

4/29/11

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Municipality/Organization: Town of Falmouth

EPA NPDES Permit Number: MAR 041114

MADEP Transmittal Number: W-035626

Annual Report Number

& Reporting Period:

No. 8: May 2010-May 2011

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Peter M. McConarty

Title: Acting Town Engineer

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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 gathered and evaluated 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: Heather B. Harper

Title: Acting Town Manager

Date:

4/28/11

Part II. Self-Assessment

The Engineering staff is responsible for implementing the Phase II requirements and has been moving forward with compliance.

Due to the present economy downturn, the Public Works Department has focused most of the available drainage infrastructure repair funding towards stormwater discharge quality to ensure NPDES compliance. In 2009, the Department purchased an Asset Management Software program that has tracking capabilities. A business Systems Manager has been hired and is currently programming the software to include street cleaning and catch basin sediment removal reporting.

Due to a reduction in the workforce, routine street cleaning schedule has been limited to one street sweeping crew. Street cleaning is performed in the spring after snow removal operations, and in the fall after the hurricane and nor'easter season. A catch basin cleaning truck and crew has been dedicated to full time basin cleaning from April – October.

NPDES compliance programs and staff development training are continually being updated. Several key aspects include:

1. Proposals received for the development of “Town Stormwater Regulations” including NPDES compliance requirements. Funding for these services is currently being pursued.
2. The Town “*Driveway Permit*” forms have been modified to include NPDES stormwater requirements. The modified “*Driveway Permit*” includes:
 - Statement “No driveway shall be constructed directing stormwater onto roadways”.
 - Bonding of permits ensuring all site work is constructed according to the driveway permit and attachments.
3. The Engineering Division maintains an active list of drainage concerns. Each site is evaluated for repair (including best management practices (BMP’s), water quality, and accessibility for maintenance. Work is ongoing to correct the stormwater issues.
4. Evaluation review and update of the current “Public Outreach and Participation Program” is ongoing. Funding for storm drain markers stating “NO DUMPING, DRAINS TO OCEAN” is currently being sought.
5. The Engineering division has submitted an “Individual Placement Proposal” to AmeriCorps Cape Cod. The proposal outlines a 16 hour per week internship from October 2011-July 2012. Duties to include locating, mapping, and rating drainage appurtenances; logging data; and assisting in the “Public Outreach” portion of the NPDES requirements.

6. NPDES training:

- Webinar, two hours, January 11, 2011.
- Stormwater / FEMA seminar, four hours, February 17, 2011, New Bedford, MA.
- Stormwater Regulation Update seminar, four hours, March 1, 2011, Natick, MA.
- Small MS4 Stormwater General Permits, eight hours, April 27, 2011, Chelsea, MA.

The following roadway projects including stormwater LID design and best management practices have been designed and are currently under construction:

- Mill Road – Approximately 1,300 linear feet of roadway has been reconstructed. Stormwater design includes a grass swale with hdpe piping leading to a sediment forebay, stone filtration swale, granite weir and vegetated buffer area.
- Falmouth Heights Road – Installed two in-line proprietary water quality basins. The Town owns a vacuum truck that is used to removed sediment and debris from the basins.
- Falmouth Heights Parking Lot – Installed one in-line proprietary water quality basin.
- Siders Pond Road – Design plans have been developed for the installation of two in-line proprietary water quality basins. The work is scheduled for this construction season.
- Falmouth received two grants from the Natural Resources Conservation Service (NRCS) for:
 - The reconstruction of a fish ladder and proposed LID drainage for improving sediment flow into Rands Canal. The Town must match 25% of the total cost with in-house professional design services.
 - Drainage improvements at the end of County Road at Megansett Harbor. The Town must match 25% of the total cost with in-house professional design services.

The Engineering Division, working with The Falmouth Natural Resources Division is currently designing, preparing plans and working with local and state agencies on stormwater permitting. The projects are scheduled for construction in 2011-2012.

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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 9
1-1 Revised	Televised Program for Falmouth Specific.	Engineering D.N.R..	Program airing on local station.	Program was initiated.	Review proprietary programs, meet with local community televised news channel to discuss options and air time schedule.
1-2 Revised	Posting Of Maps	Engineering Engineering and GIS	Map prepared and displayed	Ongoing updates to map as needed.	Ongoing updates to map as needed.
1-3 Revised	Annual Public Hearing	Admin.	Meetings held per schedule	Meeting not scheduled and held.	Review schedule and reinstitute meetings.
1-4 Revised	Educational Flyer	Admin. and DPW	Flyer prepared and distributed	Posters developed.	Flyers Distributed 2003-2005.
Revised					
Revised					

1a. Additions

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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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 9
2-1 Revised	Encourage participation	Admin./DPW	Maintain complaint file	Maintain a complaint report file.	Keep complaint report file updated.
2-2 Revised	Stormwater Committee	Selectmen/DPW	Update management program	Committee established and meetings held.	Review schedule and reinstate meetings.
2-3 Revised	Selectmen's Meeting Review	Selectmen Administrator	Meetings held per schedule	Reestablish meeting schedule.	Review schedule and reinstate meetings.
2-4 Revised	Storm Drain Stenciling	DPW/Engineering	Documentation of catch basins stenciled	Implement installation program.	Purchase Stenciling. Implement installation program when funding becomes available.
2-5 Revised	Hazardous Waste Collection	Board Of Health	Documentation of Collection	Hazardous waste collection was conducted 4 times in conjunction with 3 bordering towns. May thru Oct	Conduct hazardous waste collection days 4 days between May and Oct in conjunction with 3 bordering towns

