.	appropriate.  Continue to offer materials and assistance for residents to complete stormwater projects.

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15	Planned Activities – Next Permit Term
1F	Establish a "Green Team" at Franklin High School and Participate in Stormwater/Water Quality Improvement Projects	Franklin High School students, DPW	Monthly meetings, agenda, memos of actions and results	Other educational activities are completed in place of the "Green Team".  On April 29, 2017 the Town of Franklin hosted an Earth Day clean up	Plan for Earth Day Events each year. The 2018 Earth Day is planned for April 28 <sup>th</sup> and will offer free t-shirts and free annuals to the first 50 volunteers.
Revised	Identify and Conduct New Opportunities for Stormwater/Water Quality Education	DPW	# of events or activities and participants	event at Beaver Pond offering free annuals to the first 50 volunteers. This event attracted 154 volunteers and supplied participants with educational stormwater handouts.	
1G	Open Data Sharing for Stormwater Infrastructure	DPW	Ongoing correspondence with regulatory agencies for data sharing	No significant activities occurred during the permit year related to open data sharing with non-profit and regulatory entities, but information is available upon request. The DPW continued work on creating a GIS Story Map journal that will display pictures and descriptions of green infrastructure improvements. This will be posted to the DPW web page.	Continue to share GIS and infrastructure data with regulatory agencies.
1H	Classroom Stormwater Education	Town Engineer & DPW	# students and/or # classes & grades taught	On April 28, 2018 the Town of Franklin is hosting an Earth Day clean up event offering free annuals and t- shirts to the first 50 volunteers. Educational stormwater handouts will be made available for the volunteers.	Plan for Earth Day Events each year.
11	Stormwater Newspaper Articles	DPW	# articles published, audience reached	The Franklin, MA website posts stormwater education webpages and Public Works News & Announcements about relevant stormwater activities. A recent addition to the Franklin, MA website explains the Sewer piping system construction in the downtown area, posted on May 31, 2017. An article was also posted on February 27, 2018 advertising the Earth Day Celebration and Cleanup.	Continue to develop and publish articles for new topics on a regular basis.

## 2. Public Involvement and Participation

BMP ID#	BMP Description	Responsible Dept./Person	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15	Planned Activities – Next Permit Term
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2A	Storm Drain Stenciling	DPW	Average Ten Catch Basins/Year	Storm drains are monitored on a regular basis as part of catch basin	Continue to maintain and replace storm drain markers in Town. Solicit
Revised				cleaning activities to determine if remarking is needed. 347 catch basins were stenciled in Year 15.	and involve local Youth Organizations (e.g., Eagle Scouts).
2B	Outreach Efforts with Charles River Watershed Association	DPW Director & Conservation	Number of Coordinated Programs	In Year 14, the Town completed a public outreach and assistance program to build rain gardens on	Continue to coordinate public events during next permit term to increase public education and involvement.
Revised				residential properties. A webpage on the Town website remains available with educational material on residential rain gardens.	
				In Year 14, the Franklin DPW in partnership with the CRWA, the Coca Cola Company, and River Network began a program to encourage the domestic use of rain barrels. Two free workshops were held on May 6, 2017	
				to construct rain barrels. A total of 40 rain barrels were constructed for home use by participants. One rain barrel session features a CRWA presentation.	

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15	Planned Activities – Next Permit Term
2C	Public Meetings to Encourage Volunteers	DPW, Recreation Department, Earth Day Committee (volunteer)	Meetings held with the Public Starting Year 2	The annual Earth Day cleanup event will be held on April 28, 2018. The event will focus on minimizing environmental impact, water	Continue to solicit volunteers and advertise the Earth Day cleanup every year. Continue to incorporate stormwater topics with the cleanup
Revised			One meeting annually	conservation and stormwater management in conjunction with a large-scale roadside litter cleanup and beautification effort. The Earth Day event held the previous year on April 29, 2017 resulted in the filling of 2 bags (1 ton/ bag) of roadside litter with 154 residents in attendance.  The town also plans to coordinate efforts with the yearly CRWA Earth Day river cleanup event. Last year, approximately 1 truck load (6 cubic yards) of waste materials was removed.	event.

