

Municipality/Organization: **Town of Townsend**

EPA NPDES Permit Number: MAR041228

MassDEP Transmittal Number: **W-036204**

Annual Report Number **Year 10**
& Reporting Period: **April 1, 2012 – March 31, 2013**

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2013)

Part I. General Information

Contact Person: Karen Chapman **Title:** Co-Land Use Coordinator

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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: Co-Land Use Coordinator

Date: April 30, 2013

Part II. Self-Assessment

The Town of Townsend has completed the required self-assessment and has 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 subdivision 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 provided GIS mapping information regarding outfalls along Route 119. A GPS unit has been purchased and will be used to complete the mapping. Lack of funding and personnel hours have limited our ability to complete this project.

Part II.B.3(c) The Town has successfully passed an Illicit Discharges to the Municipal Storm Drain System Bylaw, but has yet to adopt 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 and Groundwater Protection District Bylaw, a significant portion of the MS4 Regulated Area contains Route 119 which is under State control.

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 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities –
1a Revised	Distribute/post nonpoint Source Pollution posters	Land Use Coordinator	Completed year 1		
1b Revised	Stormwater message on Local cable access channel	Land Use Coordinator	Completed.		New messages will be developed to be broadcast on a continuous schedule.
1c Revised	Obtain/Distribute Auto Shop brochures	Land Use Coordinator	Distribute brochures in tax bill annually	New brochures are being developed that specifically address Auto services businesses.	The new brochures will be mailed directly to the appropriate businesses.
1d Revised	Add Stormwater information to Town's Website	Land Use Coordinator	Update Stormwater info on website to ensure it is current	New town website has been developed and there is a section on Stormwater on all of the Land Use Boards pages.	New information from the anticipated new EPA permit and copies of Annual Reports will be added to the website.
1e Revised	Distribute brochures in water bills	Land Use/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. Add info to the Water Dept and Land Use Boards webpages.
1f Revised	Host Lawn Care Seminar	Conservation Commission	Hold Seminar	Completed.	
1g Revised	Develop dog waste bylaw	Land Use	Have bylaw passed at Town Meeting	Completed.	

1h	Distribute Stormwater Pollution Prevention brochure to residents	Conservation Commission	Distribute brochure in property tax bills	Completed.	Will post information on town website rather than future direct mailing to every residence, which is very costly.
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 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities –
2a Revised	Advisory Committee	Land Use Coordinator	Formed year one.	No progress. Land Use Coordinator works with Highway Dept and Conservation Commission on issues.	Consider developing Stormwater Implementation Committee with oversight of town wide stormwater issues.
2b Revised	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 4/27/2012 in association with Earth Day. Friends of Willard Brook held street clean ups in May and November 2012 on the streets around Pearl Hill State Park and Willard Brook State Park. Highway Dept has “Operation Neat Streets” where several organizations clean up specific streets every year and this is growing.	Continue on an annual basis and try to grow participation throughout the town utilizing several organizations in town such as Boy and Girl Scouts, Couples Club, Gardening Club, etc. .
2c Revised	Hazardous Waste Day Collection	Fire Department Board of Health	Hold twice per year Hazardous Waste Center is open from March thru December	A new regional hazardous waste collection site has being constructed at Devens. It opened in 2011 for two days a week each month for participating communities from March thru December.	Continue participation in regional facility.
2d Revised	Continue Waste Oil Collection & Recycling	Highway Department	Hold first Saturday Monthly	Held monthly. Highly successful. Town-wide participation	Continue. Monthly participation continued.
2e Revised	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.

2f	Hold Earth Day Celebration	Recycling Committee, Recreation Commission	Hold Earth Day Celebration	Completed. Earth Day Celebration held on April 28, 2012. Theme was "New England Animals". Activities included outdoor/indoor plant swap, recycling booth, Organic Lawn Care presentation, and booths representing the Hannaford Supermarkets, Townsend Recycling Committee, Friends of Willard Brook, Townsend Conservation Land Trust, Townsend Conservation Commission, Townsend Energy Committee, North Central Regional Solid Waste Cooperative and many others.	Continue annual celebration. 2013 celebration scheduled for April 27, 2013 with a theme of "Birds, Butterflies, Bees and Bugs".
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 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities –
3a	Map Outfalls and Receiving Waters	Land Use Coordinator	Map 25% of outfalls that drain urbanized areas each year	Some progress.	Continue project. Use GPS unit to locate and map remaining outfalls. Contact local engineering firms for survey locations of stormwater structures to assist in mapping
Revised					
3b	Review existing bylaws and regulations	Land Use Coordinator, Bylaw Review Committee	Determine if existing bylaws & regs fulfill EPA requirements	Complete.	
Revised					
3c	Develop Illicit Discharge Detection & elimination plan	Land use Coordinator, Highway Department	Make recommendations for inclusion into proposed plan	Several templates and other towns' plans have been located.	Customize template for Townsend.
Revised					
3d	Develop/Modify General Illicit Discharge bylaw	Land Use Coordinator, Highway Department	Propose recommendation for modifying/developing bylaw	Complete.	Review new EPA Permit with our Bylaw to see if changes need to be made based on the new permit requirements.
Revised					
3e	Present Bylaw for Town Meeting Action	Land Use Coordinator, Highway Department	Make Presentation for Town Meeting Action	Complete.	
Revised					

