

Municipality/Organization: Town of Franklin

EPA NPDES Permit Number: MAR041117

MaDEP Transmittal Number: W- 041238

**Annual Report Number
& Reporting Period:** **No. 9: May 1, 2011-April 30, 2012**

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:

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, except for the following provision:

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). The work under EPA's "Sustainable Stormwater Funding Project" for the Upper Charles River communities of Bellingham, Franklin and Milford" was reviewed by the Town. 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. Further action is pending the release of the 2012 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 continued to support the development of the abovementioned EPA funding project and further action is pending the availability of funding and the release of the 2012 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 9 reporting period:

- The Charles River Watershed Association was awarded the 2011 Thiess International Riverprize and named the Town of Franklin as a partner for its significant contributions to the restoration of the Charles River.
- The DPW and the Charles River Watershed Association partnered on a grant for the EPA Office of Waters Urban Small Waters Grant and submitted a letter of interest on April 6, 2012 to develop a Green Stormwater Infrastructure Implementation Strategy under the EPA Green Infrastructure Program.
- As part of the "Sustainable Stormwater Funding Project", multiple Town staff have participated in Steering Committee meetings and provided review of agenda items, program evaluations and cost information. The Steering Committee met on the following dates: June 29, 2011 and September 12, 2011. The project concluded on September 30, 2011 with the receipt of the final report.
- The DPW Director made 7 stormwater presentations during the permit year:
 - Stormwater - Financing the Regulations – NEWEA CSO Conference, Portsmouth, NH on May 4, 2011.
 - Stormwater Perspective: Town of Franklin & The Upper Charles Study – Montachusett Regional Planning Commission, LID Workshop #2, Athol, MA on August 5, 2011.
 - EPA Residual Designation Authority for Designated Discharges in the Upper Charles River – Norfolk Bristol Middlesex Highway Association: Fall Technical Session, Wellesley, MA on October 12, 2011.
 - Stormwater: Financing the Regulations – Save The Bay, Providence, RI on November 17, 2011.
 - Stormwater Perspective: Town of Franklin & The Upper Charles Study – Suasco Watershed Community Council, Waltham, MA on December 13, 2011.

- Stormwater: It's Not Easy Being Green (Panel Moderator) – New England Water Environment Association, Boston, MA on January 23, 2012.
- Effective Lower Cost Measures for Stormwater Treatment – Massachusetts Watershed Coalition, Worcester, MA on April 12, 2012.

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 9	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 on recycling practices. In July 2010 the town moved to a single stream automated trash and recycling program and realized a 27% increase in recycling tonnage. This increase has held steady through the current permit year. The recycling center started accepting rigid plastic which has removed approximately 50 tons from the waste stream. Styrofoam is also now accepted for recycling and has removed approximately 83 cubic yards from the waste stream. Toilets, sinks and bathtubs are also accepted for recycling, in addition to creating a formalized composting program at the facility. The facility saw a 17% increase in usage throughout the permit period.	Continue to update website with additional information and educational materials. Increase recycling tonnage through public awareness campaigns. Outfit the recycling center with the ability to accept household hazardous waste on a daily basis in addition to accepting mattresses and some furniture items for recycling.

1B	Education Information on the Web Site	DPW	Web Site Information developed and posted for year 2	<p>The stormwater management/education web page was maintained and updated-with information about the EPA “Sustainable Stormwater Funding Project” for the Upper Charles River communities of Bellingham, Franklin and Milford”. 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 326 hits by 04/30/2012.</p> <p>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.</p>	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		
BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9	Planned Activities – Next Permit Term
1C	Education on Waste Disposal & Water Conservation	DPW/Solid Waste Coord.	Materials Available in all Public Buildings	* Water conservation materials are available at the Administration Building.	Continue to make materials available at public buildings, Town events and post information on the Town’s

