Rec'd 5/1/08 P

Municipality/Organization: **Town of Townsend**

EPA NPDES Permit Number: MAR041228

MassDEP Transmittal Number: **W-036204**

Annual Report Number & Reporting Period: **April 1, 2007 – March 31, 2008**

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2008)

Part I. General Information

Contact Person: Karen Chapman Title: Acting Land Use Coordinator

Telephone #: (978)597-1700 x1723 Email: kchapman@townsend.ma.us

Mailing Address:272 Main Street, Townsend, MA 01469

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: Karen Chapman

Printed Name: Karen Chapman

Title: Acting Land Use Coordinator

Date: April 30, 2008

Part II. Self-Assessment

The Town of Townsend 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 II.B.3(a) The Town has not yet developed a complete storm sewer map. There are several maps which contain partial information, but there is not one map containing the entire Town. A portion of Route 119 bisects the entire Town and is a significant portion of the MS4 Regulated Area. The State Highway Department, District III office has been contacted to obtain mapping information regarding outfalls along Route 119.

Part II.B.3(c) The Town has successfully passed an Illicit Discharges to the Municipal Storm Drain System Bylaw, but has yet to develop a plan to detect and address non-stormwater discharges into the system. The adopted Bylaw does contain some elements of the required plan within it.

Part II.C Although protection of our drinking water supply is addressed under a local Aquifer Protection District Bylaw, a significant portion of the MS4 Regulated Area contains Route 119 which is under State control.

Major completed milestones in Permit Year 5 are the adoption of two bylaws, the Illicit Discharges to the Municipal Storm Drain System Bylaw nad the NPDES Phase II Stormwater Bylaw. In addition, the Conservation Commission was able to secure a grant from TURI at UMASS Lowell for an Organic Lawn Care Demonstration Project for the Town Hall and Public Library lawns. This includes public information sessions and trainings and hands-on demonstrations.

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
1a	Distribute/post nonpoint Source Pollution posters	Land Use Coordinator	Completed year 1		
Revised					
1b	Stormwater message on Local cable access channel	Land Use Coordinator	Completed. Need to add periodically	Stormwater public information session. held and shown on Public Access Cable channel.	
Revised					
1c	Obtain/Distribute Auto Shop brochures	Land Use Coordinator	Distribute brochures in tax bill annually	Not completed – understaffed	Use Senior work off program volunteer to copy flyer and add to appropriate tax bill mailing for FY09
Revised					
1d	Add Stormwater information to Town's Website	Land Use Coordinator	Update Stormwater info on website to ensure it is current	Website in process of being updated. Loss of personnel an issue	Complete website redesign with links to particular informational sites..
Revised					
1e	Distribute brochures in water bills	Land Use/Water Department, Water Department	Insert in biannual water bill	Brochure on lawn watering and water conservation inserted in to water bills.	Insert brochure on an annual basis and update if applicable.
Revised					
1f	Host Lawn Care Seminar	Conservation Commission	Hold Seminar	Completed. Conservation Commission sponsored seminar open to the public on organic lawn care with organic fertilizer manufacturer and hands-on activities.	Consider annual seminar
Revised					
1g	Develop dog waste bylaw	Land Use	Have bylaw passed at Town Meeting	Completed. Disposal of Dog Waste Bylaw passed at May, 2006 Annual Town meeting. Calls for enforcement by Animal Officer or Police Dept.	None
Revised					

1h	Distribute Stormwater Pollution Prevention brochure to residents	Conservation Commission	Distribute brochure in property tax bills	Developed and distributed Stormwater pollution prevention brochure in quarterly tax bill in FY08	Consider annual update of brochure for tax bills.
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
2a	Advisory Committee	Land Use Coordinator	Formed year one.	Loss of personnel hampering effort. Meetings held monthly. Using the resources of NRWA employee funded through EPA grant.	
Revised					
2b	Adopt-a-Highway Program	Land Use Coordinator, Recycling Committee, Highway Dept	Target at least one street per year	Recycling Committee held a street clean-up on 4/28/2007. Highway Dept has "Operation Neat Streets" where several organizations clean up specific streets every year.	Continue on an annual basis. .
Revised					
2c	Hazardous Waste Day Collection	Fire Department	Hold twice per year	Completed on 5/5/2007 and 9/29/2007 as part of the North Central Regional Solid Waste Cooperative. Published on Website and local bulletin boards	Continue with twice per year collections. New collection day scheduled for 5/3/2008. .
Revised		Board of Health			
2d	Continue Waste Oil Collection & Recycling	Highway Department	Hold first Saturday Monthly	Held monthly. Highly successful. Town-wide participation	Continue. Monthly participation continued.
Revised					
2e	Volunteer annual stream clean-up day	Land Use Coordinator, Conservation Commission	One clean-up day every spring	Friends of Willard Brook have initiated stream clean-up days with volunteers.	Continue effort to establish Town organization despite liability issues.
Revised					
2f	Hold Earth Day Celebration	Recycling Committee, Recreation Commission	Hold Earth Day Celebration	Completed. Earth Day Celebration held on April 28, 2007. Activities included Recyclable Arts & Crafts, recycling booth, Organic Lawn Care presentation, Composting instructions, booths representing Nashua River Watershed Association, Townsend Recycling Committee, Friends of	Continue annual celebration. 2008 celebration scheduled for April 26, 2008.

