

Municipality/Organization: TOWN OF STURBRIDGE

EPA NPDES Permit Number: MAR041240

MassDEP Transmittal Number: W-036131

Annual Report Number **Year 15**
& Reporting Period: **April 1, 2017 – March 31, 2018**

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

Part I. General Information

Contact Person: Greg Morse
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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: Gregory H. Morse

Title: DPW Director

Date: 5/1/2018

Part II. Self-Assessment

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
Revised	Community Website	Town Administrator		The Town will continue to work on the Storm Water Management web page.	Town Administrator should assign duties to the Cable Access Production Coordinator
Revised	Newspaper Press Release	Town Administrator	Post Storm Water Mgmt. info on Town website	None	Only one (1) year met.
Revised	Hazardous Waste Collection Day	Board of Health	One press release per year in local newspaper	The Town will continue to hold hazardous waste collection day on the 3 rd Saturday 9 months per year. This has been lowered from 12 days due to lack of participation in winter months	9 days a year per new schedule. Lowered from 12 days
Revised	Education Displays	Conservation Commission	Monthly collection days	The Conservation Commission will continue to display educational materials at the Center Office Building, at minimum during the summer	Maintain educational materials at the Center Office Building current practice is sufficient.
Revised	Local Cable Access	Town Administrator	Display educational displays at Town Hall	None.	Information Bulletins should be posted for a minimum of one month additionally, seasonally targeted prevention initiatives also. Town Administrator should assign duties to the Cable Access Production Coordinator
Revised	Classroom Education – Recycling	Board of Health	Post related bulletins on the Local Cable Access channel	The BOH will continue this program with different group of students from the elementary school.	Maintain the yearly visits which have been on-going since year one.

	Classroom Education - Storm Water	School Science Department DPW; Conservation Commission; Town Administrator	Participate in Dynamics in Democracy Program	DPW, Conservation Commission and Veolia will continue the site visit programs and support school requests and take on interns.	DPW, Conservation Commission and Veolia will continue the site visit programs and school requests which have been on-going since year one.
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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities
Revised	Adopt-A-Road	DPW; Town Administrator	Initiate Program Maintain Program	One sponsor for Adopt-A-Road Program is in place. Posted signs identify the party on the road. Several residents are working in various spot locations.	Continue to recruit sponsors for the program; document trash collection on roads throughout the year
Revised	Storm Drain Stenciling	DPW	Stenciling storm drains	Continue stenciling effort begun Route 20.	Maintain existing stenciling and expand as needed.
Revised	Community Clean up <i>Community/River/Trail clean-up day</i>	Conservation Commission; BOH; Town Administrator	Hold annual community clean-up day Maintain Program	Town wide Community Day was held and now sponsored by the Conservation Commission. DPW picks up bagged and bulk material.	Continue Town wide Community Day, trying to increase the number of volunteers each year. DPW picks up bagged and bulk material.
Revised	Adopt-A-Stream	Conservation Commission; DPW	Clean up and survey the Quinebaug River and its Tributaries	Volunteers continue to identify and clean-up spot river/stream at various locations. DPW picks up material as needed.	Continue to clean up spot river/stream locations in various areas.
Revised	Lake & Pond Management Program	Conservation Commission	Develop a Lake & Pond Mgmt. Program to test water quality & document conditions.	Continue effort to test water quality/ document conditions in Town lakes and ponds. The Town will continue to assist Lake Associations with their needs. Annual presentation held.	Continue effort to test water quality/ document conditions in Town lakes and ponds. The Town will continue to assist Lake Associations with their needs. An Annual presentation is held.
Revised	Watershed Organization Meeting	Town Administrator & Conservation Commission	Hold annual meeting w/ Lake associations.	Continue to hold meetings	Continue to hold meetings. Lake Associations frequently identify storm water problems and propose solutions or improvements. The Town supports these initiatives.