Revised				<ul style="list-style-type: none"> * Water Conservation Kits (toilet tank displacement bags, low-flow showerheads, leak detection tablets, faucet aerators) are available at the DPW. * Stormwater education materials were displayed at the Town Hall, High School, 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. * A continued mercury thermometer replacement program was implemented; residents can turn in their old mercury thermometer for a digital one. * Recycling facts and updates are broadcast daily on the local cable channel year round * Educational information available on specific websites for stormwater management and recycling * DPW facility tours were conducted 4 times for elementary school students in which stormwater and water conservation topics were discussed. * Phone and e-mail address provided for citizen inquiries (dpw@franklin.ma.us) 	website.
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1D	Water Resource Information and Protection Signs	DPW	Five Signs Posted/Year beginning in year 3	The DPW installed an additional “Water Resource Area” sign at a crossing of the Shepards Brook that was recently reconstructed.	Evaluate additional locations for signs and coordinate with efforts under BMP 1F.
Revised			Begin posting signs in year 4; post/maintain signs annually		
BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9	Planned Activities – Next Permit Term
1E	Public Education with Charles River Watershed Association	DPW Director, Town Engineer	Number of Coordinated Programs	In permit year 8 the Town installed rain gardens as part of a partnership with CRWA’s “Building Blue” subwatershed management project. 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. The DPW and CRWA partnered on a grant for the EPA Office of Waters Urban Small Waters Grant and submitted a letter of interest for the EPA Green Infrastructure Program.	Continue to coordinate public education efforts and pursue grant opportunities with the CRWA, as appropriate.
Revised			# attendees & audience		

1a. Additions

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9	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	The “Green Team” at the High School was dissolved early on in Permit Year 9 and was not available to coordinate with. DPW staff performed guided tours to 4 groups of elementary school students. The tours included covering the topics of stormwater, water conservation and recycling.	Continue to provide tours of the DPW facility which includes conversations and demonstrations on stormwater, water conservation and recycling. (BMP 2A).

1G	Open Data Sharing for Stormwater Infrastructure	DPW	Ongoing correspondence with regulatory agencies for data sharing	The DPW made 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.	Continue to share GIS and infrastructure data with regulatory agencies.
BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9	Planned Activities – Next Permit Term
1H	Classroom Stormwater Education	Town Engineer & DPW	# students and/or # classes & grades taught	DPW staff performed guided tours to 4 groups of elementary school students. The tours included covering the topics of stormwater, water conservation and recycling.	Continue to provide tours of the DPW facility which includes conversations and demonstrations on stormwater, water conservation and recycling. (BMP 2A).
1I	Stormwater Newspaper Articles	DPW	# articles published, audience reached	The DPW was featured in articles in the Milford Daily News related to the “Sustainable Stormwater Funding Project” and information on stormwater retrofits included in reconstruction projects on numerous occasions throughout the year. Stormwater articles were published on the following dates: 4/23/2012, 3/1/2012, 10/28/2011, 8/25/2011, 8/8/2011, and 7/26/2011.	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 9	Planned Activities – Next Permit Term
2A Revised	Storm Drain Stenciling	DPW	Average Ten Catch Basins/Year	12 storm drains were re-marked at locations downtown where they wore out over time or where there was new construction.	Continue to maintain and replace storm drain markers in Town. Solicit and involve local Youth Organizations (e.g., Green Team, Eagle Scouts).
2B Revised	Outreach Efforts with Charles River Watershed Association	DPW Director & Conservation	Number of Coordinated Programs	In permit year 8 the Town installed rain gardens as part of a partnership with CRWA’s “Building Blue” subwatershed management project. 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.	Coordinate public events during next permit term to increase public education and involvement.
2C Revised	Public Meetings to Encourage Volunteers	DPW, Recreation & Department, Earth Day Committee (volunteer)	Meetings held with the Public Starting Year 2 One meeting annually	An Earth Day cleanup event was held on April 22, 2012 at Beaver Pond and approximately 100 people participated. The event focused on minimizing environmental impact, water conservation and stormwater management in conjunction with a large scale roadside litter cleanup and beautification effort. The town also coordinated efforts with the yearly CRWA Earth Day river cleanup event.	Continue to solicit volunteers and advertise the Earth Day cleanup every year. Continue to incorporate stormwater topics with the cleanup event.

