

Municipality/Organization:

EPA NPDES Permit Number:

MassDEP Transmittal Number: W-

**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:

Title:

Telephone #:

Email:

Mailing Address:

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:

Title:

Date:

Part II. Self-Assessment

Include here the results of your self-assessment review of compliance with all permit conditions. As shown in the examples below, include a statement of full compliance or identify specific conditions of the permit that have not yet been complied with or satisfied. You should not duplicate here information regarding the status of compliance with the minimum control measures (i.e. BMP implementation, goals, and schedule) that is included in Part III of your annual report.

The <<town/city of>> has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions.

<<OR>>

The <<town/city of>> has completed the required self-assessment and have determined that our municipality is in compliance with all permit conditions, except for the following provisions:

Part I.B.2(e)(vi) The <<town/city of>> permit eligibility with regard to the Endangered Species Act was pending at the time of our NOI submission. The National Marine Fisheries Service has since provided written determination (attached) that our MS4 discharges are not likely to jeopardize the continued existence of specific species protected under the Endangered Species Act.

Part I.B.2(k) Two discharges have been conclusively determined (through our water quality monitoring) to be contributing to an instream exceedance of water quality standards in Mill Brook. These discharges have been made priorities in our illicit discharge elimination program.

Part II.B.8 Have not yet evaluated physical conditions, site design considerations, and BMPs to promote groundwater recharge through the implementation of our stormwater management program. The Engineering Department has since completed such an evaluation and developed recharge practices and guidelines that will be incorporated into education materials, our Drain Use Regulations, and standard practice for municipal road and drainage projects.

Part II.C Though protection of our drinking water reservoir is a priority within our SWMP, have not yet completed feasibility assessment of providing pretreatment and spill control for all stormwater discharges to our drinking water reservoir.

Part II.F Failed to submit annual report on or before May 1. Submitted on May 15.

Part III. Summary of Minimum Control Measures

Transcribe into columns 1-4 below the BMP, responsible party, and measurable goal information from your municipality’s NOI, and describe in the last two columns progress made during Permit Year 4 toward achieving your measurable goals and what activities are planned for next year, respectively. Changes that revise/replace or add components to your storm water management program can also be included here. Changes included in your annual report will be considered as formal notifications and modification requests accordingly.

You may also attach an implementation schedule as was included with your NOI, revised to incorporate changes in content and timing of your best management practices.

Note: Item 7 below is applicable to only those municipalities with MS4 discharges into a water body that has an approved total maximum daily load (TMDL) and where the municipality is required to implement storm water waste load allocation (WLA) provisions of the TMDL.

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
1.1	Educational signage at high-use recreational areas	DPW and Recreation Department	Install signage at town beach, boat launch, and dog park in Spring '04; record number of signs installed.	34 signs have been installed.	Maintain signs as needed.
1.2	General Educational Brochure	Engineering and Town Clerk	Develop and distribute to all residents in town '04 water bill	Stormwater Survey was drafted and distributed in January '07 to all 13,456 residents to measure perception of issue and behavioral changes.	Receive and compile survey data. Modify SWMP accordingly to emphasize topics where education is most needed.
Revised	Lawn care and pet waste brochures and public perception survey	Engineering	Develop brochures and distribute door-to-door during spring '05; record number of brochures distributed		
1.3	Stormwater curriculum for grades 5 & 6	ConComm and School Department	Implement curriculum by '05-'06 school year; perform annually thereafter.	Curriculum has been drafted, but not yet implement. Difficulty coordinating with school department.	Implement curriculum during '07-'08 school year.

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1a. Additions

1.8	Develop stormwater website	Engineering and IT Departments	Add stormwater page to town's existing website by Spring '07, update as needed.	Planning has begun.	Prepare remainder of content and post webpage.
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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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
2.1	Stormwater Advisory Committee	Public Works and ConComm	Establish committee by Fall '03 with charge of recommending improvements to the SMWP and hosting annual meetings; record number of meetings.	Committee reviewed SWMP and recommended improvements.	Continue to hold annual meetings and improve SWMP as recommended.
2.2	Public meetings on SWMP	Public Works and SW advisory committee	Hold public meetings each Fall beginning in '05; record number of attendees.	Held public meeting in September '06. 53 citizens attended.	Host annual meeting. Advertise meeting on public access channel and with posters at town library and town hall.
2.3	Shoreline Clean-ups	Public Works and ConComm	Organize and support annual clean-ups; record number of volunteers and distance of shoreline cleaned.	Organized 24 volunteers during August '06 to clean debris from a 1 ¼ mile reach of Swift River.	Complete similar effort in subsequent years.
2.4	Catch Basin Stenciling	Public Works and ConComm	Stencil all catch basins by end of permit term; record number stenciled.	Identified 125 priority catch basins (those prone to dumping concerns or providing visible educational opportunity). Stenciled 75% of the	Continue stenciling all 125. Maintain stencils.

