

Municipality/Organization: Avon, MA

EPA NPDES Permit Number: BRPWM084 MAR041089

MassDEP Transmittal Number: W-044647

Annual Report Number

& Reporting Period: April 1, 2006 – March 31, 2007

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2007)

Part I. General Information

Contact Person: Mark C. Fisher

Title: Town Administrator

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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: Mark C. Fisher

Title: Town Administrator

Date: April 2, 2007

Part II. Self-Assessment

Now with the new Town Administrator in place, progress is being made in getting back on schedule with the completion of plans and requirements under our Stormwater Permit.

The Town will be opening bids on April 4, 2007 relative to a major road reconstruction project which includes updating of catch basins and storm water control.

The Town has just completed an extensive Drainage Catchment Study in the section of our town that has inadequate stormwater control. We are currently reviewing the results of this study and will be putting together a definitive plan of action for financial review and approval.

One of our BMP's deals with an Environmental Assessment of our Highway Maintenance Facility. We have had an assessment completed and have taken some immediate corrective actions, as well preparing to purchase a properly designed catch basin for that facility. Also we are in the process of getting specifications on a holding tank for collection of water runoff from the vehicles parked inside the facility, as well proper containment and safe storage of potentially hazardous materials.

As part of the town's on-going stormwater control, a detailed inventory of flow conditions in the main river in town has been completed. We are now in the process drawing up specifications of work that needs to be performed.

The Town, through the Highway Department Budget has continued proper catch basin cleaning schedules as well as clearing and cleaning of various storm culverts, streams and drainage areas.

The Town continues to adequately budget for street sweeping that allows the town to minimize the impact of sand and salt on the stormwater drainage system.

The Town remains committed to making as much progress with improving our stormwater discharge as is possible, realizing budgetary constraints.

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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
101 Revised	Stormwater Impacts Mailer	Town Administrator	1 Town Wide Mailing	Project incomplete	Gather information to be included. Design the document. Obtain Funding
102 Revised	School Stormwater Science Project	Town Administrator with School Supt.	1 Class Science Project	Project incomplete	Discuss with Superintendent and develop appropriate plan
103 Revised	Stormwater on Local Cable Access Show	Town Administrator	1 show on environmental/stormwater issues	Project incomplete	Meet with producers of the “Cracker Barrel” public access show. Discuss content and format of program possibility. Gather information for program
104 Revised	Youth Stream Cleanup	Town Administrator	Annual Stream Clean Up Day	Project incomplete	The Town has competed an inventory of work that has to be performed on various streams and drainage areas. We need to determine liability issues. Work with Conservation Commission and Local Civic Groups to develop a plan and schedule
Revised					
Revised					

1a. Additions

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
201	Stormwater Management Task Force	Town Administrator	Establishment of Task Force	We have put together a work group consisting of the Highway Department Operations Manager, the Water Department Superintendent, the Town Administrator and the Chairman of the Board of Selectmen	Current priority is dealing with issues needed to be completed under existing permit.
202	Publicity of Stormwater related Articles/hearings	Town Administrator	Public Announcements for all stormwater articles/hearing	We have just received our Drainage Study. Once the review is completed, then requests will be made through town meeting warrant articles and hearings to provide adequate funding	As articles for funding and by-laws progress, hearing will be held with appropriate public notice. Information will also be distributed on the Town's new Web Site
203	Science Contest sponsored by Business Association	Town Administrator	Stormwater Science Contest	No action at this time	Business Associations do not appear to be active. Will work with the Schools in relation to the Class Science Project and determine if private business involvement in terms of evaluation and prizes.
Revised					
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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
301 Revised	Map Stormwater Sewer Infrastructure	Town Administrator and Highway Operations Manager	Completed GIS map	Handwritten map in place. As engineering work is being done on various sections, GIS format is being required. New Drainage Study, for a major portion of the town, has been completed and is in GIS format that will be added to our GIS system	Need to get a determination of cost to convert existing maps to GIS format and seek funding through town meeting
302 Revised	Education Flier on Basement Good Housekeeping Practices	Town Administrator and Board of Health	1 Town-wide Mailing	No action at this time	The Board of Health has issued flyers in relation to compostable materials, recyclables and the handling of hazardous materials. We need to talk in further detail with the Board of Health about other stormwater issues and in addition to a possible flyer, place information on the Town's new Web Site.
303 Revised	Illicit Discharge Hotline	Town Administrator and Highway Operations Manager	Establish Hotline	Ongoing	Currently using existing phone lines to forward complaints that come into various town departments. Need to make town's residents aware of the fact that they should call into the town if they see activity in the Stormwater System that they fee is inappropriate.
304 Revised	Illicit Discharge Bylaw	Planning Board	Bring By-Law before Town Meeting	Planning Board has enacted an in-house erosion control plan to deal with runoff at construction sites. Will continue to work on avenues in which to control runoff from existing sites.	No further action
Revised					

