

Municipality/Organization: Town of Franklin

EPA NPDES Permit Number: MAR041117

MaDEP Transmittal Number: W- 041238

**Annual Report Number
& Reporting Period:** No. 12: May 1, 2014-April 30, 2015

NPDES PII Small MS4 General Permit Annual Report

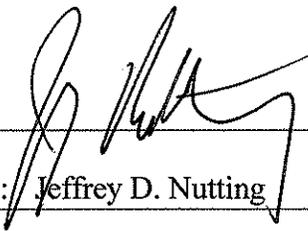
Part I. General Information

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: 5/6/2015

Part II. Self-Assessment

The Town of Franklin has completed the required self-assessment and has determined that our municipality is in compliance 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). As discussed in the Year 11 annual report, the work under EPA's 2011 "Sustainable Stormwater Funding Project" for the Upper Charles River communities of Bellingham, Franklin and Milford" was reviewed by the Town and remains under consideration. The Town actively participated in this project and it is anticipated that the Town will utilize this information in the development of an appropriate and feasible approach to meet the forthcoming permit requirements related to TMDLs and WLA. Following the release of the 2014 Draft Phase II MS4 Permit, the Town's consultant conducted a detailed review of the Town's program with respect to the new permit to outline necessary actions and to develop a preliminary budget. The Town reviewed the changes from the 2011 Study to the 2014 Draft Phase II MS4 Permit requirements regarding phosphorous reduction requirements and the timelines for implementation. Further action is pending the release of the final Phase II MS4 Permit.
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. In 2010 and 2011 the Town supported the development of the abovementioned EPA funding project and further action is pending the availability of funding and the release of the Phase II MS4 Permit.

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 12 reporting period:

- In late spring 2013, a comprehensive, Town-wide "Green Stormwater Infrastructure (GSI) Implementation Strategy" was completed using grant funding from the US EPA Green Infrastructure Program. The project focused on: quantifying water quality and other environmental/economic benefits associated with existing GSI projects; identifying opportunities to use GSI to address both water quality requirements and community development goals; and developing a plan for adoption of GSI practices to overcome barriers posed by local codes. This project was completed in July 2014 and provides support and guidance for the Town's efforts to enhance stormwater management as part of redevelopment projects and targeted watershed improvement projects. The results will also be incorporated with the planning efforts to address the Phase II MS4 Permit, once reissued.
- In June 2013, a "Well Pumping and Recharge Strategies for Streamflow Augmentation" project funded by a Sustainable Water Management Initiative (SWMI) grant from the MassDEP was completed. The project evaluated strategies for more effective and sustainable management of water resources in Town. Implementation of the study recommendations began in summer 2014 and efforts are ongoing to enhance local water resource management.
- In March 2014, the Franklin DPW was awarded another SWMI grant by the MassDEP for their proposal "Regional Evaluation of Water Management Alternatives to Reduce Streamflow Impacts in the Upper Charles River Watershed." This project is expected to be completed by late spring 2015.
- In March 2015, the Franklin DPW was awarded another SWMI grant by the MassDEP to develop stormwater management

designs to promote infiltration and groundwater recharge. The project will support the design and construction of two infiltration basins in strategic groundwater recharge areas, building upon the previous SWMI grant efforts.

- The Franklin DPW received a Charles River Watershed Association (CRWA) grant to conduct training about constructing residential rain gardens in permit year 11. There was a webpage on the Town website where residents were able to sign up for the training. The training took place on May 3, 2014 with 15 residents in conjunction with a rain garden demonstration project was constructed at the DPW Administration Building. Periodic meetings were held after the initial training session for those who were keen on constructing their own rain gardens. 2 residents still want to create rain gardens but are waiting until the weather is better in the summer to begin construction. DPW is still continuing to offer materials and periodic meetings with interested residents.
- 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 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 subwatershed, a major tributary to the Upper Charles River in Franklin.