Revised			Stencil all priority catch basins by end of permit term; record number stenciled		
2.5	HHW Collection	Public Works	Host annual HHW collection events; record number of participants and quantity of material collected	Hosted two events in '06. Collected approximately 3,500 gallons and 2 tons of waste from 1,400 participants.	Continue to host bi-annual events.
Revised			Host bi-annual HHW events; record number of participants and quantity of material collected		
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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
3.1	Identify & map outfalls and receiving waters	Engineering	Map all outfalls in GIS by Spring '06; record % complete.	GPS located 90% of outfalls and their receiving waters. Awaiting a software and hardware upgrade prior to loading into GIS. (Regional planning authority provided base map and GPS units on loan.)	Complete GPS locating effort, install software upgrade, and complete GIS mapping.

3.2	Screen outfalls for illicit connections	Public Works	Screen all outfalls by Spring '05; record number of outfalls inspected/screened, number of illicit connections found and illicit connections removed.	Completed field screening of 90% of outfalls concurrent with GPS effort (See 3.1). Identified 21 outfalls for prioritized investigation using EPA's Illicit Discharge Detection & Elimination Protocol. Completed investigation of 15 of the 21 outfall catchments. Identified 7 illicit discharges and removed 5.to-date. (Local stream team volunteers provided field inspection support.)	Complete field screening and IDDE investigations.
3.3	Draft Illicit Connection Bylaw	Engineering, Public Works, Selectmen	Warrant article on Spring '04 town meeting	Passed bylaw at special Fall '06 town meeting. Revised sewer use regulations consistent with new bylaw.	Implement bylaw and regulations
Revised			Prepare bylaw for Spring '06 town meeting		
3.4	Revise Sewer and Drain Use Regulations	Engineering, Public Works	Adopt within 6 months of new bylaw	See 3.3	See 3.3
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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
4.1	Construction Site ESC Bylaw and regulations for sites > 1 acre	Public Works, Engineering, ConComm	Review existing mechanisms for adequacy and completeness by Spring '05. If required, prepare bylaw for Spring '06.	Passed bylaw at Spring '06 Town Meeting and revised sewer use regulations accordingly. Regulates construction and post-construction discharges (see 5.1).	Enforce bylaw and regulations.

Revised	Comprehensive Stormwater Management Bylaw & Revised Sewer Use Regulations		Pass bylaw and revise sewer use regulations by Spring '06.		
4.2	Site Plan Review	Planning, Public Works, Engineering, ConComm	Update site plan review procedures consistent with bylaw and prepare checklist of sign-off protocols; record % of construction starts adequately regulated for ESC.	Implemented an interim policy for all currently jurisdictional projects that requires Engineering to review and approve ESC plans. 95% of construction starts adequately regulated for ESC.	Continue to implement interim policy until bylaw is approved.
4.3	Site Inspections	Building, ConComm	Implement a site inspection process by Spring '07; record number of site inspections completed.	Implemented inspection program in late Fall '06 consistent with bylaw and regulations. .	Continue program implementation.
4.4	Establish hotline to report non-compliant activities	Building, ConComm	Establish before '04 construction season.	Webpage is in place. 4 complaints received. Took corrective action at an unstabilized construction site and one incidence of dumping.	Continue to maintain website and .
Revised	Add public reporting feature to town webpage	IT Department	Implement by Spring '05; record number of complaints and action taken.		
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4a. Additions

