

**Municipality/Organization:** Town of Bedford, Massachusetts  
**EPA NPDES Permit Number:** MAR 041028  
**MassDEP Transmittal Number:** W-X233180  
**Annual Report Number & Reporting Period:** Year 7  
April 1, 2009 – March 31, 2010

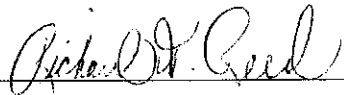
**NPDES PII Small MS4 General Permit  
Annual Report  
(Due: May 1, 2010)**

**Part I. General Information**

**Contact Person:** Adrienne St. John **Title:** Public Works Engineer  
**Telephone #:** (781) 275-7605 **Email:** astjohn@bedfordma.gov  
**Mailing Address:** 314 Great Road Bedford, MA 01730

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:** Richard Reed  
**Title:** Town Manager  
**Date:** April 28, 2010

## **Part II. Self-Assessment**

The Town of Bedford is aware of the new Endangered and Threatened Species list, but has not determined that any Town activities or discharges have had a negative impact on the species.

The Town continues to collect field information to document vernal pools, especially those near outlets from roadways or parking lots. No new vernal pools were certified in Year 7.

**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 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1-1 Revised	Residential Flyer	DPW/SuAsCo	Distribute to 75% of homes	Sponsored public information talk by Fred Civian, DEP Stormwater Coordinator in June '09. Mr. Civian spoke on various BMP methods that homeowners and developers could incorporate into future projects.	Continue to have stormwater information available at local events.
1-2 Revised	Education Program	DPW/SuAsCo	Teach in 5 <sup>th</sup> grade	Handed out SuAsCo post cards at Bedford Day. Published article in local newspaper "Catch Basin Marking for Stormwater Control" to describe why to keep basins clean.	Continue as directed by new NPDES permit
1-3 Revised	Develop web site	DPW	Have in place by 7/05	Website is continually changing to offer information and links to stormwater sites.	Continue to add pertinent information, Town projects, EPA links, helpful tips
1-4 Revised	Stormwater flyer to businesses	DPW/SuAsCo	Distribute to 50%	No specific work targets to businesses in Year 7	Continue as directed by new NPDES permit
1-5 Revised	Stormwater video	DPW	Show video on local cable station.		

**1a. Additions**

1a-6	Pet Waste Dispensers	DPW	Distribute to 75% of local dog owners	Handed out 200 pet waste bags at Bedford Day. Town Clerk distributes bags as dogs are licensed.	Continue popular program
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## 2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities
2-1 Revised	Stormwater Display	DPW/SuAsCo	3mos. at library, Town Hall, Schools		Continue to mark catch basins and deliver door hangers to explain benefits of keeping stormwater clean.
2-2 Revised	Local Stormwater Committee	Selectmen, DPW Cons Com, Planning	Form committee by 12/04	Representatives from Town attended workshop at UNH's Stormwater Center. Assisted local Scout troops with annual clean up day in spring and site specific clean up projects with Eagle Scouts.	
2-3 Revised	Stormwater meetings	DPW/SW Committee	Meet 3x/year	Met regularly with Cons. Comm. Administrator, commissioners to address stormwater violations or complaints. Included Code Enforcement as needed.	
Revised					
Revised					
Revised					

### 2a. Additions


### 3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities
3-2 Revised	Map SW outlets	DPW	75% capture rate	Continued to map outlets (77 GPS's in year 7). Constantly digitizing As-Built drawings to incorporate information on private properties.	Continue to GPS outlets and note condition of pipe and if any dry weather flow.
3-3 Revised	Identify critical resources	DPW, Cons Comm	Map, notify abutters, develop BMP	Constructed 2 Rain Gardens to eliminate direct untreated discharge to Shawsheen River. Had consultant develop "pollutant load reduction model" to assess efficiency of gardens.	Construct more rain gardens.
3-4 Revised	Perform water quality testing	DPW	3 sites-residential, municipal, commercial	No testing in year 7	Monitor requirements from new NPDES Permit
3-5 Revised	Local bylaw-illicit discharges	DPW/Selectmen, Planning		Draft bylaw written. Adopted new sewer use bylaw at Town Meeting which will allow DPW to enter private homes to check for illegal connections.	Continue as directed by new NPDES permit
Revised					
Revised					