[illegible]

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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
401 Revised	Construction Site E & SC Bylaw	Planning Board	Bylaw brought before Town Meeting	The planning Board has created an Erosion Control plan based on EPA's sample plan. Need to discuss further action with the Planning Board	No further action
402 Revised	Site Plan Review Amendment	Planning Board	Amendment Article brought before Town Meeting	The planning Board has created an Erosion Control plan based on EPA's sample plan. Need to discuss further action with the Planning Board	No Further action
Revised					
Revised					
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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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
501 Revised	Stormwater Management Bylaw	Planning Board	Bylaw brought before Town Meeting	Erosion Control plan created, based on the EPA's sample control plan	No further action
502 Revised	Site Plan Review Amendment	Planning Board	Amendment Article brought before Town Meeting	Erosion Control Plan created, based on EPA's sample control plan	No further action
Revised					
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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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
601 Revised	Annual Street Sweeping	Highway Department	Sweep all town streets once per year	Complete	Annual Occurrence
602 Revised	Annual Catch Basin Clean-out	Highway Department	Clean out all catch basins once per year	Complete	Annual Occurrence
603 Revised	Environmental Assessment of Highway Maintenance Facility	Highway Operations Manager	Completed Assessment	Assessment has been completed. Immediate corrective action taken. Process of purchasing properly designed catch basin. Working on specifications for holding tank for water run-off from vehicles parked in facility.	Complete project
604 Revised	Highway/Water Depts. Good Housekeeping Education	Highway Operations Manager and Water Superintendent	At least 1 training for all Water/highway Dept. Staff	Ongoing	Evaluate and assure it has been completed
605	Environmental Assessment of Municipal Facilities	Town Administrator	Completed Assessment	Ongoing	Need to determine next step
Revised					
Revised					

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Revised						

6a. Additions

Wastewater Management Plan	Board of Selectmen	Plan complete	Assessment of wastewater discharges in Town by outside Engineer. Development of a long term plan to address future wastewater flows	Plan under review by the Massachusetts Department of the Environment. Significant investment made to develop a long term plan to address present and future wastewater discharges.
Drainage Assessment Brentwood Neighborhood	Board of Selectmen	Study Completed	Evaluate study and develop a plan	Present plan for financial review and funding

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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
Revised					
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7a. Additions

7b. WLA Assessment

The Town's water department is currently monitoring subsurface migration of various pollutants in the area of test well sites on the Brockton/Avon Town Line.

Part IV. Summary of Information Collected and Analyzed

There have been actual studies of: Wastewater Management, Storm water control in certain sections of town, and analysis of water flow in main rivers. There continues to be on going discussion with various department heads and members of the Board of Selectmen.