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15	Planned Activities – Next Permit Term
2D	Community Assistance Program	DPW	Evaluation correspondence	EPA materials were posted at various locations during the permit term: Town Hall, DPW Administrative Office, and Senior Center. The display will also be available at the Earth Day Cleanup event on April 28, 2018.	Continue to develop program and incorporate materials into public education/outreach and participation/involvement BMPs, as appropriate.
2E	Establish a Stormwater Telephone Hotline	DPW	Record number of phone calls to hotline, copies of advertisements.	Stormwater issues are handled by DPW through calls to the main office. The hotline number displayed on the stormwater web page. DPW continued to use an online work order system to include stormwater reports, allowing for faster response time. One incident was reported to the DPW in Year 15. A	Continue to record number of phone calls to hotline and address issues reported.  Continue to establish means in which residents may acquire additional stormwater information.

	culvert on Pine Street needed repai	and
	was causing flooding. Measures we	re
	taken by the DPW to temporarily re	pair
	the culvert and prevent further floo	ding
	issues.	

## ${\bf 3.}\ \, {\bf Illicit\ Discharge\ Detection\ and\ Elimination}$

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15	Planned Activities – Next Permit Term
3A	Stormwater Map Development	DPW Director, Town Engineer, Highway Dept	Completed Map Showing Collection System Outfalls	824 outfalls have been mapped. 602 outfalls are owned/maintained by the town. The storm drain system map was	Continue to update the drainage map and GIS data with ongoing mapping efforts (e.g., BMP 3D). Continue to
Revised		GIS Manager		updated to reflect the results of field inspections (see BMP 3D). The drainage network is approximately 95% mapped and the DPW has developed detailed (200-scale) maps for future drainage assessments and asset management.	develop a detailed drainage data layer and begin to define drainage catchments based on this information.
3B	Develop Non-Storm Water Discharge Ordinance	DPW Director	Ordinance Adopted by Town	A draft illicit discharge prohibition article under the existing stormwater bylaw was developed and remained	Present illicit discharge article to the public at an upcoming Town Council meeting for final review.
Revised				under review in Year 15. The Town can address illicit discharges under the Board of Health jurisdiction.	
3C	Develop Illicit Detection Implementation Plan	DPW Director	Plan Developed	Outfall inspections were previously completed in accordance with the Town's Illicit Discharge, Detection &	Continue with follow-up actions in accordance with the IDDE plan (see BMP 3D below).
Revised				Implementation Plan (IDDE).	
3D	Perform Dry Weather Outfall Assessments	DPW Director, consultant	Prioritized Areas and Number of Outfalls Assessed	No obvious illicit discharges were identified during outfall inspections in permit year 15. Mapping was updated for water and sewer maps.	Continue to evaluate dry weather flows with respect to the updated water and sewer maps. Conduct additional water quality assessments at
Revised		GIS Manager			outfalls with dry weather flow, as appropriate.
3E	Develop Procedures for Removing Illicit Connections	DPW Director, Consultant	Procedures Developed and Number of Locations Identified	Procedures for the removal of illicit discharges are included in the IDDE plan (BMP 3C) and the legal	Document the progress of removing any identified illicit discharges.
Revised				mechanism is outlined in the IDDE article (BMP 3B).	

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15	Planned Activities – Next Permit Term
3F	Setup and Advertise a Hotline for Illicit Discharges	DPW	Log of Complaints and Action Taken.	Coordinated with BMP 2E, DPW handles stormwater issues through written records and calls to the hotline.	Continue to keep log of complaints and action taken. Continue to establish means in which residents may acquire additional stormwater information.
				One incident was reported to the hotline in Year 15 and was resolved.	
3G	I/I and Sewer Rehab. Program	Town Engineer, DPW Director, Consultant	Prioritization plan and record of corrections	I/I and sewer rehabilitation activities continued. Permanent groundwater and rain gauges continued to be monitored monthly to collect better data. Flow meter data is analyzed on an annual basis.	Continue I/I and sewer rehabilitation activities to repair infrastructure as funding allows.
				220 sewer manholes were inspected and CCTV was conducted on 10,737 LF of sewer pipeline. Phase I of the Sewer Master Plan was completed in December 2017 and Phase II is in progress.	