3a. Additions

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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 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities –
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	New state stormwater regulations within the Wetlands Protection Act afford more oversight to stormwater controls than previously. Final draft Stormwater regulations have been completed which include inspection forms and instructions.	Planning Board to have public hearings to adopt the Stormwater Regulations which include new inspection forms.
Revised					
4b	Develop/Modify Site Inspection Program	Land Use Coordinator, Conservation Commission, Building Dept	Make recommendations for modifying existing program	Stormwater Rules & regulations which contain a section on inspections is in final draft form and is being reviewed by Town Counsel. Also contains inspection forms for municipality and permittee.	Planning Board to 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.	
Revised					
4d	Develop/Modify Bylaw for Construction Site Runoff	Land Use Coordinator, Stormwater Bylaw Committee	Propose recommendations for modifying/developing bylaw	Completed in 2007.	Review new EPA Permit with our Bylaw to see if changes need to be made based on the new permit requirements.
Revised					
4e	Present Bylaw for Town Meeting Action	Land Use Coordinator, Stormwater Bylaw Committee	Make Presentation for Town Meeting Action	Completed in 2007.	
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 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities –
5a	Review Existing Site Inspection Practices	Highway Department	Determine if existing practices fulfill EPA requirements	complete	
Revised					
5b	Develop/modify inspection & Maintenance Practices	Highway Department	Make recommendations for modifying existing practices	Stormwater Rules & regulations to support the Stormwater Bylaw contain a section on inspections and is in final draft form and is being reviewed by Town Counsel. Also contains inspection forms for municipality and permittee.	Have Planning Board hold hearing to incorporate stormwater rules & regulations into the planning board regulations. Distribute new inspection forms to Building, Highway and Planning
Revised					
5c	Review Existing Bylaws and Regulations	Land Use Coordinator	Determine if existing bylaws and regs fulfill EPA requirements	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 Runoff	Land Use Coordinator	Propose recommendations for modifying/developing bylaw	Completed in 2007	Review new EPA Permit with our Bylaw to see if changes need to be made based on the new permit requirements.
Revised					
5e	Present Bylaw for Town Meeting Action	Land Use Coordinator	Make presentations for Town Meeting Action	Completed in 2007.	
Revised					

5a. Additions

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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 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities –
6a Revised	Street Sweeping Program	Highway Department	Sweep all streets once per year	Completed	Continue Annually
6b Revised	Catch Basin Cleaning Program	Highway Department	Clean catch basins once very two years	Cleaned annually. 85 basins cleaned for this reporting period.	Continue annually as budget allows. Investigate purchasing new clamshell unit as current equipment is over 30 years old.
6c Revised	Perform site visits to examine existing practices	Land Use Coordinator	Target all applicable municipal facilities	Complete.	Monitor for any changes
6d Revised	Train municipal employees at each town facility	Land Use Coordinator	Target all applicable municipal facilities	Complete	
6e Revised Revised	Perform follow-ups to ensure required practices are met	Land Use Coordinator	Target all municipal facilities	Ongoing	

6a. Additions

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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 10 (Reliance on non-municipal partners indicated, if any)	Planned Activities –
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

During Permit Year 10, the Town is still struggling with financial shortfalls and has not yet completed mapping the outfalls in the entire Town. Most of the Regulated Area falls within the States Highway Department control of Route 119 and a map of these outfalls has been obtained from the State Highway Department. Information was also obtained from the Building Department, Highway Department, Conservation Commission, Friends of Willard Brook, Nashua River Watershed Association, Townsend Recycling Committee, and the Devens Regional Household Hazardous Products Collection Center.

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, 2012 through March 31, 2013)

Programmatic

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	no
Annual program budget/expenditures **	(\$)	5,000
Total program expenditures since beginning of permit coverage	(\$)	
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		General Fund from new permit fees. None collected as of this report.

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		
<ul style="list-style-type: none"> ▪ days sponsored ** 	(#)	20 HHW 12 Waste Oil
<ul style="list-style-type: none"> ▪ community participation ** 	(# or %)	71 residents. HHW

▪ material collected **	(tons or gal)	3.52 tons HHW 493 gallons of waste oil
School curricula implemented	(y/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	(%)	25
Estimated or actual number of outfalls	(#)	35
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	25
Mapping method(s)		
▪ Paper/Mylar	(%)	75
▪ CADD	(%)	
▪ GIS	(%)	25
Outfalls inspected/screened **	(# or %)	3
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	30
Illicit discharges identified **	(#)	0
Illicit discharges identified (Since beginning of permit coverage)	(#)	0

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) **	(#)	0
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)	
Site inspections completed **	(# or %)	0
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 **	(#)	85
Qty. of storm drain cleaned **	(%, LF or mi.)	80 LF
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	~1.5 tons
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	compost

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	\$5,000
• 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)	~750 yds
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	compost
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	\$42,000
• Hourly or lane mile contract rate **	(\$/hr. or ln mi.)	
• Disposal cost**	(\$)	
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	1 owned
• Vacuum street sweepers owned/leased	(#)	
• Vacuum street sweepers specified in contracts	(y/n)	
• % Roads swept with rotary brush sweepers **	%	100
• % 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 %)	95%
▪ Herbicides	(lbs. or %)	95%

▪ Pesticides	(lbs. or %)	95%
Integrated Pest Management (IPM) Practices Implemented	(y/n)	Y

	(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 %)	no
Manual control spreaders used **	(y/n or %)	yes
Zero-velocity spreaders used **	(y/n or %)	no
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/l _n mi. or %)	-2%
Estimated net reduction or increase in typical year sand application rate **	(±lbs/l _n mi. or %)	-1%
% 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	