The Franklin DPW completed several projects that incorporated stormwater improvements:

- Bioretention area at the DeCarte Conservation Area – summer 2014
- Bioretention area on Panther Way – summer 2014
- Retention, recharge and infiltration features at Sculpture Park – summer 2014
- 2 new culverts and bioretention area on Lincoln Street – summer 2014
- Impervious surface reduction and landscaped center islands in the School Zone on Lincoln Street – summer 2014
- Impervious surface reduction and tree wells on Kathleen Drive and Fannie Way – summer 2014
- Rain garden installation for roof runoff at DPW Administration Building – fall 2014
- Drainage improvements at Park Rd. to install deep sump catch basins and alleviate a flooding issue – fall 2014

The DPW began planning for the following projects:

- Drainage system improvements at Summer St., Harborwood Dr., Corrine Rd. and Betten Ct.
- Drain improvements and impervious surface reduction for the Lewis St., Crocker Ave., and Cook St. area.
- Senior Center parking lot underground infiltration system

The Franklin DPW Director made 3 stormwater presentations during the permit year:

- Franklin Town Council: “Beaver St Culvert,” Franklin, MA on November 19th, 2014
- NEWEA: “One RDA-Two Approaches,” Boston, MA on Tuesday January 27th, 2015
- Franklin Town Council: “Sewer Interceptor, Recycling and Snow Removal Operations,” Franklin, MA on February 4th, 2015

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 12	Planned Activities – Next Permit Term
1A	Recycling Education for Home Owners	DPW/Solid Waste Coord.	Distribute 3 times/year	<p>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.</p> <p>In July 2010 the town moved to a single stream automated trash and recycling program that has increased the tonnage of recyclable materials. The Town realized a 3% increase in overall tonnage of recyclable materials from permit year 12. The recycling center continued to accept rigid plastic which has removed approximately 50 tons from the waste stream in the last year. Styrofoam is also accepted for recycling and has removed approximately 54 tons from the waste stream. 3.5 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.</p> <p>The recycling center continues to accept mattresses, furniture items, and limited household hazardous wastes on a daily basis. Additional personnel were added to enhance recycling operations at the site.</p>	Continue to update website with additional information and educational materials. Increase recycling tonnage through public awareness campaigns.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	Planned Activities – Next Permit Term
1B	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 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 prevent pollution topics. Also, a link to the “2014 Draft MA small MS4 permit- comments from Franklin” and a link to the “Franklin Rain Garden” web pages were created. Copies of the quarterly storm water management flyer were added to a town wide quarterly mailer. The hit counter added to the web page in Year 7 recorded an additional 257 hits, bringing the total to 1,089 hits on 04/27/2015.	Continue to update web page with new topics and the progress of the Stormwater Management program as needed. Track the number of hits on the stormwater web page to gauge effectiveness.
Revised			Increase # of web site hits each year	The DPW web page continued to advertise rain barrels to residents, discussing the improved environmental and stormwater benefits. Detailed recycling and waste disposal information is posted on the Town’s recycling web page. A link to Franklin Rain Garden program was added, which provides information on the purposes of rain gardens, as well as how to create your own, along with assistance and materials provided to the residents.	