#### 4. Construction Site Stormwater Runoff Control

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15	Planned Activities – Next Permit Term
4A	Ordinance Development for Waste Control	DPW Director, Town Engineer, Conservation, Planning, Consultant	Ordinance Adopted by Town	Stormwater Management bylaws were adopted into the Town's regulations in 2007.	Continue to implement the stormwater bylaw in permit review and enforcement processes.
Revised			Draft bylaw at Town Meeting in year 4		
4B	Formalization of Site Plan Review Procedures	DPW Director, Town Engineer, Conservation, Planning, Consultant	Site Plan Review Procedures Adopted by Town	This BMP has been incorporated into the work discussed under BMP 4A, as part of the stormwater bylaws.	Refer to BMP 4A.
Revised					

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15	Planned Activities – Next Permit Term
4C	Revised Ordinance to Address Storm Water Pollution	DPW Director, Town Engineer, Conservation, Planning, Consultant	Revised Ordinance Adopted by the Town	This BMP has been incorporated into the work discussed under BMP 4A, as part of the stormwater bylaw.	Refer to BMP 4A.
Revised					
4D  Revised	Best Management Practice Manual for Developers	DPW Director, Town Engineer, Conservation, Planning, Consultant	Handbook Completed and Adopted by Town  MA DEP Handbook on File	The stormwater bylaw references the MA DEP Handbook for erosion control requirements that are used to review future projects. The Department of Public Works in conjunction with the Department of Planning and Community Development has completed a Best	Continue to use the handbook for inspections and developer education and implement requirements under the stormwater bylaw.
				Development Practices Guidebook for Developers, which has been made available online. The Guidebook was adopted by the Conservation Commission on Oct. 27, 2016 and by the Planning Board on Oct. 17, 2016.	
4E	Formalization of Inspection Procedures	DPW Director, Town Engineer, Conservation, Planning, Consultant	Inspection Procedures Adopted by Town	The existing standardized checklist was used by the DPW for construction site inspections at 5 project sites throughout the permit term.	Continue to utilize formalized inspection procedures and train staff as necessary.
Revised		Construction Inspectors			

BMP ID#	BMP Description	Responsible Dept./Person	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15	Planned Activities – Next Permit Term
10 "		Name		Termit Tear 13	Treat I chilit I chili
4F	Establish a Procedure for the Receipt of Information Submitted by the Public	DPW Director, Town Engineer, Conservation	Record number of phone calls to hotline, copies of articles advertising the hotline.	The DPW generally receives calls related to stormwater and handles any problems that arise. This information is coordinated with BMP 2E.	Continue to coordinate with BMPs 2E & 3F, continue to receive and record information by the public regarding construction sites.
				One complaint was received and resolved by the DPW in Year 15.	

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 Name		Permit Year 15	Next Permit Term
5A  Revised	Procedures for Long Term O&M	DPW Director, Town Engineer, Conservation, Planning, Consultant	Adoption of Procedures by Town	Stormwater Management bylaws were adopted into the Town's regulations in 2007.	Continue to implement the stormwater bylaw and review operation and maintenance requirements.
Revised			Draft bylaw at Town Meeting in year 4		
5B	Review Procedures for Post Construction Impacts	DPW Director, Town Engineer, Conservation, Planning, Consultant	Adoption of Procedures by Town	This BMP has been incorporated into the work discussed under BMP 5A. The Town previously developed a standardized checklist for review of projects subject to the stormwater	No further action.
Revised				bylaws.	
5C	Best Management Handbook for Developers	DPW Director, Town Engineer, Conservation, Planning, Consultant	Handbook Completed and Adopted by Town	The stormwater bylaw references the MA Stormwater Handbook that is used to review projects. The Department of Public Works in conjunction with the Department of Planning and	Continue to use the handbook for review of BMP designs under the stormwater bylaw.  Continue to distribute educational
Revised			MA DEP Handbook on File Educational Flyers	Community Development completed a Best Development Practices Guidebook for Developers, which has been made available online. The Guidebook was adopted by the Conservation Commission on Oct. 27, 2016 and by the Planning Board on Oct. 17, 2016.	flyers related to stormwater management.
				The DPW office provides educational flyers related to proper stormwater management techniques.	

BMP	BMP Description	Responsible	Measurable Goal(s)	Progress on Goal(s) -	Planned Activities –
ID#		Dept./Person		Permit Year 15	Next Permit Term
		Name			
5D	Establish a Procedure	DPW and	Record number of	The DPW generally receives calls	Coordinate record keeping program
	for the Receipt of	Conservation	phone calls, and	related to stormwater and handles any	with the post-construction stormwater
	Information Submitted	Planning	copies of letters and	problems that arise. DPW continued to	bylaw, track calls and records of
	by the Public		other	use an online work order system to	enforcement.
			correspondence.	include stormwater reports, allowing	
				for faster response time.	