4.7	Evaluate ESC Technologies	Engineering and ConComm	Perform evaluation of paper fiber and floc logs at high school construction beginning Spring '06.	Worked with graduate at State University to evaluate materials for controlling erosion and sedimentation. Evaluated several products and designs and modified sewer use regulations with new design standards.	Continue to assess the effectiveness of ESC products and methods.
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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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
5.1	Stormwater management and regulations for sites > 1 acre	Public Works, Engineering, ConComm	Review existing mechanisms for adequacy and completeness by Spring '05. If required, prepare bylaw for Spring '06 warrant article and revise regulations.	Passed bylaw at Spring '06 Town Meeting and revised sewer use regulations accordingly. Regulates construction and post-construction discharges (see 4.1).	Enforce bylaw and regulations.
Revised	Comprehensive Stormwater Management Bylaw & Revised Sewer Use Regulations		Pass bylaw and revise sewer use regulations by Spring '06.		
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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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
6.1	Employee Training	Public Works	Conduct stormwater pollution prevention training in late winter each year.	Provided ½ day training to all key department staff regarding pollution prevention practices and SWMP implementation. Focused on new comprehensive stormwater bylaw.	Conduct ½ day training. Use feedback from previous years training to target/focus agenda items.
6.2	Street Sweeping	Public Works	Sweep all streets annually through '06 and 2 times/year thereafter; record volume collected, annual costs.	Completed annual sweeping. Collected 5 tons of material and spent \$5,100 on sweeping.	Will begin sweeping 2 times/year.

6.3	Catch Basin Cleaning	Public Works	Clean all catch basins once every 3 years.	Using screenings volume and frequency data from existing program, refined to an optimized inspection and cleaning schedule. Cleaned 54 catch basins and 1250 LF of storm drain.	Continue implementation of optimized inspection and cleaning schedule. Evaluate cost/benefit of specifying vacuum equipment in future cleaning contracts.
Revised	Predictive catch basin cleaning program.		Continue existing catch basin cleaning program until implementation of a predictive program in Spring '07; record number of basins cleaned, quantity of storm drain cleaned, and annual costs.		
6.4	O&M Program for town-owned structural BMPs	Public Works, Engineering	Implement O&M program by Spring '05	Implemented new O&M procedures for the town's detention ponds and particle separators.	Continue procedures.
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6a. Additions

6.8	Implement Integrated Pest Management (IPM) at town facilities	Parks & Recreation	Train facility employees and practice IPM town-wide by Summer '07; record estimation net reduction of fertilizer/herbicide/pesticide application on public land.	Inventoried current chemicals, quantities, and practices used on town parcels.	Host an IPM/lawn care workshop for staff and lawn care professionals with Cooperative Extension Service.
6.9	Vehicle washing	Public Works	Implement an interim washing policy in Fall '05 and construct a washing facility by Spring '08	Implemented interim policy in September '05, and facility construction budget and plans have been approved.	Begin construction of facility.

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
7.1	Targeted education to residents of the Green Pond neighborhood.	ConComm, Health	Distribution in Spring '04 – '08 of phosphorus reduction brochure series.	Distributed brochure to about 550 residents and other landowners in sub-watershed.	Prepare and distribute a brochure on septic system care.
Revised	Include business, industrial park, and golf course.				
7.2	Support for Green Pond Phosphorus Task Force	ConComm, Health	Host quarterly meetings beginning Fall '03 to assess progress and make recommendations for improving SWMP.	Hosted quarterly meetings and bore recommendation to install gross particle separator.	Continue quarterly meetings.
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7a. Additions

7.6	Install gross particle separator on West Street drain	Engineering, Public Works	Install in Summer '07	Cost share agreement for design, installation, and O&M with MassHighway has been settled. Design completed.	Install particle separator.
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7b. WLA Assessment

Provide here a narrative assessment that demonstrates how the waste load allocation is being met through implementation of your selected BMPs or where additional controls may be necessary. The assessment is expected to focus on the adequacy of your chosen BMPs (in terms of implementation and maintenance), not necessarily on the response of the receiving water(s).

BMPs were chosen consistent with the recently published Green Pond Phosphorus TMDL and accompanying recommendations. The town has been effective in energizing the neighborhood and engaging the Green Pond Phosphorus Task Force in a partnership.

Progress will be closely tracked and modifications and improvements will be implemented as required.

Part IV. Summary of Information Collected and Analyzed

Summarize the results of information or data, if any, that was collected and analyzed during Permit Year 1, but was not included elsewhere in the annual report or requires further elaboration. Information and data could include results/trends from any storm or receiving water quality monitoring, beach monitoring or closure statistics, assessment of particular BMP performance, or financial impact of program implementation.

