

Municipality/Organization: Town of Bedford, Massachusetts

EPA NPDES Permit Number: MAR 041028

MassDEP Transmittal Number: W-X228041

**Annual Report Number
& Reporting Period:** April 1, 2008 – March 31, 2009

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2009)

Part I. General Information

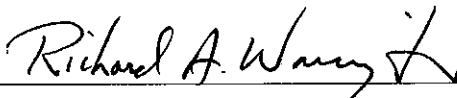
Contact Person: Adrienne St. John **Title:** Public Works Engineer

Telephone #: (781) 275-7605 **Email:** adrienne@town.bedford.ma.us

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 Warrington

Title: Acting Town Manager

Date: April 30, 2009

Part II. Self-Assessment

Part 1.B.2(e)vi

The Town is aware of the new Endangered and Threatened Species list, but has not yet determined if any of the Town discharges have a negative effect on the species.

The Town is collecting information to document vernal pools, targeting locations adjacent to roadways and drainage outfalls. In Year 6, vernal pools off Shawsheen Road (certified), Middlesex Turnpike and Liljegren Way were studied.

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 6 (Reliance on non-municipal partners indicated, if any)	Future Planned Activities –
1-1 Revised	Residential Flyer	DPW/SuAsCo	Distribute to 75% of homes	“Tips for Keeping Stormwater Clean” article published in Bedford Byline, fall 2008, sent to all addresses in town. Handed out SuAsCo “Stormwater Matters” post cards at Bedford Day and weekly Farmers Markets.	Continue to have stormwater information available at local events and public sites.
1-2 Revised	Education Program	DPW/SuAsCo	Teach in 5 th grade	Elementary school has “outdoor classroom” where kids learn about stormwater maintenance system (wet pond) and the effect of stormwater runoff on a natural habitat	Continue to assist school as requested.
1-3 Revised	Develop web site	DPW	Have in place by 7/05	Implemented new web site to show Town/DEP wetlands, perennial/intermittent streams, detention ponds. Had training sessions with Town staff, Conservation Comm., Planning Board and Trails Committee.	Continue to add pertinent information, EPA links, helpful tips
1-4 Revised	Stormwater flyer to businesses	DPW/SuAsCo	Distribute to 50%	Businesses also received Bedford Byline article about stormwater. 39 properties with greater than 5 acres of impervious area were sent letters notifying them of new stormwater regulations	
1-5 Revised	Stormwater video	DPW	Show video on local cable station	Video shown bi-weekly at various time slots on local cable station.	

1a. Additions

1a.6 Revised	Pet Waste Dispensers	DPW	Distribute to 75% of local dog owners	Handed out 185 pet waste dispensers and refill packs at Bedford Day	Have Town Clerk give out dispensers and bags as residents license their dogs in 2009
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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 6 (Reliance on non-municipal partners indicated, if any)	Future Planned Activities –
2-1 Revised	Stormwater Display	DPW/SuAsCo	3 mos. at library, Town Hall, Schools	Displayed new SuAsCo posters, marked 80 catch basins and hung 95 door hangers to remind public not to dump down drains	Continue to mark catch basins and use door hangers at properties where basins are marked.
2-2 Revised	Local Stormwater Committee	Selectmen, DPW ConsCom, Planning	Form committee by 12/04	No progress	If interest shown, expand membership
2-3 Revised	Stormwater meetings	DPW/SW Committee	Meet 3x/year	Met regularly with Conservation Commission Administrator to address stormwater complaints or wetland dumping violations.	
Revised					
Revised					
Revised					