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	Planned Activities – Next Permit Term
1C	Education on Waste Disposal & Water Conservation	DPW/Solid Waste Coord.	Materials Available in all Public Buildings	<ul style="list-style-type: none"> • Water conservation materials are available at the DPW Building. • Water Conservation Kits (toilet tank displacement bags, low-flow showerheads, leak detection tablets, faucet aerators) are available at the DPW. • Stormwater education materials continue to be displayed at the Town Hall, High School and DPW Administrative Office. • Recycling flyers are sent quarterly to residents. • Water conservation information is broadcast daily on local cable channel during months of May through October. • Mandatory water conservation notices were added to quarterly newsletter. • The continued mercury thermometer replacement program was maintained; residents can turn in old mercury thermometers for digital units. • The fluorescent bulb turn in program was maintained. • Recycling facts and updates are broadcast daily on the local cable channel year round. • Educational information is available on specific websites for stormwater management and recycling. • Phone and e-mail address provided for citizen inquiries (dpw@franklin.ma.us). 	Continue to make materials available at public buildings, Town events and post information on the Town’s website.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	Planned Activities – Next Permit Term
1D	Water Resource Information and Protection Signs	DPW	Five Signs Posted/Year beginning in year 3	New and updated educational signs were posted at 8 rain gardens in the summer of 2014.	Continue to evaluate additional locations for signs.
Revised			Begin posting signs in year 4; post/maintain signs annually	New educational signs were posted at the “Sculpture” rain garden and “Panther Way” rain garden.	
1E	Public Education with Charles River Watershed Association	DPW Director, Town Engineer	Number of Coordinated Programs	In previous permit years, several rain gardens were constructed in town as part of a partnership with CRWA. These rain gardens and their functions have been incorporated into lesson plans in the science curriculum of teachers in the school and wet weather demonstrations have been given by the DPW Director in previous years. Educational signs were installed or replaced at each rain garden in permit year 12.	Continue to coordinate public education efforts and pursue grant opportunities with the CRWA, as appropriate. Continue to offer materials and assistance for residents to construct rain gardens.
Revised			# attendees & audience	In permit year 12, construction of a bioretention area was completed at the DelCarte Conservation Area. This was the remaining component of a previous public education project. As discussed previously, the Town received a grant for a public outreach and assistance program to build rain gardens on residential properties. The project included one training session with 15 residents along with follow-up guidance on how to install a rain garden. Materials were offered by DPW for the installation of a rain garden.	

1a. Additions

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	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”. The DPW evaluated future opportunities for stormwater and water quality education as part of ongoing projects in Town.	Schedule to provide tours of the DPW facility and include discussions and demonstrations on stormwater, water conservation and recycling. (BMP 2A).
Revised	Identify and Conduct New Opportunities for Stormwater/Water Quality Education	DPW	# of events or activities and participants		The DPW “Touch-A-Truck” event is scheduled for May 23, 2015.
1G	Open Data Sharing for Stormwater Infrastructure	DPW	Ongoing correspondence with regulatory agencies for data sharing	The DPW continued to offer open data sharing, which includes making GIS data and information related to the storm drain system and impervious cover available to non-profit and regulatory industries invested in watershed protection and management. No significant activities occurred during the permit year.	Continue to share GIS and infrastructure data with regulatory agencies.
1H	Classroom Stormwater Education	Town Engineer & DPW	# students and/or # classes & grades taught	DPW staff will once again perform the “Touch-A-Truck” event on May 23, 2015 at the DPW Facility.	Schedule tours of the DPW facility and include conversations and demonstrations on stormwater, water conservation and recycling. Coordinate with BMP 2A, if possible.
1I	Stormwater Newspaper Articles	DPW	# articles published, audience reached	The DPW was featured in articles in the Franklin news and other news outlets related to the recent award of grants and other stormwater topics. Stormwater related articles were published on the following dates: -franklin.wickedlocal.com: 2/26/2015 and 2/6/2015 -Milford Daily News: 3/13/2015 and 2/27/2015 -franklinmatters.org: 12/28/2014 and 8/28/2014	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 Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	Planned Activities – Next Permit Term
2A	Storm Drain Stenciling	DPW	Average Ten Catch Basins/Year	Storm drains are monitored on a regular basis as part of catch basin cleaning activities to determine if remarking is needed. 928 catch basins were marked.	Continue to maintain and replace storm drain markers in Town. Solicit and involve local Youth Organizations (e.g., Eagle Scouts).
Revised					
2B	Outreach Efforts with Charles River Watershed Association	DPW Director & Conservation	Number of Coordinated Programs	<p>In previous permit years, several rain gardens were constructed in town as part of a partnership with CRWA. These rain gardens and their functions have been incorporated into lesson plans in the science curriculum of teachers in the school and wet weather demonstrations have been given by the DPW Director in previous years. Educational signs were installed or replaced at each rain garden in permit year 12.</p> <p>In permit year 12, construction of a bioretention area was completed at the DelCarte Conservation Area.</p> <p>As discussed previously, the Town received a grant for a public outreach and assistance program to build rain gardens on residential properties. The project included one training session with 15 residents along with follow-up guidance on how to install a rain garden. Materials were offered by DPW for the installation of a rain garden.</p>	Continue to coordinate public events during next permit term to increase public education and involvement.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	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	<p>The annual Earth Day cleanup event will be held on May 2, 2015. The event will focus on minimizing environmental impact, water 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 May 3, 2014 resulted in the filling of 2 bags (1 ton/ bag) of roadside litter with 85 residents in attendance.</p> <p>The town also coordinated efforts with the yearly CRWA Earth Day river cleanup event and approximately 2 truck loads (6 cubic yards) of waste materials were removed.</p>	Continue to solicit volunteers and advertise the Earth Day cleanup every year. Continue to incorporate stormwater topics with the cleanup event.
Revised		One meeting annually			