### 3a. Additions


**4. Construction Site Stormwater Runoff Control**

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities
4-1 Revised	Develop awareness of construction site issues	DPW, Code, Cons Comm.	Write guidelines, distribute to builders	Continue to require Erosion and Sedimentation controls in place for site work. Required stone entrances for construction sites, infiltration of roof runoff on all new buildings. Use hydro excavations for DPW projects. Provide “Does your Construction Site Need a Stormwater Permit?” to contractors requesting other permits from DPW.	Continue as directed by new NPDES permit
4-2 Revised	Control construction site waste	DPW, Code, Cons Comm.	Reduce litter, erosion, dust, sediment	Require weekly trench paving on utility and road projects to maintain cleaner job sites and reduce erosion. Perform routing inspections of road, utility, site and subdivision projects.	Continue as directed by new NPDES permit
4-3 Revised	ESC plans for disturbances > 5,000 s.f.	Code, DPW, Cons Comm.	Draft bylaw by 7/07	Tree protection and silt sacks now required on all Town projects, even if now wetlands on site.	Continue
Revised					
Revised					

**4a. Additions**


## 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 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities
5-1 Revised	Develop bylaw to address stormwater impacts	Selectmen, Planning, DPW, Cons. SW Comm.	In place by 12/05	Working with consultant to publish “Low Impact Development BMP Handbook” to give to developers as a way to direct design engineers to stormwater treatment systems that are concise, achievable and approved by Town.	
5-2 Revised	Promote infiltration	Planning, DPW, Code, Cons Comm	No increase in flood levels or locations	Still require infiltration of roof runoff on new structures. Recommend rain gardens and bioretention during plan reviews.	Continue
5-3 Revised	Expand grass plots, reduce pavement widths	DPW, Planning	Improve infiltration	Still require LID techniques during plan review. Allow reduced pavement width on some smaller housing projects, or reinforced turf for emergency access roads.	Continue
5-4 Revised	Research rain barrels	DPW	Distribute to 10 households for pilot program	Sold 90+ rain barrels to residents. Some bought 2. Gave out handheld hose nozzles to reduce water waste and rain gauges to promote good watering practices. Received positive feedback from homeowners.	May continue in future years.

### 5a. Additions

5a-5	Keep current with regulations	Cons. Comm. Planning board, DPW		Continued to attend workshops, seminars, trade shows to understand and follow DEP regulations.	Continue
5a-6	Organize local stormwater permits	Cons. Comm., DPW		Maintaining data base of stormwater management plans for Cons. Comm. to track maintenance and reporting.	Add new filings as permitted.

## 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 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities
6-1 Revised	Street sweeping, CB cleaning	DPW	2x per year in critical areas	Continued with program. Swept all roadways at least once, Great Road, industrial and municipal properties swept monthly except for winter months. Used vacuum truck to clean stormwater treatment units and critical catch basins. Reduced amount of winter sand. Removed trash, pallets, debris from 405 feet of ditch at Evergreen Ave and 171 feet of ditch between Wiggins Ave and bike path.	Continue as directed by new NPDES permit
6-2 Revised	Inspect older sewer mains	DPW, MWRA	TV 1 mile per year	TV'd 10 miles of sewer mains and 312 sewer manholes. Developing a work plan to repair deficiencies.	Continue
6-3 Revised	Promote/use alternative fertilizers & pesticides	DPW, Cons Comm	Reduce nitrogen loading	DPW used fertilizers on an As-Needed basis. Conservation Commission prohibits salts, herbicides and blanket fertilizers on projects adjacent to resource areas.	continue
6-4 Revised	Develop spill prevention plan	DPW, Fire, DEP	Purchase spill control equipment	In place	Regularly check inventory
6-5 Revised	Site better snow dump	DPW	Locate site by 12/05	Did not have to use snow dump in Year 7	