2a. Additions

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3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 6 (Reliance on non-municipal partners indicated, if any)	Future Planned Activities –
3-2 Revised	Map SW outlets	DPW	75% capture rate	Continued to map outlets (98 GPS'd in Year 6), digitized As-Built drawings, stenciled 150 catch basins.	Continue to GPS, estimate 118 outlets left to monitor
3-3 Revised	Identify critical resources	DPW, ConsComm	Map, notify abutters, develop BMP	Assisted with Scouts and community groups of clean up of trash & debris on public properties. Added 2008 Estimated Habitat maps to website, map is on display at Conservation Commission office.	Construct 3 rain gardens to eliminate direct discharge to Shawsheen River
3-4 Revised	Perform water quality testing	DPW	3 sites – residential, municipal, commercial	No testing in Year 6	
3-5 Revised	Local bylaw – illicit discharges	DPW/Selectmen, Planning	In place by 7/06	Draft bylaw written	Have adopted at Town Meeting
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 6 (Reliance on non-municipal partners indicated, if any)	Future Planned Activities --
4-1 Revised	Develop awareness of construction site issues	DPW, Code, ConsComm	Write guidelines, distribute to builders	Continued to require Erosion and Sed. Control measures in place for site plan and subdivision projects. Required stone on construction entrances and infiltration of roof runoff for new homes and buildings. Use and promote hydro-excavations. Provided EPA pamphlet "Does Your Construction Site Need a Stormwater Permit?" to contractors coming in for other permits. "Storm Watch" DVD shown to DPW employees to explain Municipal Stormwater Pollution Prevention	Continue
4-2 Revised	Control construction site waste	DPW, Code, ConsComm	Reduce litter, erosion, dust, sediment	Required weekly trench paving on utility and road projects to maintain neater job sites. Perform inspections on construction projects.	Continue
4-3 Revised	ESC plans for disturbances > 5,000s.f	Code, DPW, ConsComm	Draft bylaw by 7/07	Tree protection and catch basin silt sacks now required on all site plans and subdivision lots.	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 6 (Reliance on non-municipal partners indicated, if any)	Future Planned Activities –
5-1 Revised	Develop bylaw to address stormwater impacts	Selectmen, Planning, DPW, Cons. SW Comm.	In place by 12/05	Draft bylaw and regulations written	Adopt at Annual Town Meeting
5-2 Revised	Promote infiltration	Planning, DPW, Code, ConsComm	No increase in flood levels or locations	Require infiltration of roof runoff on new structures. Recommend rain gardens, bioretention during site plan reviews. Rain garden constructed at Bedford High School to promote concept.	Continue
5-3 Revised	Expand grass plots, reduce pavement widths	DPW, Planning	Improve infiltration	Require LID techniques during site plan and subdivision reviews. Allow reduced pavement width on some smaller housing projects. reinforced turf in seasonal parking areas and for fire lane at Bedford High School	Construct rain gardens in existing cul-de-sacs to reduce impervious.
5-4 Revised	Research rain barrels	DPW	Distribute to 10 households for pilot program	Applied for DEP grant for reduced cost of rain barrels to promote water reuse.	Sell 50 rain barrels in June, 2009 and follow up with 10% of owners for feedback.
Revised					
Revised					

5a. Additions

5a-5	Keep current with regulations	Cons. Comm. Planning Board, DPW		DPW staff and Cons. Comm. Administrator attended several professional seminars, for example: Regulatory Revisions to Stormwater Management, Environmental Management Compliance, Stormwater Regulations for sites with >5 acres of impervious cover, various manufacturer/supplier trade shows of stormwater treatment products	Continue to keep local boards and commissions up to date with changing regulations
5a-6	Organize local stormwater permits	Cons. Comm., DPW		Gathered all site Order of Conditions and stormwater management plans from the past 10 years to follow up with ongoing stormwater requirements for maintenance and reporting.	Implement notification system to remind property owners of requirements and ensure maintenance is being done and reports are filed.