2a. Additions

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	Planned Activities – Next Permit Term
2D	Community Assistance Program	DPW	Evaluation correspondence	Educational materials from SuAsCo, tailored to the Charles River, were incorporated into existing programs. The informative display was set up at various locations during the permit term: Town Hall, High School, DPW Administrative Office and Senior Center. The display will also be available at the Earth Day Cleanup event on May 2, 2015.	Continue to develop program needs and incorporate materials into public education/outreach and participation/involvement BMPs, as appropriate.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	Planned Activities – Next Permit Term
2E	Establish a Stormwater Telephone Hotline	DPW	Record number of phone calls to hotline, copies of advertisements.	<p>Stormwater issues are handled by DPW through calls to the main office and the hotline is displayed on the stormwater web page. DPW continued to use an online work order system to include stormwater reports, allowing for faster response time.</p> <p>One case was reported to the DPW: suspected dumping of paint at Briarwood Road. DPW followed up and determined the concern was not a problem.</p>	<p>Continue to record number of phone calls to hotline and address issues reported.</p> <p>Continue to establish means in which residents may acquire additional stormwater information.</p>

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	Planned Activities – Next Permit Term
3A	Stormwater Map Development	DPW Director, Town Engineer, Highway Dept	Completed Map Showing Collection System Outfalls	626 outfalls have been mapped. The storm drain system map was updated to reflect the results of field inspections (see BMP 3D) in addition to ongoing efforts to incorporate the drainage network from existing subdivision plans. The drainage network is approximately 85% mapped and the DPW has developed detailed (200-scale) maps for future drainage assessments and asset management.	Continue to update the drainage map and GIS data with ongoing mapping efforts (e.g., BMP 3D). Continue to develop a detailed drainage data layer and begin to define drainage catchments based on this information.
Revised		GIS Manager		<p>In 2014, an intern mapped and field verified approximately 50% of the drainage system and found additional outfalls that were previously not mapped.</p>	

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	Planned Activities – Next Permit Term
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 under review.	Present illicit discharge article to the public at an upcoming Town Council meeting for final review.
Revised			Draft article at Town Meeting in year 6		
3C	Develop Illicit Detection Implementation Plan	DPW Director	Plan Developed	Outfall inspections were completed in accordance with the Town’s Illicit Discharge, Detection & Implementation Plan (IDDE).	Continue with follow-up actions in accordance with the IDDE plan (see BMP 3D below).
Revised					
3D	Perform Dry Weather Outfall Assessments	DPW Director, consultant	Prioritized Areas and Number of Outfalls Assessed	Additional outfall inspections (33) were completed as part of the mapping effort under BMP 3A. No obvious illicit discharges were identified during outfall inspections in permit year 12.	Continue to evaluate dry weather flows with respect to the updated water and sewer maps. Conduct additional water quality assessments at outfalls with dry weather flow, as appropriate.
Revised		GIS Manager		Mapping was updated for water and sewer maps.	
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 mechanism is outlined in the IDDE article (BMP 3B).	Document the progress of removing any identified illicit discharges.
Revised					