### 6a. Additions

6a-6	Provide yard waste disposal opportunities	DPW		Town landfill open on Saturdays from April thru November to bring yard waste to municipal compost site. Keeps residents from dumping in wetlands or on Town properties.	Remove pile(s) of yard waste and debris dumped in wetland.
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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 7 (Reliance on non-municipal partners indicated, if any)	Planned Activities
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

7a. Additions


7b. WLA Assessment

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

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

(Since beginning of permit coverage unless specified otherwise by a \*\*, which indicates response is for period covering April 1, 2009 through March 31, 2010)

**Programmatic**

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	Y
Annual program budget/expenditures **	(\$)	\$10,000
Total program expenditures since beginning of permit coverage	(\$)	\$50,000
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		General Fund

**Education, Involvement, and Training**

Estimated number of property owners reached by education program(s)	(# or %)	95%
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.)	0
Shoreline cleaned since beginning of permit coverage	(mi.)	2,350 ft
Household Hazardous Waste Collection Days		
<ul style="list-style-type: none"> <li>▪ days sponsored **</li> <li>▪ community participation **</li> <li>▪ material collected **</li> </ul>	(# or %)	8 15%
School curricula implemented	(tons or gal) (y/n)	450 gal No

**Legal/Regulatory**

In Place Prior to Phase II      Reviewing Existing Authorities      Drafted      Draft in Review      Adopted

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

**Mapping and Illicit Discharges**

	(Preferred Units)	Response
Outfall mapping complete	(%)	85%
Estimated or actual number of outfalls	(#)	650
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	92%
Mapping method(s)		
▪ Paper/Mylar	(%)	10
▪ CADD	(%)	5
▪ GIS	(%)	85
Outfalls inspected/screened **	(# or %)	77
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	570
Illicit discharges identified **	(#)	0
Illicit discharges identified (Since beginning of permit coverage)	(#)	1
Illicit connections removed **	(#); and (est. gpd)	0
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	0
% of population on sewer	(%)	95%
% of population on septic systems	(%)	5%

### Construction

	(Preferred Units)	Response
Number of construction starts (>1-acre) **	(#)	12
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)	85
Site inspections completed **	(# or %)	120
Tickets/Stop work orders issued **	(# or %)	1
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	(%)	75%
Site inspections (for proper BMP installation & operation) completed **	(# or %)	15
BMP maintenance required through covenants, escrow, deed restrictions, etc.	(y/n)	Y
Low-impact development (LID) practices permitted and encouraged	(y/n)	Y

### 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)	2
Qty of structures cleaned **	(#)	1698
Qty. of storm drain cleaned **	(%, LF or mi.)	1000 lf
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	25 ton
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	compost

Basin Cleaning Costs			
• Annual budget/expenditure (labor & equipment)**	(\$)		\$17,000
• Hourly or per basin contract rate **	(\$/hr or \$ per basin)		\$9.95/basin
• Disposal cost**	(\$)		0
Cleaning Equipment			
• Clam shell truck(s) owned/leased	(#)		0
• Vacuum truck(s) owned/leased	(#)		1
• Vacuum trucks specified in contracts	(y/n)		0
• % Structures cleaned with clam shells **	(%)		95
• % Structures cleaned with vacator **	(%)		5

	(Preferred Units)	Response
Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	1
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	12
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	compost
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	\$10,000
• Hourly or lane mile contract rate **	(\$/hr. or ln mi.)	\$83.75/hr
• Disposal cost**	(\$)	0
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	1
• Vacuum street sweepers owned/leased	(#)	0
• Vacuum street sweepers specified in contracts	(y/n)	N
• % Roads swept with rotary brush sweepers **	%	100
• % Roads swept with vacuum sweepers **	%	0

Reduction (since beginning of permit coverage) in application on public land of:  
 ("N/A" = never used; "100%" = elimination)

▪ Fertilizers	(lbs. or %)	25%
▪ Herbicides	(lbs. or %)	N/A
▪ Pesticides	(lbs. or %)	25%
Integrated Pest Management (IPM) Practices Implemented	(y/n)	Y