2a. Additions

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 was also available at the Earth Day Cleanup event on April 22, 2012.	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 9	Planned Activities – Next Permit Term
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 as displayed on the stormwater website. Approximately 38 cases were addressed.	Record number of phone calls to hotline. Continue to establish means in which residents may acquire additional stormwater information.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9	Planned Activities – Next Permit Term
3A	Stormwater Map Development	DPW Director, Town Engineer, Highway Dept GIS Manager	Completed Map Showing Collection System Outfalls	442 outfalls were previously 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 69% 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					
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 prepared and awaits presentation at an upcoming Town Council meeting.	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	28 outfalls in high priority areas were re-inspected and no obvious illicit discharges were observed. All 501 outfalls have been screened for illicit discharges.	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			
BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9	Planned Activities – Next Permit Term
3E	Develop Procedures for Removing Illicit Connections	DPW Director, Consultant	Procedures Developed and Number of Locations Identified	Procedures for the removal of illicit discharges were added to 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.

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.	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	I/I and sewer rehabilitation activities continued. Flow metering was conducted using the permanent meter at the downstream end of a primary collector line. Permanent groundwater and rain gauges were also installed and monitored on a monthly basis in an effort to collect better data. Flow meter data is analyzed on an annual basis. GPS was used to collect the location of 131 sewer manholes. CCTV was conducted on 6,500 LF of sewer pipeline.	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 9	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		
BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9	Planned Activities – Next Permit Term
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 began the preparation 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 19 projects throughout the permit term.	Continue to utilize formalized inspection procedures and train staff as necessary.
Revised		Construction Inspectors			

4a. Additions.

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.	Coordinate with BMPs 2E & 3F, continue to receive and record information by the public regarding construction sites.
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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 9	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	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	Community Development began the preparation of a Best Development Practices Guidebook for Developers. The DPW office provides educational flyers related to proper stormwater management techniques.	Continue to distribute educational flyers related to stormwater management.
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5a. Additions

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.	Coordinate record keeping program with the post-construction stormwater bylaw, track calls and records of enforcement.
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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 9	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.	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	Highway, Water and Sewer Department employees attended training on April 26, 2012. The topics covered included: MS4 Permit Requirements; Stormwater Impacts; Sources of Pollution; BMPs for Municipal Operations; O&M for Structural BMPs; Spill Prevention & Response; Illicit Discharge Detection & Elimination; and Inspections & Recordkeeping. The training was conducted with 3 neighboring Towns.	Conduct training for the DPW, Highway, Water and Sewer Department employees and evaluate future training needs including site visits and field training.
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	Continued routine street sweeping program. All streets are swept once a year and the downtown area is swept twice a 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	Inspections and site activities were conducted in accordance with the 2008 SPCC Plan.	Follow the current SPCC Plan and target managers for hands on training.
Revised					
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.	Begin 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 9	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.
6G	Low Impact Design for DPW Roadway & Drainage Projects	DPW Director, Town Engineer	Record of final or as-built plans and improvements.	Design was completed for 4 roadway reconstruction projects that will incorporate 6 rain gardens, 3 tree pits for pretreatment, and 3 infiltration chambers. Roadway design also focused on removing impervious surface with the removal of 1 sidewalk and narrowing the roadway by 2 feet throughout the subdivision. (see also BMP 6H).	Additional projects and drainage improvements will be evaluated during the next permit round.

6H	BMP Evaluation and Identification of Needed Retrofits	DPW Director, Town Engineer, Consultant	Database of BMPs, owners, O&M requirements, inspection forms.	<p>The Town focused on the retrofit design and construction of 9 BMP locations during the reconstruction of a roadway and municipal parking lot. 5 of the BMPs were sited on an urban municipal parking lot in a highly visible downtown location. Design was completed on 2 additional BMPs. The Town also identified and reconstructed 4 existing BMPs that were not functioning properly. The reconstruction has improved these BMPs and allows them to operate as originally designed.</p> <p>The town owned BMPs listed in the BMP database were updated with additional inspection data. The Town began developing standard operating procedures (SOPs) for drainage system maintenance.</p>	<p>Construct the 2 additional BMPs. Incorporate the results of the previous BMP evaluation into future evaluations for impaired waters (BMP 7A & 7B) and 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	<p>The highway department made repairs and conducted preventative maintenance on 58 Manholes and Catch Basins throughout the permit term. Drainage work was completed on Anchorage Rd and the Depot St parking lot during road reconstruction including the installation of 5 rain gardens, 3 pretreatment tree pits and 2 infiltration chambers. Design was completed on the Wyllie Ct, Miller St and Green St reconstruction projects.</p> <p>The Town also identified and reconstructed 4 existing BMPs that were not functioning properly. The reconstruction has improved these BMPs and allows them to operate as originally designed.</p>	Continue to make drainage improvements as funding is available. Incorporate the results of BMP 6H.