3a. Additions.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	Planned Activities – Next Permit Term
3F	Setup and Advertise a Hotline for Illicit Discharges	DPW	Log of Complaints and Action Taken.	<p>Coordinated with BMP 2E, DPW handles stormwater issues through written records and calls to the hotline.</p> <p>One case was reported to the DPW: suspected dumping of paint at Briarwood Road. DPW followed up and determined the concern was not a problem.</p>	Continue to keep log of complaints and action taken. Continue to establish means in which residents may acquire additional stormwater information.
3G	I/I and Sewer Rehab. Program	Town Engineer, DPW Director, Consultant	Prioritization plan and record of corrections	<p>I/I and sewer rehabilitation activities continued. Flow metering continued using the permanent meter at the downstream end of a primary collector line. Permanent groundwater and rain gauges continued to be monitored on a monthly basis in an effort to collect better data. Flow meter data is analyzed on an annual basis.</p> <p>A GPS was used to collect the location of 198 sewer manholes during the permit year. CCTV was conducted on 34,015 LF of sewer pipeline.</p> <p>A sewer leak was repaired on Summer Street.</p>	Continue I/I and sewer rehabilitation activities to repair infrastructure as funding allows.

4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	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					
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	Best Management Practice Manual for Developers	DPW Director, Town Engineer, Conservation, Planning, Consultant	Handbook Completed and Adopted by Town	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 is nearing completion of a Best Development Practices Guidebook for Developers.	Continue to use the handbook for inspections and developer education and implement requirements under the stormwater bylaw. Finish and distribute the Best Development Practices Guidebook.
Revised			MA DEP Handbook on File		
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 6 project sites throughout the permit term.	Continue to utilize formalized inspection procedures and train staff as necessary.
Revised		Construction Inspectors			

4a. Additions.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	Planned Activities – Next Permit Term
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.	<p>The DPW generally receives calls related to stormwater and handles any problems that arise. This information is coordinated with BMP 2E.</p> <p>There was one complaint reported this year to the Stormwater Telephone Hotline. This complaint led to an inspection by DWP and the erosion and sediment controls at the site were upgraded.</p>	Continue to coordinate with BMPs 2E & 3F, continue to receive and record information by the public regarding construction sites.

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 12	Planned Activities – Next Permit Term
5A	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 bylaws.	No further action.
Revised					
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 Community Development is nearing completion of a Best Development Practices Guidebook for Developers. The DPW office provides educational flyers related to proper stormwater management techniques.	Continue to use the handbook for review of BMP designs under the stormwater bylaw. Finish and distribute the Best Development Practices Guidebook.
Revised			MA DEP Handbook on File Educational Flyers		Continue to distribute educational flyers related to stormwater management.

5a. Additions

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	Planned Activities – Next Permit Term
5D	Establish a Procedure for the Receipt of Information Submitted by the Public	DPW and Conservation Planning	Record number of phone calls, and copies of letters and other correspondence.	The DPW generally receives calls related to stormwater and handles any problems that arise. DPW continued to use an online work order system to include stormwater reports, allowing for faster response time.	Coordinate record keeping program with the post-construction stormwater bylaw, track calls and records of enforcement.

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 12	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 was updated and the Town developed standard operating procedures (SOPs) for drainage system maintenance.	Continue to incorporate the results of BMP 6H and implement the recommendations for pollution prevention and housekeeping. Adapt SOPs as appropriate to Franklin DPW.
Revised			List of current O&M procedures		
6B	Employee Training	DPW Director/Division Heads	Four Employee Training Sessions	A refresher training session for Stormwater Pollution Prevention and Good Housekeeping was conducted for Highway, Water and Sewer Department employees on November 20, 2014.	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 area is swept weekly from May 1 st -October 1 st . Municipal parking lots are swept twice per year. The previous purchase of a new street sweeper helped to maintain the cleaning schedules.	Continue existing practices for sweeping and enhance cleaning operations based on the availability of equipment and staff time. Consider a method to track sediment volumes and optimize sweeping routes and schedules.
Revised					
6D	Spill Response and Prevention	DPW Director/Division Heads	Procedures and Inventory Completed	The SPCC Plan was updated and re-certified in October 2013. Inspections and site activities were conducted in accordance with the SPCC Plan. DPW employees received SPCC training on November 20, 2014.	Continue to follow the current SPCC Plan and target managers for hands on training.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	Planned Activities – Next Permit Term
6E	Catch Basin Cleaning	DPW Director/ Division Heads	Schedule Developed and Areas Prioritized for Cleaning	The Highway Department continued to use the old Water Department vacuum truck to assist with catch basin cleaning. DPW rebuilt its current (clam shell) catch basin cleaning truck. Due to a change in the hydraulic training and certification requirements for DPW employees, not all catch basins were cleaned. A total of 1,200 catch basins were cleaned during the permit year.	Continue to evaluate appropriate cleaning frequencies and coordinate maintenance activities with BMP 6H.
Revised					