	(Preferred Units)	Response
Average Ratio of Anti-/De-Icing products used ** (also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)	% NaCl % CaCl <sub>2</sub> % MgCl <sub>2</sub> % CMA % Kac % KCl % Sand	80% 10%    10%
Pre-wetting techniques utilized **	(y/n or %)	Y
Manual control spreaders used **	(y/n or %)	Y
Zero-velocity spreaders used **	(y/n or %)	Y
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/ln mi. or %)	0
Estimated net reduction or increase in typical year sand application rate **	(±lbs/ln mi. or %)	0
% of salt/chemical pile(s) covered in storage shed(s)	(%)	100%
Storage shed(s) in design or under construction	(y/n or #)	N
100% of salt/chemical pile(s) covered in storage shed(s) by May 2008	(y/n)	Y

**Water Supply Protection**

Storm water outfalls to public water supplies eliminated or relocated	# or y/n	1
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	1
<ul style="list-style-type: none"> <li>• Treatment units induce infiltration within 500-feet of a wellhead protection area</li> </ul>	# or y/n	N



Enter your transmittal number

x233180

Transmittal Number

Your unique Transmittal Number can be accessed online: <http://mass.gov/dep/service/online/trasmfrm.shtml>

Massachusetts Department of Environmental Protection

Transmittal Form for Permit Application and Payment

1. Please type or print. A separate Transmittal Form must be completed for each permit application.

2. Make your check payable to the Commonwealth of Massachusetts and mail it with a copy of this form to: DEP, P.O. Box 4062, Boston, MA 02211.

3. Three copies of this form will be needed.

Copy 1 - the original must accompany your permit application. Copy 2 must accompany your fee payment. Copy 3 should be retained for your records

4. Both fee-paying and exempt applicants must mail a copy of this transmittal form to:

MassDEP
P.O. Box 4062
Boston, MA
02211

\* Note: For BWSC Permits, enter the LSP.

A. Permit Information

BRP WM 08A

NPDES Stormwater General Permit

1. Permit Code: 7 or 8 character code from permit instructions

2. Name of Permit Category

Year 7 Report

3. Type of Project or Activity

B. Applicant Information - Firm or Individual

Town of Bedford

1. Name of Firm - Or, if party needing this approval is an individual enter name below:

2. Last Name of Individual

3. First Name of Individual

4. MI

314 Great Road

5. Street Address

Bedford

MA

01730

781 275-7605

111

6. City/Town

7. State

8. Zip Code

9. Telephone #

10. Ext. #

Adrienne St. John

astjohn@bedfordma.gov

11. Contact Person

12. e-mail address (optional)

C. Facility, Site or Individual Requiring Approval

Town of Bedford

1. Name of Facility, Site Or Individual

314 Great Road

2. Street Address

Bedford

MA

01730

781 275-7605

111

3. City/Town

4. State

5. Zip Code

6. Telephone #

7. Ext. #

046001083

8. DEP Facility Number (if Known)

9. Federal I.D. Number (if Known)

10. BWSC Tracking # (if Known)

D. Application Prepared by (if different from Section B)\*

1. Name of Firm Or Individual

2. Address

3. City/Town

4. State

5. Zip Code

6. Telephone #

7. Ext. #

8. Contact Person

9. LSP Number (BWSC Permits only)

E. Permit - Project Coordination

- 1. Is this project subject to MEPA review? [ ] yes [x] no
If yes, enter the project's EOE file number - assigned when an Environmental Notification Form is submitted to the MEPA unit:

EOEA File Number

F. Amount Due

DEP Use Only

Permit No:

Rec'd Date:

Reviewer:

Special Provisions:

- 1. [x] Fee Exempt (city, town or municipal housing authority)(state agency if fee is \$100 or less).
There are no fee exemptions for BWSC permits, regardless of applicant status.
2. [ ] Hardship Request - payment extensions according to 310 CMR 4.04(3)(c).
3. [ ] Alternative Schedule Project (according to 310 CMR 4.05 and 4.10).
4. [ ] Homeowner (according to 310 CMR 4.02).

Check Number

Dollar Amount

Date