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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities
Revised	Mapping Storm water Outfalls	DPW; Planning Department	Identify Town's outfalls <i>Outfalls mapped. Mapping of Stormwater collection on-going in Urbanized areas of Town</i>	Outfalls identified Tighe & Bond Engineers, Westfield, Ma. Joined the Central Massachusetts Regional Storm Water Coalition (CMRSWC) which includes 30 Towns. Stormwater collection system on-going in all areas of town. Urbanized area of Town done.	D.P.W. and Town non-municipal partners completed. Add/update new locations as subdivision roads accepted and continue Stormwater collection system mapping outside of Urbanized area Begin critical outfall inventory and ranking
Revised	Non-Storm water Discharge Bylaw	Town Admin.; DPW; Board of Selectman	Evaluate existing bylaw regulations	Storm water Bylaw approved	Update Storm water bylaws as regulations change.
Revised	Develop Illicit Discharge Plan	Town Admin.; DPW	Evaluate existing procedures'	Continue to work on developing Illicit Discharge Plan on-going.	Continue to work on developing Illicit Discharge Plan on-going.
Revised	Illegal Dumping	DPW	Post signs at areas of illegal dumping; remove waste that has been dumped	Monitor problem areas, posting signs where necessary and pick up debris as warranted.	Continue to monitor problem areas, posting signs where necessary and pick up debris as warranted. Picked up 134 trash bags, 6 tv's, 152 tires, 1 couch, 2 computers and trash, etc.
Revised	Non-Storm water Discharges	DPW	Inspect outfalls yearly to identify illicit connections.	Outfalls are looked at pre-storm and during storms to reduce spot flooding year round and find Illicit connections.	Continue to monitor outfalls pre-storm and during storms to reduce flooding and find Illicit connections.
Revised	DPW Employee Education	DPW	Evaluate existing regulations	Issue reminders and investigate any employee questions.	Issue reminders and investigate any employee questions.

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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities
Revised	Construction Runoff Bylaw	Planning Board Cons. Comm.	Evaluate existing regulations	The Town will continue to review construction plans using the existing regulations.	Follow construction run-off Bylaw adopted on 3/22/2011
Revised	Plan Review	Planning Board Cons. Comm.	Evaluation existing regulations	The Town will continue to review construction plans using the existing regulations.	The Town will continue to review construction plans using the past and new regulations.
Revised	Inspection/Reporting	Planning Board Cons. Comm.	Review construction plans in accordance with existing regulations.	To continue to enforce existing policies and regulations.	Continue to enforce existing policies and regulations.
Revised					
Revised					
Revised					
Revised					

4a. Additions

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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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities
Revised	Post Construction Runoff Bylaw	Planning Board Cons. Comm.	Evaluate existing regulations	Bylaw and or Regulations written voted and approved	Continue to review and improve bylaw and regulations as needed. Utilize outside help when needed. Homeowners are always encouraged to implement storm water features on their properties to address potential issues.
Revised	Construction Site Plan Review	Planning Board Cons. Comm.	Review construction plans in accordance with existing regulations.	Bylaw and or Regulations written voted and approved.	Continue to review and improve bylaw and regulations as needed. Utilize outside help when needed. Homeowners are always encouraged to implement storm water features on their properties to address potential issues.
Revised	Storm water System Maintenance Plan	Board of Selectman	Require Storm water facility operation and maintenance in accordance with existing regulations	Board of Selectmen continue to enforce existing policies	Board of Selectmen continue to enforce existing policies
Revised					
Revised					
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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities
Revised	Catch Basin Cleaning Program	DPW	Clean all catch basins at least once annually Clean all catch basins every other year (50/50)	50% goal fluctuating but close. Program is now complying with north/south Route 20 demarcation North done 2017	To maintain Catch Basin Cleaning Program
Revised	Street Sweeping Program	DPW	Sweep all Town roads annually	Road sweeping done annually. Problem spots swept again Route 20 & Route 131 sidewalks swept annually.	To maintain Street and Sidewalk Sweeping Program
Revised	Recycling Program	Board of Health	Offer recycling program free of charge to all residents	Only current cost for Recycling is for a mirror hanging tag to enter the facility: First car=Free Second car=Free 3 rd car=\$20.00 plus pay as you throw	To maintain Recycling Program:
Revised	Town Composting Program	Board of Health	Offer composting program free of charge to all residents	Only current cost for Town composting is for a sticker to enter the facility if applicable	To maintain Town Composting Program
Revised	Oil Recycling Program	Board of Health	Offer oil recycling program	Only current cost for Oil Recycling is for a sticker to enter the facility if applicable	To maintain Oil Recycling Program
Revised	Trash Program	Board of Health	Provide all residents a free service to dispose of solid waste	MSW (Municipal Solid Waste) pay as you throw One mirror hanging tag free- 2plates/cars Third car=\$20.00 No additional fees.	To maintain a Trash Program Small=\$0.50 per bag Big=\$1.00 per bag *Bags are available at local retailers