### 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	Planned Activities – Next Permit Term
6A	Standard Operating Procedures	DPW Director/Division Heads	Ten Procedures Developed	This BMP has been incorporated into the work discussed under BMP 6H. The work under BMP 6H continued	Continue to incorporate the results of BMP 6H and implement the recommendations for pollution
Revised			List of current O&M procedures	and the Town continued to follow existing standard operating procedures (SOPs) for drainage system maintenance.	prevention and housekeeping. Adapt SOPs as appropriate to Franklin DPW.
6B	Employee Training	DPW Director/Division Heads	Four Employee Training Sessions	No training was conducted during Year 15. New training sessions are planned to occur under the new permit in 2018.	Continue to conduct training for the DPW, Highway, Water and Sewer Department employees.
Revised			Annual training, attendance sheet and copy of program		
6C	Parking Lot and Road Sweeping	DPW Director/Division Heads	Schedule Developed and Areas Prioritized for Cleaning	DPW continued the routine street sweeping program. All streets are swept once a year and the downtown	Continue existing practices for sweeping and enhance cleaning operations based on the availability of
Revised				area is swept weekly from May 1 <sup>st</sup> -October 1 <sup>st</sup> . Municipal parking lots are swept twice per year. The previous purchase of a new street sweeper helped to maintain the cleaning schedules.	equipment and staff time. Consider a method to track sediment volumes and optimize sweeping routes and schedules.

BMP	BMP Description	Responsible	Measurable Goal(s)	Progress on Goal(s) -	Planned Activities –
ID#		Dept./Person		Permit Year 15	Next Permit Term
		Name			
6D	Spill Response and	DPW	Procedures and	The SPCC Plan was updated and re-	Continue to follow the current SPCC
	Prevention	Director/Division	Inventory Completed	certified in October 2013. Inspections	Plan and target managers for hands on
		Heads		and site activities were conducted in	training.
Revised				accordance with the SPCC Plan.	
				Training sessions are planned under the	Update and recertify the SPCC Plan by
				new permit in 2018.	October 2018 for the 5-year review.
6E	Catch Basin Cleaning	DPW Director/	Schedule Developed	The Highway Department continued to	Coordinate maintenance activities with
	_	Division Heads	and Areas Prioritized	use the old Water Department vacuum	BMP 6H.
			for Cleaning	truck to assist with catch basin	
Revised				cleaning. A total of 347 catch basins	
				were cleaned during the permit year.	

BMP ID#	BMP Description	Responsible Dept./Person	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15	Planned Activities – Next Permit Term
		Name			
6F	Municipal Facilities and	DPW &	Record of inspections,	The Town continued to implement the	Continue to implement the
	Operations Evaluation	Consultant	recommendations and	recommendations from the March 2011	recommendations of the updated
			improvements.	municipal facilities and operations	evaluation.
			Pollution prevention	evaluation.	
			inspection checklist.		

BMP ID#	BMP Description	Responsible Dept./Person	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15	Planned Activities – Next Permit Term
6G	Low Impact Design for DPW Roadway & Drainage Projects	Name  DPW Director, Town Engineer	Record of final or asbuilt plans and improvements.	The following projects were completed in Year 15:  Orchard St, Garden St, Squire St: installed new catch basins  Maple St: installed four underground infiltration systems  Cottage St neighborhood (portion of Cottage St, Geb St, Joy St, Worsted St, Metcalf St, A St): installed new catch basins, rain gardens, and tree wells.  The DPW began planning for the following projects:  Intersection of Beaver and Grove Street; pavement reduction, replace three catch basins, and add two catch basins.  Elm Street: add infiltration galleries.  Linda Lane: reduce cul-de-sac, replace two catch basins, and add two tree wells.  Lincolnwood: replace one catch basin, reduce roadway, and add a rain garden.  Alpine neighborhood: replace catch basins with deep sump catch basins.	Additional projects and drainage improvements will be evaluated during the next permit round and implemented as funding is available.