6a. Additions

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	Planned Activities – Next Permit Term
6F	Municipal Facilities and Operations Evaluation	DPW & Consultant	Record of inspections, recommendations and improvements. Pollution prevention inspection checklist.	The Town continued to implement the recommendations from the March 2011 municipal facilities and operations evaluation.	Continue to implement the recommendations of the updated evaluation.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	Planned Activities – Next Permit Term
6G	Low Impact Design for DPW Roadway & Drainage Projects	DPW Director, Town Engineer	Record of final or as-built plans and improvements.	<p>The following projects were completed :</p> <ul style="list-style-type: none"> • Bioretention area at the DelCarte Conservation Area – summer 2014 • Bioretention area on Panther Way – summer 2014 • Retention, recharge and infiltration features at Sculpture Park – summer 2014 • 2 new culverts and bioretention area on Lincoln Street – summer 2014 • Impervious surface reduction and landscaped center islands in the School Zone on Lincoln Street-summer 2014 • Impervious surface reduction and tree wells on Kathleen Drive and Fannie Way • Rain garden installation for roof runoff at DPW Administration Building • Drainage improvements at Park Rd. to install deep sump catch basins and alleviate a flooding issue-completed fall 2014 <p>The DPW began planning for the following projects:</p> <ul style="list-style-type: none"> • Drainage system improvements at Summer St., Harborwood Dr., Corrine Rd. and Betten Ct. • Drain improvements and impervious surface reduction for the Louis Road, Crocker Ave., and Cook St. area. • Senior Center Parking Lot underground infiltration system 	<p>Additional projects and drainage improvements will be evaluated during the next permit round and implemented as funding is available.</p> <ul style="list-style-type: none"> •

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	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.	<p>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 at the Jefferson Elementary and Remington Middle Schools and a green infrastructure retrofit along Cottage Street near Union Street.</p> <p>In March 2015, the Franklin DPW was awarded another SWMI grant by the MassDEP to develop water management designs to promote infiltration and groundwater recharge. The project will support the design and construction of two infiltration basins in strategic groundwater recharge areas, building upon the previous SWMI grant efforts</p> <p>The Town continues to follow its standard operating procedures (SOPs) for drainage system maintenance.</p>	<p>Develop additional BMP retrofit projects and pursue funding for design and construction.</p> <p>Incorporate results of the previous BMP evaluation into future evaluations for impaired waters (BMP 7A & 7B). Evaluate priority cleaning areas and retrofit opportunities.</p> <p>Incorporate maintenance needs into existing operations as funding allows. Continue to monitor and update the BMP maintenance and retrofit database.</p>
6I	Stormwater BMP Maintenance & Drainage System Upgrades	DPW	Record of cleaning activities, # structures cleaned annually	The Highway Department made repairs to 32 catch basins and conducted catch basin cleaning on 1,200 catch basins. 25 manholes were also repaired during this year. 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. A total of 3 tons were recycled and/or disposed during the permit year.	Continue to make Household Hazardous Waste Collection available year round at the Town recycling center. Continue tracking materials collected and begin tracking participation.