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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
3a	Map Outfalls and Receiving Waters	Land Use Coordinator	Map 25% of outfalls that drain urbanized areas each year	25% complete. No more progress due to losses in personnel.	Continue project. Obtain mapping for State road Route 119 which runs through the length of the town from District III State Highway Dept.
Revised					
3b	Review existing bylaws and regulations	Land Use Coordinator, Bylaw Review Committee	Determine if existing bylaws & regs fulfill EPA requirements	Bylaw Review Committee completed preliminary review. Planning Board rules & regulations revisions in draft form to prevent conflict with new Stormwater Bylaws and comply with EPA requirements.	Hold Planning Board hearings to update rules & regulations.
Revised					
3c	Develop Illicit Discharge Detection & elimination plan	Land use Coordinator, Highway Department	Make recommendations for inclusion into proposed plan	No progress	Now that Illicit Discharge Bylaw has passed, a plan is preliminarily being researched.
Revised					
3d	Develop/Modify General illicit Discharge bylaw	Land Use Coordinator, Highway Department	Propose recommendation for modifying/developing bylaw	Illicit Discharges to the Municipal Storm Drain System Bylaw was completed by Stormwater Bylaw Committee and reviewed by Town Counsel and other Town officials.	
Revised					
3e	Present Bylaw for Town Meeting Action	Land Use Coordinator, Highway Department	Make Presentation for Town Meeting Action	Illicit Discharges to the Municipal Storm Drain System Bylaw was passed at the Special Town Meeting in November 2007 and approved by the Attorney General's office.	
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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
4a	Review Existing Site Inspection Practices	Land Use Coordinator, Conservation Commission, Building Dept	Review current practices and change if inadequate or include in new bylaw	Conservation Commission bylaw and rules & regulations have been partially reviewed. New state stormwater regulations within the Wetlands Protection Act afford more oversight to stormwater controls than previously.	Continue review of Conservation Commission bylaw and Rules & Regs to be in harmony with the state and local stormwater regulations and bylaws. Hold public hearings to revise rules & regs.
Revised					
4b	Develop/Modify Site Inspection Program	Land Use Coordinator, Conservation Commission, Building Dept	Make recommendations for modifying existing program	Following the passing of the NPDES Phase II Stormwater Bylaw, the committee has drafted Stormwater Rules & regulations which contain a section on inspections.	Will work with all applicable departments to streamline inspection procedures. Have Planning Board hold hearing to incorporate stormwater rules & regulations into the planning board regulations.
Revised					
4c	Review Existing Bylaws and regulations	Land Use Coordinator	Determine if existing bylaws and regs fulfill EPA requirements	Completed in 2005. Recommended to develop bylaw and regulations	
Revised					
4d	Develop/Modify Bylaw for Construction Site Runoff	Land Use Coordinator, Stormwater Bylaw Committee	Propose recommendations for modifying/developing bylaw	Is part of NPDES Phase II Stormwater Bylaw that was passed at Special Town Meeting in November 2007.	
Revised					
4e	Present Bylaw for Town Meeting Action	Land Use Coordinator, Stormwater Bylaw Committee	Make Presentation for Town Meeting Action	The NPDES Phase II Stormwater Bylaw was passed at Special Town Meeting in November 2007 and approved by the Attorney General's office.	
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
5a	Review Existing Site Inspection Practices	Highway Department	Determine if existing practices fulfill EPA requirements	complete	
Revised					
5b	Develop/modify inspection & Maintentance Practices	Highway Department	Make recommendations for modifying existing practices	Is part of NPDES Phase II Stormwater Bylaw that was passed at Special Town Meeting in November 2007.	Have Planning Board hold hearing to incorporate stormwater rules & regulations into the planning board regulations
Revised					
5c	Review Existing Bylaws and Regulations	Land Use Coordinator	Determine if existing bylaws and regs fulfill EPA requirements	Bylaw Review Committee completed preliminary review. Planning Board rules & regulations revisions in draft form to prevent conflict with new Stormwater Bylaws and comply with EPA requirements.	Have Planning Board hold hearing to incorporate stormwater rules & regulations into the planning board regulations
Revised					
5d	Develop/modify Bylaws for Post Construction Site Runnoff	Land Use Coordinator	Propose recommendations for modifying/developing bylaw	Is part of the NPDES Phase II Stormwater Bylaw passed at Special Town Meeting in November 2007 and approved by the Attorney General's office	
Revised					
5e	Present Bylaw for Town Meeting Action	Land Use Coordinator	Make presentations for Town Meeting Action	The NPDES Phase II Stormwater Bylaw was passed at Special Town Meeting in November 2007 and approved by the Attorney General's office. Planning Board Stormwater Rules & Regulations in final draft form.	Have Planning Board hold hearing to incorporate stormwater rules & regulations into the planning board regulations
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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
6a	Street Sweeping Program	Highway Department	Sweep all streets once per year	Completed	Continue Annually
Revised					
6b	Catch Basin Cleaning Program	Highway Department	Clean catch basins once very two years	Cleaned annually. 145 basins cleaned for this reporting period.	Continue annually as budget allows.
Revised					
6c	Perform site visits to examine existing practices	Land Use Coordinator	Target all applicable municipal facilities	Complete.	Monitor for any changes
Revised					
6d	Train municipal employees at each town facility	Land Use Coordinator	Target all applicable municipal facilities	Complete	
Revised					
6e	Perform follow-ups to ensure required practices are met	Land Use Coordinator	Target all municipal facilities	Ongoing	
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 4 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 5
Revised					
Revised					
Revised					
Revised					
Revised					
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