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 6 (Reliance on non-municipal partners indicated, if any)	Future Planned Activities –
6-1 Revised	Street sweeping, CB cleaning	DPW	2x per year in critical areas	Continued program. Swept all 80 miles of roadways. Great Road (local commercial area) and municipal properties swept 12 times in year 6.	Continue to reduce amount of sand used during snow and ice operations.
6-2 Revised	Inspect older sewer mains	DPW, MWRA	TV 1 mile per year	Replaced 1400 l.f. of leaking sewer force main. Installed 6 inflow dishes in sewer manholes to eliminate 8,500 gallons of removal I/T. Cleaned and inspected 1.5 miles of sewer in West Bedford.	Continue
6-3 Revised	Promote/use alternative fertilizers & pesticides	DPW, ConsComm	Reduce nitrogen loading	DPW using fertilizer on an as-needed basis only. Cons. Comm requiring no-salt areas, no herbicides and no 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	Site located at middle school ball field; not needed in 2008	
Revised					

6a. Additions

6a-6	Provide yard waste disposal opportunities	DPW		Added 2 more Saturdays for public to bring yard waste to municipal compost site. Keeps residents from dumping in wetlands or on Town properties	Continue
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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 6 (Reliance on non-municipal partners indicated, if any)	Future 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, 2008 through March 31, 2009)

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	(\$)		\$42,000
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.)		350 ft
Shoreline cleaned since beginning of permit coverage	(mi.)		2,350 ft
Household Hazardous Waste Collection Days			
▪ days sponsored **	(#)		8
▪ community participation **	(# or %)		15%
▪ material collected **	(tons or gal)		450 gal
School curricula implemented	(y/n)		N

Legal/Regulatory

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	
▪ Erosion & Sediment Control	x				
▪ Post-Development Stormwater Management					
Accompanying Regulation Status (indicate with "X")					
▪ Illicit Discharge Detection & Elimination				x	
▪ Erosion & Sediment Control	x				
▪ Post-Development Stormwater Management					

Mapping and Illicit Discharges

	(Preferred Units)		Response
Outfall mapping complete		(%)	82
Estimated or actual number of outfalls		(#)	600
System-Wide mapping complete (complete storm sewer infrastructure)		(%)	92
Mapping method(s)			
▪ Paper/Mylar		(%)	10
▪ CADD		(%)	5
▪ GIS		(%)	85
Outfalls inspected/screened **		(# or %)	88
Outfalls inspected/screened (Since beginning of permit coverage)		(# or %)	493
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) **	(#)		10
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)		85
Site inspections completed **	(# or %)		200
Tickets/Stop work orders issued **	(# or %)		3
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 %)		20
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)		28 ton
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)		Compost

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	\$22,000
• Hourly or per basin contract rate **	(\$/hr or \$ per basin)	\$9.95/basin
• Disposal cost**	(\$)	\$5,000
Cleaning Equipment		
• Clam shell truck(s) owned/leased	(#)	0
• Vacuum truck(s) owned/leased	(#)	1
• Vacuum trucks specified in contracts	(y/n)	n
• % Structures cleaned with clam shells **	(%)	95%
• % Structures cleaned with vacor **	(%)	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)	380 tons
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Compost
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	\$18,000
• Hourly or lane mile contract rate **	(\$/hr. or ln mi.)	\$83.75/hr
• Disposal cost**	(\$)	\$5,000
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 **	% NaCl	80%
(also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)	% CaCl ₂	10%
	% MgCl ₂	
	% CMA	
	% Kac	
	% KCl	10%
	% Sand	
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 %)	+ 5%
Estimated net reduction or increase in typical year sand application rate **	(±lbs/ln mi. or %)	-5%
% 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 2009	(y/n)	Y

Water Supply Protection

Storm water outfalls to public water supplies eliminated or relocated	# or y/n	n
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	1 planned
• Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	n



Enter your transmittal number

X228041

Transmittal Number

Your unique Transmittal Number can be accessed online: <http://mass.gov/dep/service/online/trasmfrm.shtml> or call MassDEP's InfoLine at 617-338-2255 or 800-462-0444 (from 508, 781, and 978 area codes).

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 6 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

adrienne@town.bedford.ma.us

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 ☒ 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

Special Provisions:

1. ☒ 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).

DEP Use Only

Permit No:

Rec'd Date:

Reviewer:

Check Number

Dollar Amount

Date