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 9	Planned Activities – Next Permit Term
6J	Make Annual Household Hazardous Waste Collections Available to Residents	DPW & Board of Health	Ongoing resident participation, amount of materials collected	A collection event was held at the Town Hall on October 1, 2011 and 8,342 pounds of waste was collected. The Town has a reciprocal agreement with 8 neighboring communities that allows residents to participate in Household Hazardous Waste Collections on multiple dates.	Evaluate methods for allowing Household Hazardous Waste Collection available year round at the Town recycling center. Continue to hold an annual event and renew the reciprocal agreement with neighboring communities for additional event opportunities.

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 9	Planned Activities – Next Permit Term
Revised	-----	-----	-----		

7a. Additions

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 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. 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. Further action is pending the availability of funding and the release of the 2012 Phase II MS4 Permit.	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 9	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.
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7b. WLA Assessment

As discussed in the Year 6 annual report, two 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 and the Pathogen TMDL for the Charles River Watershed, CN 0156.0, January 2007. The Town of Franklin 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. Adding to the concern for developing an appropriate implementation strategy, the Town’s consultant reviewed the draft TMDL for Nutrients in the Upper/Middle Charles River, CN 272.0, September 2009. Comments related to the calculation of phosphorous load, supporting data and implementation strategy were submitted to MassDEP.

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 release of the 2012 Phase II MS4 Permit.

The Town of Franklin continues to actively pursue water quality improvement projects as resources allow and in conjunction with other infrastructure projects. 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: 28 during the permit term, 501 total
- 100 residents participated in Earth Day event, 70 of which were students from local schools.

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)	N
Stream teams established or supported	(# or y/n)	N
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	1
▪ community participation	(%)	
▪ material collected	(tons or gal)	8,342 lbs.
School curricula implemented	(y/n)	Y*
*The Town does not have a specific 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 for students. Additionally, DPW works with local Boy Scouts for specific activities such as storm drain stenciling.		

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	(#)	501
System-Wide mapping complete	(%)	69%
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	69%
Outfalls inspected/screened	(# or %)	501
Illicit discharges identified	(#)	0
Illicit connections removed	(#) (est. gpd)	0
% of population on sewer	(%)	80
% of population on septic systems	(%)	20

Construction

Number of construction starts (>1-acre)	(#)	19
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 \$)	
Complaints/concerns received from public	(#)	

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
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	1
Total number of structures cleaned	(#)	5,200
Storm drain cleaned	(LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		
Cost of screenings disposal	(\$)	
Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	
Qty. of sand/debris collected by sweeping	(lbs. or tons)	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	
Cost of sweepings disposal	(\$)	

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 %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	

Anti-/De-Icing products and ratios The sand/salt mix was modified from the previous 20:80 sand/salt mix based on the amount of material necessary to treat roadway conditions, resulting in more effective treatment without applying additional material.	% NaCl % CaCl ₂ % MgCl ₂ % CMA % Kac % KCl % Sand	10:90 sand/salt mix
Pre-wetting techniques utilized	(y/n)	
Manual control spreaders used	(y/n)	
Automatic or Zero-velocity spreaders used	(y/n)	Y
Estimated net reduction in typical year salt application	(lbs. or %)	
Salt pile(s) covered in storage shed(s)*	(y/n)	Y
Storage shed(s) in design or under construction	(y/n)	
*Salt is stored in two sheds to provide adequate cover of all materials.		