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15	Planned Activities – Next Permit Term
6H	BMP Evaluation and Identification of Needed Retrofits	DPW Director, Town Engineer, Consultant	Database of BMPs, owners, O&M requirements, inspection forms.	Work was completed for the MassDEP s319 Grant for the project "Phase II of Stormwater BMP Retrofits". Jefferson Elementary and Remington Middle Schools retrofits were constructed in the spring of 2017 The Cottage Street BMPs	Develop additional BMP retrofit projects and pursue funding for design and construction.  Incorporate results of the previous BMP evaluation into future
				were completed in the fall of 2017 and final planting is planned for spring 2018.	evaluations for impaired waters (BMP 7A & 7B).
				The Town was awarded a s319 grant in the fall of 2017 for the design and construction of BMPs along Dean Ave as part of an adjacent redevelopment project and Griffin Road to reduce pavement at an under-utilized dead end road.	Incorporate maintenance needs into existing operations as funding allows. Continue to monitor and update the BMP maintenance and retrofit database.
				The Town continues to follow its standard operating procedures (SOPs) for drainage system maintenance.	
6I	Stormwater BMP Maintenance & Drainage System Upgrades	DPW	Record of cleaning activities, # structures cleaned annually	The Highway Department made repairs to 2 catch basins and conducted catch basin cleaning on 347 catch basins. See all projects listed in BMP 6G.	Continue to make drainage improvements as funding is available. Incorporate the results of BMP 6H.
6J	Make Annual Household Hazardous Waste Collections Available to Residents	DPW & Board of Health	Ongoing resident participation, amount of materials collected	The Town recycling center now provides Household Hazardous Waste Collection year-round. The Town received 2.9 tons of hazardous waste in Year 15.	Continue to make Household Hazardous Waste Collection available year-round at the Town recycling center. Continue tracking materials collected and begin tracking participation.

## $\textbf{7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA)} < \\ \textit{if applicable} >> \\$

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15	Planned Activities – Next Permit Term
Revised					

7a. Additions

BMP ID#	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15	Planned Activities – Next Permit Term
7A	Evaluate Data and TMDL for the Charles River and Develop a Plan to Improve TMDL Waters	DPW, Conservation, Consultant	Copy of Water Quality Improvement Plan	As discussed previously, the Town of Franklin applied for and received an s319 Grant funding (Project 16-01/319) for the "Upper Charles River Regional Stormwater Finance Phase II Feasibility Study" with the participating Towns of Franklin, Medway, and Milford. The project began in early 2017 and is anticipated to be complete in June 2018. The results of this project will assist in the development of the Town of Franklin's approach for meeting the MS4 Permit, TMDL studies, and associated WLA.	Evaluate the results of the "Sustainable Stormwater Funding Project", the previously developed TMDL strategy, the requirements of the final Phase II and RDA Permits and incorporate this information into the SWMP Update following the permit re-issuance.
7B	Implement Water Quality Improvement Plan for discharges to 303(d) waters.	DPW & Conservation	Photographs, logs, and BMP descriptions for completed efforts and water quality improvements	Refer to BMP 7A.	This will begin upon development of the implementation strategy and as resources become available.

#### 7b. WLA Assessment

Three TMDLs have been finalized for the Charles River Basin. These include: Total Maximum Daily Load for Nutrients in the Lower Charles River Basin, Massachusetts CN 301.0, June 2007; Pathogen TMDL for the Charles River Watershed, CN 0156.0, January 2007; and the Nutrient TMDL for the Upper/Middle Charles River, CN 272.0, May 2011.

In Year 13, the Town of Franklin applied for and received an s319 Grant funding (Project 16-01/319) for the "Upper Charles River Regional Stormwater Finance Phase II Feasibility Study" with the participating Towns of Franklin, Medway and Milford. The project began in early 2017 and is anticipated to be complete in June 2018. This project builds upon the efforts of Franklin and Milford as part of the 2011 study and incorporates the requirements of the April 4, 2016 MS4 permit for the participating Towns. This project leverages past work under the 2011 study, the 2016 Stormwater Utility Feasibility Study for the Town of Medway, and recent work by the Town of Franklin to evaluate stormwater management needs. The results of this project will assist in the development of the Town of Franklin's approach for meeting the MS4 Permit, TMDL studies, and associated WLA.

The Town of Franklin continues to actively pursue funding for and implement water quality improvement projects, as resources allow. Many of these projects are constructed in conjunction with other infrastructure projects, resulting in highly cost-effective stormwater improvements. Additionally, the Town continues to update information related to infrastructure (e.g., drainage mapping, sanitary sewer I/I investigations) that provide better data for future water resource planning activities. Examples of these efforts and specific water quality improvement projects were outlined previously in this report.