- *A summary of water quality monitoring results from Mill Brook are attached. In general, data suggests an increasing trend in bacteria indicator organisms during the past several years, predominantly downstream of Town Center.*
- *Town beach was closed for a total of 11 days during the '06 swimming season, and increase from nine days from the '05 season.*
- *See Part V below for additional information collected..*

Part V. Program Outputs & Accomplishments (OPTIONAL)

You may include, where known, the following (and other) estimated program results and accomplishments realized since the beginning of permit coverage, and, in some cases, during Permit Year 4. Insert additional rows as appropriate.

(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
Stormwater management position created/staffed	(y/n)	Y
Annual program budget/expenditures **	(\$)	\$12,456
Total program expenditures since beginning of permit coverage	(\$)	\$43,483
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 %)	64 %
Stormwater management committee established	(y/n)	Y
Stream teams established or supported	(# or y/n)	Y, 1

Shoreline clean-up participation or quantity of shoreline miles cleaned **	(y/n or mi.)	Y, 3.4 mi.
Shoreline cleaned since beginning of permit coverage	(mi.)	6.1 mi.
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	2
▪ community participation **	(# or %)	89 %
▪ material collected **	(tons or gal)	2,400 gal.
School curricula implemented	(y/n)	N

Legal/Regulatory

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

	(Preferred Units)	Response
Outfall mapping complete	(%)	100 %
Estimated or actual number of outfalls	(#)	120
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	90 %
Mapping method(s)		
▪ Paper/Mylar	(%)	0 %
▪ CADD	(%)	0 %
▪ GIS	(%)	100 %
Outfalls inspected/screened **	(# or %)	0 %

Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	100 %
Illicit discharges identified **	(#)	2
Illicit discharges identified (Since beginning of permit coverage)	(#)	5
Illicit connections removed **	(#); and (est. gpd)	1, 100 gpd
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	4, 1,200 gpd
% of population on sewer	(%)	67 %
% of population on septic systems	(%)	33 %

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 %)	100 %
Tickets/Stop work orders issued **	(# or %)	0
Fines collected **	(# and \$)	0
Complaints/concerns received from public **	(#)	2

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	100 %
Site inspections (for proper BMP installation & operation) completed **	(# or %)	100 %
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 times/yr
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Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	1 times/yr
Qty of structures cleaned **	(#)	40
Qty. of storm drain cleaned **	(%, LF or mi.)	200 LF
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	500 lbs.
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Beneficial use

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	\$750
• Hourly or per basin contract rate **	(\$/hr or \$ per basin)	\$12
• 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)	N
• % Structures cleaned with clam shells **	(%)	0 %
• % Structures cleaned with vactor **	(%)	100 %

(Preferred Units) Response

Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	2 times/yr
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	5 times/yr
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	2.4 tons
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Beneficial use
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	\$2,000
• Hourly or lane mile contract rate **	(\$/hr. or In mi.)	\$10
• Disposal cost**	(\$)	\$0
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	0
• Vacuum street sweepers owned/leased	(#)	1
• Vacuum street sweepers specified in contracts	(y/n)	Y

• % Roads swept with rotary brush sweepers **	%	0 %
• % Roads swept with vacuum sweepers **	%	100 %

Reduction (since beginning of permit coverage) in application on public land of: (“N/A” = never used; “100%” = elimination)		
▪ Fertilizers	(lbs. or %)	12 %
▪ Herbicides	(lbs. or %)	N/A
▪ Pesticides	(lbs. or %)	5 %
Integrated Pest Management (IPM) Practices Implemented	(y/n)	

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	50 % 50 %
Pre-wetting techniques utilized **	(y/n or %)	Y
Manual control spreaders used **	(y/n or %)	N
Zero-velocity spreaders used **	(y/n or %)	Y
Estimated net reduction or increase in typical year salt/chemical application rate **	(±lbs/l _n mi. or %)	- 2 lbs/l _n mi.
Estimated net reduction or increase in typical year sand application rate	(±lbs/l _n mi. or %)	- 5 lbs/l _n mi.
% 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)	100 %

Water Supply Protection

Storm water outfalls to public water supplies eliminated or relocated	# or y/n	Y, 3
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	N
<ul style="list-style-type: none">• Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	N