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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 9
3-1 Revised	Discharge Identification	DPW	Production of maps	Field inventory and locate with GPS to update GIS data.	Field inventory and locate with GPS to update GIS data. Incorporate all discharges in Asset Management Software program.
3-2 Revised	Drainage Network Mapping	DPW/ Engineering	Production of maps	Field verify and update GIS database.	Field upkeep and GIS database updated.
3-3 Revised	Illicit Discharge Identification	DPW/GIS	Quantify Identification	Identified illicit discharges with BMP 3-1 & 3-2.	Identified illicit discharges with BMP 3-1 & 3-2.
3-4 Revised	Illicit Discharge Enforcement	DPW/Board Of Health	Quantify Identification	Finalize review of existing enforcement measures.	Review and upkeep of existing enforcement measures. Modify if necessary.
3-5 Revised	DPW Training	DPW	Meetings held	Not implemented.	Implement training and revise schedule to coincide with BMP 6-2. Outfit trucks with spill containment and prevention equip.
3-6 Revised	Public Information on Illicit Connections	DPW/Admin.	Maintain report file	Not implemented.	Implement in conjunction with BMP 1-1.

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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 9
4-1 Revised	Con. Com. Bylaw Review	Con. Com.	Review and/or revise bylaws	Review of bylaws and regulations.	A stormwater by-law is currently being discussed between Engineering, Con. Com. And Planning for 2011-2012 implementation. See BMP 4-1.
4-2 Revised	Planning Board Regulations Review	Planning Board	Review and/or revise regulations	Review of regulations.	See BMP 4-1.
4-3 Revised	Zoning Bylaw Review	Planning Board	Review and/or revise regulations.	Review of Zoning Bylaws.	See BMP 4-1.
Revised					
Revised					
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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 9
5-1 Revised	Con. Com Bylaw Review	Con. Com.	Review and/or revise bylaws	Initiated review of bylaws and regulations.	See BMP 4-1.
5-2 Revised	Planning Board Regulations Review	Planning Board	Review and/or revise regulations	Initiated review of regulations.	See BMP 4-1.
5-3 Revised	Zoning Bylaw Review	Planning Board	Review and/or revise regulations.	Initiated review of Zoning Bylaws.	See BMP 4-1.
Revised					
Revised					
Revised					
Revised					

5a. Additions

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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 9
6-1 Revised	DPW Policy Guide	DPW	Preparation of Policy Guide	Not initiated.	Initiate the development of the DPW Policy Guide.
6-2 Revised	DPW Annual Training	DPW	Complete annual training	Not implemented.	Implement and revise schedule to coincide with BMP 3-5.
6-3 Revised	DPW Permit Filing	DPW	Copies of permits on file	Implemented and on-going.	Continue filing permits and adhere to DEP, and local design standards.
Revised					
Revised					
Revised					
Revised					

6a. Additions

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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 9
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)

Programmatic

Stormwater management position created/staffed	(y/n)	Y
Annual program budget/expenditures	(\$)	25,000.00
		Presently Unfunded

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	New Program Televised 100%
Stormwater management committee established	(y/n)	Y
Stream teams established or supported	(# or y/n)	
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	Y 65 +/-Miles
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	4
▪ community participation	(%)	
▪ material collected	(tons or gal)	
School curricula implemented – Elementary & Middle School Grades	(y/n)	Y

Legal/Regulatory

Regulatory Mechanism Status (indicate with "X")				In Place Prior to Phase II	Under Review	Drafted	Adopted
▪ 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		(#)		129
System-Wide mapping complete		(%)		90
Mapping method(s)				
▪ Paper/Mylar		(%)		100
▪ CADD		(%)		
▪ GIS		(%)		100
▪ Asset Management Software program		(%)		100
Outfalls inspected/screened		(# or %)		20
Illicit discharges identified		(#)		
Illicit connections removed		(#)		
		(est. gpd)		
% of population on sewer		(%)		3
% of population on septic systems		(%)		97

Construction

Number of construction starts (>1-acre)	(#)	3
Estimated percentage of construction starts adequately regulated for erosion and sediment control	(%)	100%
Site inspections completed	(# or %)	4 ea. project
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% By design
Site inspections completed	(# or %)	4 ea. project
Estimated volume of stormwater recharged	(gpy)	

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	Continuous
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	Continuous
Total number of structures cleaned (3,200 +/- Total), Clean approx. 50-60 month)	(#)	On-going
Storm drain cleaned (See above)	(LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	4 C.Y. Each
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Town Owned Gravel Pit
Cost of screenings disposal	(\$)	No Cost

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	2 or as needed
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	2 or as needed
Qty. of sand/debris collected by sweeping	(lbs. or tons)	20 C.Y./Day
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Gravel Pit
Cost of sweepings disposal	(\$)	
Vacuum street sweepers purchased/leased	(#)	N/A
Vacuum street sweepers specified in contracts	(y/n)	N/A

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)		
■ Fertilizers	(lbs. or %)	2 lbs per Acre
■ Herbicides	(lbs. or %)	None Used
■ Pesticides	(lbs. or %)	Minimal Used

Anti-/De-Icing products and ratios		
	% NaCl	
	% CaCl ₂	
	% MgCl ₂	
	% CMA	
	% Kac	
	% KCl	
	% Sand	
Pre-wetting techniques utilized	(y/n)	Started 2008
Manual control spreaders used	(y/n)	N
Automatic or Zero-velocity spreaders used	(y/n)	Y (7)
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)	Y Complete