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

- Number of outfalls screened for illicit discharges: previously completed.
  - o No illicit discharges were identified during the permit year.
  - o Mapping efforts resulted in field confirmation for approximately 95% of the drainage system and identification of previously unmapped outfalls, many of which are not owned or maintained by the Town.

#### Part V. Program Outputs & Accomplishments (OPTIONAL)

#### **Programmatic**

Stormwater management position created/staffed	(y/n)	No
Annual program budget/expenditures	(\$)	

### **Education, Involvement, and Training**

Estimated number of residents reached by education program(s)	(# or %)	100%
Stormwater management committee established	(y/n)	No
Stream teams established or supported	(# or y/n)	Yes
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	
Household Hazardous Waste Collection Days		
<ul><li>days sponsored</li></ul>	(#)	Year Round
<ul><li>community participation</li></ul>	(%)	
<ul><li>material collected</li></ul>	(tons or gal)	2.9 tons
School curricula implemented	(y/n)	N*
*The Town does not have a sumiculum astablished but DDW acordinates with the middle saboal aloss	ooma to marrida agaasianal atamarria	ton lootumas and/an

<sup>\*</sup>The Town does not have a curriculum established, but DPW coordinates with the middle school classrooms to provide occasional stormwater lectures and/or guided tours for stormwater BMP projects. One guided tour occurred with a church group in Fall 2017.

## Legal/Regulatory

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

### **Mapping and Illicit Discharges**

Outfall mapping complete	(%)	100%
Estimated or actual number of outfalls	(#)	824
System-Wide mapping complete	(%)	95%
Mapping method(s)		
<ul><li>Paper/Mylar</li></ul>	(%)	
<ul><li>CADD</li></ul>	(%)	
• GIS	(%)	95%
Outfalls inspected/screened	(# or %)	100%
Illicit discharges identified	(#)	0
Illicit connections removed	(#)	0
	(est. gpd)	
% of population on sewer	(%)	80%
% of population on septic systems	(%)	20%

ConstructionNumber of construction starts (>1-acre)	(#)	7
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	100%
Site inspections completed	(# or %)	100%

Tickets/Stop work orders issued	(# or %)	0
Fines collected	(# and \$)	0
Complaints/concerns received from public	(#)	1

**Post-Development Stormwater Management** 

Estimated percentage of development/redevelopment projects adequately regulated for post-	(%)	100%
construction stormwater control		
Site inspections completed	(# or %)	100%
Estimated volume of stormwater recharged	(gpy)	Unknown

**Operations and Maintenance** 

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	1/yr
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	1/yr
Total number of structures cleaned	(#)	347
Storm drain cleaned	(LF or mi.)	2 culverts
Qty. of screenings/debris removed from storm sewer infrastructure	(yds/ton)	780 yards
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)	(location)	Certified Dump
Cost of screenings disposal	(\$)	\$40/ton
Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	1/yr
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	1/yr
Qty. of sand/debris collected by sweeping	(lbs. or tons)	790 tons
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Certified Dump
Cost of sweepings disposal	(\$)	\$20/ton
Vacuum street sweepers purchased/leased	(#)	0
Vacuum street sweepers specified in contracts	(y/n)	N

Operations and Maintenance (con't.)  Reduction in application on public land of: ("N/A" = never used; "100%" = elimin	nation)	
Fertilizers	(lbs. or %)	Non- phosphorus only
<ul> <li>Herbicides</li> </ul>	(lbs. or %)	Spot treatment on sidewalks
<ul> <li>Pesticides</li> </ul>	(lbs. or %)	N/A
Anti-/De-Icing products and ratios  Sand is used on limited occasions for traction on steep slopes.	% NaCl % CaCl <sub>2</sub> % MgCl <sub>2</sub> % CMA % Kac % KCl % Sand	100% salt
Pre-wetting techniques utilized	(y/n)	Y
Manual control spreaders used	(y/n)	70% are automatic
Automatic or Zero-velocity spreaders used	(y/n)	Y
Estimated net reduction in typical year salt application	(lbs. or %)	0
Salt pile(s) covered in storage shed(s)	(y/n)	Y*
Storage shed(s) in design or under construction	(y/n)	N

\*Salt is stored in 2 sheds to provide adequate cover of all materials