During Permit Year 5, the Town is still struggling with financial shortfalls and has not yet mapped the outfalls in the entire Town. Most of the Regulated Area falls within the States Highway Department control of Route 119. Cleaning of storm drains was significantly lower this year due to loss of personnel in the Townsend Highway Department.

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, 2007 through March 31, 2008)

Programmatic

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	no
Annual program budget/expenditures **	($)	0.00
Total program expenditures since beginning of permit coverage	($)	0.00
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		General Fund from new permit fees.

Education, Involvement, and Training

Estimated number of property owners reached by education program(s)	(# or %)	80-100%
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.)	yes
Shoreline cleaned since beginning of permit coverage	(mi.)	
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	2 HHW 12 Waste Oil
▪ community participation **	(# or %)	53 HHW
▪ material collected **	(tons or gal)	1.69 tons HW 1537 gal waste oil
School curricula implemented	(y/n)	yes

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	(%)	25
Estimated or actual number of outfalls	(#)	20
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	25
Mapping method(s)		
▪ Paper/Mylar	(%)	100
▪ CADD	(%)	
▪ GIS	(%)	
Outfalls inspected/screened **	(# or %)	2
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	20
Illicit discharges identified **	(#)	
Illicit discharges identified (Since beginning of permit coverage)	(#)	
Illicit connections removed **	(#); and (est. gpd)	
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	
% of population on sewer	(%)	0
% of population on septic systems	(%)	100

Construction

	(Preferred Units)	Response
Number of construction starts (>1-acre) **	(#)	10
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)	10
Site inspections completed **	(# or %)	10
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	(%)	
Site inspections (for proper BMP installation & operation) completed **	(# or %)	
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)	
Qty of structures cleaned **	(#)	145
Qty. of storm drain cleaned **	(%, LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	~100 tons
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	compost

Basin Cleaning Costs		

• Annual budget/expenditure (labor & equipment)**	($)	
• Hourly or per basin contract rate **	($/hr or $ per basin)	
• Disposal cost**	($)	
Cleaning Equipment		
• Clam shell truck(s) owned/leased	(#)	1 owned
• Vacuum truck(s) owned/leased	(#)	
• Vacuum trucks specified in contracts	(y/n)	
• % Structures cleaned with clam shells **	(%)	100
• % Structures cleaned with vactor **	(%)	

	(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)	
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	~300 tons
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	compost
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	($)	
• Hourly or lane mile contract rate **	($/hr. or ln mi.)	
• Disposal cost**	($)	
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	2 owned
• Vacuum street sweepers owned/leased	(#)	
• Vacuum street sweepers specified in contracts	(y/n)	
• % Roads swept with rotary brush sweepers **	%	95
• % 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 %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	

Integrated Pest Management (IPM) Practices Implemented	(y/n)	

	(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	25 0 0 0 0 0 75
Pre-wetting techniques utilized **	(y/n or %)	
Manual control spreaders used **	(y/n or %)	yes
Zero-velocity spreaders used **	(y/n or %)	
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/ln mi. or %)	
Estimated net reduction or increase in typical year sand application rate **	(±lbs/ln mi. or %)	
% 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	
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	
• Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	

Office of
Land Use Department
272 Main Street
Townsend, Massachusetts 01469
978-597-1700 X1723

April 30, 2008

Ann Herrick - CIP
U.S. Environmental Protection Agency - Region 1
1 Congress Street, Suite 1100
Boston, MA 02114-2023

Dear Ms. Herrick,

Please find enclosed the Town of Townsend's NPDES Phase II Small MS4 General Permit Annual Report for the reporting period April 1, 2007 through March 31, 2008.

If you have any questions, please do not hesitate to contact me at (978) 597-1700 x1723.

Thank you,

Karen Chapman

Karen Chapman
Acting Land Use Coordinator

enclosure