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, 2006 through March 31, 2007)

Programmatic

	(Preferred Units)		Response
	(y/n)	No	
Stormwater management position created/staffed			
Annual program budget/expenditures **	(\$)	\$40,000	
Total program expenditures since beginning of permit coverage	(\$)	\$250,000 +	
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		Gen. Fund	

Education, Involvement, and Training

Estimated number of property owners reached by education program(s)	(# or %)	Unknown
Stormwater management committee established	(y/n)	Yes
Stream teams established or supported	(# or y/n)	One
Shoreline clean-up participation or quantity of shoreline miles cleaned **	(y/n or mi.)	N/A
Shoreline cleaned since beginning of permit coverage	(mi.)	N/A
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	1
▪ community participation **	(# or %)	Unknown
▪ material collected **	(tons or gal)	Regional

School curricula implemented	(y/n)	No

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

Mapping and Illicit Discharges

	(Preferred Units)		Response
Outfall mapping complete	(%)		25%
Estimated or actual number of outfalls	(#)		Unknown
System-Wide mapping complete (complete storm sewer infrastructure)	(%)		75%
Mapping method(s)			
▪ Paper/Mylar	(%)		75%
▪ CADD	(%)		
▪ GIS	(%)		20%
Outfalls inspected/screened **	(# or %)		Unknown
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)		Unknown
Illicit discharges identified **	(#)		1
Illicit discharges identified (Since beginning of permit coverage)	(#)		1
Illicit connections removed **	(#); and (est. gpd)		1

Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	1
% of population on sewer	(%)	1%
% of population on septic systems	(%)	99%

Construction

(Preferred Units) Response		
Number of construction starts (> 1-acre) **	(#)	3
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)	100%
Site inspections completed **	(# or %)	3
Tickets/Stop work orders issued **	(# or %)	None
Fines collected **	(# and \$)	None
Complaints/concerns received from public **	(#)	None

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	
Site inspections (for proper BMP installation & operation) completed **	(# or %)	
BMP maintenance required through covenants, escrow, deed restrictions, etc.	(y/n)	
Low-impact development (LID) practices permitted and encouraged	(y/n)	

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets) **	(times/yr)	Yearly
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	Yearly
Qty of structures cleaned **	(#)	580
Qty. of storm drain cleaned **	(%, LF or mi.)	100 ft.

Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	Unknown
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Recycling Ctr.

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	\$10,000
• Hourly or per basin contract rate **	(\$/hr or \$ per basin)	
• Disposal cost**	(\$)	
Cleaning Equipment		
• Clam shell truck(s) owned/leased	(#)	1
• Vacuum truck(s) owned/leased	(#)	
• Vacuum trucks specified in contracts	(y/n)	
• % Structures cleaned with clam shells **	(%)	580
• % Structures cleaned with vacor **	(%)	

(Preferred Units)		Response
Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	Yearly
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	Yearly
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	Unknown
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Compost
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	\$30,000
• Hourly or lane mile contract rate **	(\$/hr. or ln mi.)	
• Disposal cost**	(\$)	
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	1
• Vacuum street sweepers owned/leased	(#)	
• Vacuum street sweepers specified in contracts	(y/n)	
• % Roads swept with rotary brush sweepers **	%	
• % Roads swept with vacuum sweepers **	%	

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

▪ Fertilizers	(lbs. or %)	Unknown
▪ Herbicides	(lbs. or %)	Unknown
▪ Pesticides	(lbs. or %)	Unknown
Integrated Pest Management (IPM) Practices Implemented	(y/n)	Unknown

	(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 ₂ % MgCl ₂ % CMA % Kac % KCl % Sand	4 parts sand to 1 part salt per Town Regulations
Pre-wetting techniques utilized **	(y/n or %)	
Manual control spreaders used **	(y/n or %)	
Zero-velocity spreaders used **	(y/n or %)	Yes
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/ln mi. or %)	Unknown
Estimated net reduction or increase in typical year sand application rate **	(±lbs/ln mi. or %)	Unknown
% of salt/chemical pile(s) covered in storage shed(s)	(%)	100%
Storage shed(s) in design or under construction	(y/n or #)	
100% of salt/chemical pile(s) covered in storage shed(s) by May 2008	(y/n)	Yes

Water Supply Protection

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