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 9 (Reliance on non-municipal partners indicated, if any)	Planned Activities
Revised	TMDL for receiving Water Quinebaug River	The Town	Under several BMP's address the issues.	Continue to address issues under current BMP's.	Continue to address issues under current BMP's. Quinebaug tested on an Annual basis as part of the Towns monitoring program
Revised	TMDL for receiving water Pistol Pond	The Town	Under several BMP's address the issues.	Continue to address issues under current BMP's.	Continue to address issues under current BMP's. Pistol Pond was tested on an annual basis as part of the Towns Lakes Monitoring Program.
Revised	TMDL for receiving water Alum Pond	The Town	Under several BMP's address the issues.	Continue to address issues under current BMP's.	Continue to address issues under current BMP's. Alum Pond tested on an annual basis as part of the Towns Monitoring Program.
Revised					
Revised					
Revised					

7a. Additions

7b. WLA Assessment

Part IV. Summary of Information Collected and Analyzed

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, 2017 through March 31, 2018)

Programmatic

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	No
Annual program budget/expenditures	(\$) 1,500.00+/-	\$22,150.00
Total program expenditures since beginning of permit coverage	(\$) 414,120.00+/- labor only	\$489,335.00+/- labor only
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		General

Education, Involvement, and Training

Estimated number of property owners reached by education program(s)	(# or %)	35% -50% year
Stormwater management committee established	(y/n)	No
Stream teams established or supported	(# or y/n)	No
Shoreline clean-up participation or quantity of shoreline miles cleaned **	(Y/n or mi.)	½ mile year Goal
Shoreline cleaned since beginning of permit coverage	(mi.)	6 miles
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	9
▪ community participation **	(# or %)	50-60%

▪ material collected **	(tons or gal)	2000 gallons(yr.)
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	(%)	100%
Estimated or actual number of outfalls	(#)	379
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	85% +/-
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	100% Sept 13
Outfalls inspected/screened **	(# or %)	10%
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	100%
Illicit discharges identified **	(#)	0%
Illicit discharges identified (Since beginning of permit coverage)	(#)	2 last 10 years
Illicit connections removed **	(#); and (est. gpd)	0

Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	2880 gpd
% of population on sewer	(%)	49%
% of population on septic systems	(%)	51%

Construction

	(Preferred Units)	Response
Number of construction starts (>1-acre) **	(#)	0
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)	100%
Site inspections completed **	(# or %)	40-50 year
Tickets/Stop work orders issued **	(# or %)	0
Fines collected **	(# and \$)	0 Town
Complaints/concerns received from public **	(#)	4 (per month)+/-

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	ABOVE
Site inspections (for proper BMP installation & operation) completed **	(# or %)	ABOVE
BMP maintenance required through covenants, escrow, deed restrictions, etc.	(y/n)	No
Low-impact development (LID) practices permitted and encouraged	(Y/n)	Yes

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets) **	(times/yr)	50%per year
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	50%per year
Qty of structures cleaned **	(#) 634	1362 over two years

Qty. of storm drain cleaned **	(%, LF or mi.)	1000-1250LF year
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	951 tons
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Landfill

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	\$12,880.00 labor only
• Hourly or per basin contract rate **	(\$/hr or \$ per basin)	
• Disposal cost**	(\$)	\$13.54/ ton
Cleaning Equipment		
• Clam shell truck(s) owned/leased	(#)	1 owned
• Vacuum truck(s) owned/leased	(#)	0 owned
• Vacuum trucks specified in contracts	(Y/n)	Yes
• % Structures cleaned with clam shells **	(%)	100%
• % Structures cleaned with vactor **	(%)	0% Drainage 10% Sanitary Sewer structures

	(Preferred Units)	Response
Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	Once/year plus spot cleaning
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	Once/year plus spot cleaning
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	1,500 tons
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	Landfill
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	\$11,040.00
• Hourly or lane mile contract rate **	(\$/hr. or Ln mi.)	N/A
• Disposal cost**	(\$)	\$8.00/ton
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	1 owned
• Vacuum street sweepers owned/leased	(#)	1 owned
• Vacuum street sweepers specified in contracts	(y/n)	No

• % Roads swept with rotary brush sweepers **	%	100%
• % 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 very little used, spot treatment only common and ball fields	(Lbs. or %)	99%+
▪ Herbicides very little used, spot treatment only sidewalk weeds	(Lbs. or %)	99%+
▪ Pesticides	(Lbs. or %)	N/A
Integrated Pest Management (IPM) Practices Implemented	(Y/n)	No

	(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% 75% 3:1 ratio
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/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 #)	No
100% of salt/chemical pile(s) covered in storage shed(s) by May 2008	(Y/n)	100% covered since 1980's

Water Supply Protection

Storm water outfalls to public water supplies eliminated or relocated	# or y/n	No
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	No
Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	No