7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) <<if applicable>>

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	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 12	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	<p>As discussed in previous Annual Reports, the Town hired a consultant to develop a strategy to meet the TMDL considering existing actions under the Phase II stormwater management program and available resources.</p> <p>This effort was put on hold and the Town participated in the EPA’s “Sustainable Stormwater Funding Project” that developed a recommended approach to begin addressing the requirements of the TMDL.</p> <p>Following the release of the 2014 Draft Phase II MS4 Permit, the Town’s consultant conducted a detailed review of the Town’s program with respect to the new permit to outline necessary actions and to develop a preliminary budget. The Town reviewed the changes from the 2011 Sustainable Stormwater Funding Project to the 2014 Draft Phase II MS4 Permit requirements regarding phosphorous reduction requirements and the timelines for implementation. Further action is pending the availability of funding and the reissuance of the Phase II MS4 Permit.</p>	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.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 12	Planned Activities – Next Permit Term
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: the Total Maximum Daily Load for Nutrients in the Lower Charles River Basin, Massachusetts CN 301.0, June 2007; the 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. The Town of Franklin previously hired a consultant to review the TMDLs and provide recommendations on the additional steps needed to comply with the TMDLs. This review identified some concerns that will be considered in the development of the implementation strategy.

At the beginning of Year 8, the Town reviewed the requirements of the draft Phase II Permit for North Coastal Watersheds and considered previous work/progress under the current program towards meeting these permit requirements and the water quality objectives outlined in the TMDLs. A significant amount of effort has been put forth to develop an appropriate and cost-effective program to meet the permit requirements of the Phase II and RDA programs, as part of ongoing work under EPA’s “Sustainable Stormwater Funding Project” for the Upper Charles River communities of Bellingham, Franklin and Milford”. The Town actively participated in this project and a recommended approach to address the requirements of the TMDL was developed. Additionally, a key element of the study was to develop a potential approach to fund the future stormwater program. The Town anticipates that this information will be used to assist in the development of an appropriate and feasible approach to meet the new permit requirements related to TMDLs and WLA; however, further action is pending the availability of funding and the reissuance of the Phase II MS4 Permit.

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.

In addition to stormwater BMP construction projects, the Town of Franklin continues to undertake planning efforts for responsible management of its water resources. Examples of these efforts include: the grant project under the US EPA Green Infrastructure Program to develop a comprehensive, Town-wide “Green Stormwater Infrastructure (GSI) Implementation Strategy” and multiple

rounds of Sustainable Water Management Initiative (SWMI) grants from the MassDEP. During permit year 12, the Town was awarded another SWMI grant and an s319 Grant from MassDEP for the design and construction stormwater retrofit projects. These planning and stormwater improvement efforts will assist the Town of Franklin towards meeting the objectives of TMDLs and the overall goals of the Phase II MS4 Permit.

Part IV. Summary of Information Collected and Analyzed

- Number of outfalls screened for illicit discharges: 33 during the permit term, 626 total
 - No Illicit Discharges were identified during the permit year.
 - Mapping efforts resulted in field confirmation for approximately 50% of the drainage system and identification of previously unmapped outfalls.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	Yes
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)	Yes
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		
▪ days sponsored	(#)	Year Round
▪ community participation	(%)	
▪ material collected	(tons or gal)	3 tons
School curricula implemented	(y/n)	N*
*The Town does not have a curricula established, but DPW coordinates with the middle school classrooms to provide occasional stormwater lectures and/or guided tours for stormwater BMP projects. Several rain gardens have been constructed at public schools and serve as stormwater demonstration projects. No guided tours occurred during permit year 12.		

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			X	
▪ Erosion & Sediment Control				X
▪ Post-Development Stormwater Management				X

Mapping and Illicit Discharges

Outfall mapping complete	(%)	100%
Estimated or actual number of outfalls	(#)	626
System-Wide mapping complete	(%)	85%
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	85%
Outfalls inspected/screened	(# or %)	33*
Illicit discharges identified	(#)	0
Illicit connections removed	(#) (est. gpd)	0
% of population on sewer	(%)	80%
% of population on septic systems	(%)	20%
*33 additional outfalls were identified and field screened as part of mapping efforts in permit year 12.		

Construction

Number of construction starts (>1-acre)	(#)	4
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	(#)	0

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	100%
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	(#)	1,200
Storm drain cleaned	(LF or mi.)	2 culverts
Qty. of screenings/debris removed from storm sewer infrastructure	(yds/ton)	1,100 yds
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)	1,000 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%” = elimination)		
▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	
Anti-/De-Icing products and ratios Sand is used on limited occasions for traction on steep slopes.	% NaCl % CaCl ₂ % MgCl ₂ % 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		