

Municipality/Organization: **Town of Townsend**

EPA NPDES Permit Number: MAR041228

MassDEP Transmittal Number: W-036204

Annual Report Number **Year 14**
& Reporting Period: **April 1, 2016 – March 31, 2017**

NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2017)

Part I. General Information

Contact Person: Karen Chapman

Title: Land Use Coordinator

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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: *Karen Chapman*

Printed Name: Karen Chapman

Title: Land Use Coordinator

Date: April 26, 2017

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 stormwater map. 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 contractor was hired by the Highway Department to develop a Pavement Management Program and catch basin locations were identified during the Program's data collection phase of the project. The data has not yet been provided to the town. The Highway Department has also contracted with a consultant to map all stormwater structures, including pipes and outfalls. The consultant is in the final stages of providing the data for our GIS system.

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. A draft plan is in development for review by the Planning Board and Highway Department.

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 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities –
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.		New messages will be developed to be broadcast on a continuous schedule.
Revised					
1c	Obtain/Distribute Auto Shop brochures	Land Use Coordinator	Distribute brochures in tax bill annually	Complete.	Revise brochure if needed and distribute appropriately.
Revised			Mail new brochures to applicable businesses		
1d	Add Stormwater information to Town's Website	Land Use Coordinator	Update Stormwater info on website to ensure it is current	.	New information will be added as it is developed.
Revised					
1e	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.
Revised					
1f	Host Lawn Care Seminar	Conservation Commission	Hold Seminar	Completed.	
Revised					
1g	Develop dog waste bylaw	Land Use	Have bylaw passed at Town Meeting	Completed.	Pet waste brochure is distributed to dog owners when securing their

Revised			Distribute pet waste brochure		licenses from the Town Clerk and to residents submitting Manure Management Plans with the Board of Health
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. Will also have available at the Library and Town Hall.
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 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities –
2a	Advisory Committee	Land Use Coordinator	Formed year one.	No progress. Land Use Coordinator works with Highway Dept, Planning Board and Conservation Commission on issues.	Consider developing Stormwater Implementation Committee with oversight of town wide stormwater issues.
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 4/23/16 in association with Earth Day. 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. .
Revised					
2c	Hazardous Waste Day Collection	Fire Department	Hold twice per year	The Devens regional household hazardous waste collection site is open March-December twice a month for all residents.	Continue participation in regional facility.
Revised		Board of Health	Hazardous Waste Center is open from March thru December		
2d	Continue Waste Oil Collection & Recycling	Highway Department	Hold first Saturday Monthly	Held bi-monthly. Highly successful. Town-wide participation	Continue bi-monthly participation.
Revised			Changed to bi-monthly		
2e	Volunteer annual stream clean-up day	Land Use Coordinator, Conservation Commission	One clean-up day every spring		Continue effort to establish Town organization despite liability issues. Project to clean up portions of the Squannacook River is scheduled for summer of 2017 by the Conservation Commission in consultation with the Division of Fisheries and Wildlife.
Revised					
2f	Hold Earth Day Celebration	Recycling Committee, Recreation Commission	Hold Earth Day Celebration	Completed. 10 th Annual Earth Day Celebration held on April 23, 2016. Theme was “Country Farm Life”.Activities included outdoor/indoor plant swap; clothing/textile, bottles/cans and electronics recycling, paper shredding, and booths representing Hannaford	Continue annual celebration. 2017 celebration scheduled for April 22, 2017 with a theme of “Four Paws”.

Revised				Supermarkets, Townsend Recycling Committee, Farmers Exchange, local beekeepers, Friends of Willard Brook, Townsend Conservation Land Trust, Townsend Conservation Commission, MassSAVE, North Central Regional Solid Waste Cooperative and many others. Kitchen and compost bins were distributed.	
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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 14 (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	Data has been collected for the location of all of the stormwater structures in town as part of the Highway Dept. mapping consultant..	Obtain GIS data from consultant to include on map.
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	Plan is in draft form.	Have plan reviewed and approved by Planning Board and Highway Department.
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 once it is released 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 14 (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	Complete	.
Revised					
4b	Develop/Modify Site Inspection Program	Land Use Coordinator, Conservation Commission, Building Dept	Make recommendations for modifying existing program	Complete	
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 14 (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	Review new EPA Permit with our Bylaw to see if changes need to be made based on the new permit requirements.
Revised					
5b	Develop/modify inspection & Maintenance Practices	Highway Department	Make recommendations for modifying existing practices	complete	Review new EPA Permit with our Bylaw to see if changes need to be made based on the new permit requirements.
Revised					
5c	Review Existing Bylaws and Regulations	Land Use Coordinator	Determine if existing bylaws and regs fulfill EPA requirements	Complete	Review new EPA Permit with our Bylaw to see if changes need to be made based on the new permit requirements.
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 14 (Reliance on non-municipal partners indicated, if any)	Planned Activities –
6a	Street Sweeping Program	Highway Department	Sweep all streets once per year	Completed. Highway Dept switched to an all salt program and performs pre-wetting techniques before snow storms.	Continue Annually
Revised					
6b	Catch Basin Cleaning Program	Highway Department	Clean catch basins once very two years	Cleaned annually. 250 basins cleaned for this reporting period. Highway Dept obtained a vacuum truck to assist in basin cleaning in FY16.	
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

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

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

During Permit Year 14, the Town is still struggling with financial shortfalls and has not yet completed mapping the outfalls in the entire Town. In addition staffing has been affected by retirement of two employees in the Land Use Department. In FY17, the Highway Department contracted with a consultant to collect data on existing stormwater structures including pipes and outfalls. Most of the Regulated Area falls within the State Highway Department control of Route 119 and a map of these outfalls has been obtained from the State Highway Department. The Highway Department obtained a vacuum truck to clean basins in FY16. 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 Waste 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, 2016 through March 31, 2017)

Programmatic

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	no
Annual program budget/expenditures **	(\$)	30,000
Total program expenditures since beginning of permit coverage	(\$)	
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		General Fund from new permit fees. Chapter 90 funds for consultants to collect data on stormwater structures.

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 **	(#)	20 HHW 6 Waste Oil
▪ community participation **	(# or %)	100 residents HHW
▪ material collected **	(tons or gal)	461 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	(#)	158
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	75
Mapping method(s)		
▪ Paper/Mylar	(%)	75
▪ CADD	(%)	
▪ GIS	(%)	25
Outfalls inspected/screened **	(# or %)	158

Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	158
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) **	(#)	16
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)	2
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 %)	2
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 **	(#)	250

Qty. of storm drain cleaned **	(%, LF or mi.)	80 LF
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	~1.0 tons
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	compost

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	\$3,000
• 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	(#)	1 owned
• Vacuum trucks specified in contracts	(y/n)	
• % Structures cleaned with clam shells **	(%)	30
• % Structures cleaned with vacator **	(%)	0

	(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)	~600 yds
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Compost highway
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	\$5,000
• 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	100 0 0 0 0 0 0
Pre-wetting techniques utilized **	(y/n or %)	yes
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/ln mi. or %)	-2%
Estimated net reduction or increase in typical year sand application rate **	(±lbs/ln mi. or %)	100%
% 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	