

5/25/11

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Municipality/Organization: Southbridge, Massachusetts

EPA NPDES Permit Number: MAR041161

MaDEP Transmittal Number: X238097

Annual Report Number
& Reporting Period: No.8; March 10 to March 11

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Thomas E. Daley, P.E. Title: Director

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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: Christopher Clark

Title: Town Manager

Date: April 29, 2011

Part II. Self-Assessment

As stated in last year's report, the Town of Southbridge has had numerous staff changes in recent years including three Town Managers in just over three years, turnover in the Health Dept., a new DPW Director in 2008 and now a new DPW Director in 2011. The previous Director left in late summer of 2010, a part-time acting Director was appointed and a new Director began on 1/31/11. The turnover in staff has affected the progress of the program, however improvements have continued to be made primarily in the area of mapping. At this time the entire Southbridge drainage is mapped in a GIS format.

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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 9
1A Revised	Public Outreach <i>Stormwater Education for Studente</i>	Public Works Dept.	Reach 5 th grade	No presentation held during this reporting term, however, the Town has annually, consistently met this requirement through the permit life.	Presentation made on water quality to selected grade 5 students.
1B Revised	Public Outreach	Water Dept.	Reach all water accounts (4,000 households)	Mailed annual Water Quality Report to residents which details drinking water quality for the Town.	Continue Annual Water Quality Report mailing
1a.	Five Additional	items			
1C Revised	Stormwater Press Release	DPW / Board of Health	Annual stormwater newspaper article	Advertized the four Household Hazardous Waste (HHW) disposal events in local newspaper and at municipal bldgs. Events are held in June, Sept., Dec. and March. Posted street sweeping on web-site.	Advertize the four Household Hazardous Waste (HHW) disposal events in local newspaper and at municipal bldgs. Events are held in June, Sept., Dec. and March. Post street sweeping on web-site.
1D Revised	Distribute educational flyers and advertize Household Hazardous Waste Event	Board of Health	Distribution of Flyers	Household Hazardous Waste flyer advertisements were made available at municipal buildings. Mailing of flyers to residents in water bills is no longer viable due to change in billing process and inability to send out notices with bills.	Advertize the four Household Hazardous Waste (HHW) disposal events in local newspaper and at municipal bldgs.
1E Revised	Develop Stormwater Section of Town Website	DPW and Town Website Manager	Measure number of hits annually.	Posted and updated weekly the street sweeping schedule on web-site and local cable network.	Post and update weekly the street sweeping schedule on web-site and local cable network. Add links to EPA and MADEP websites. Expand stormwater information on web-site.

IF Revised	Broadcast Town Council Meetings to update progress of the Phase II Program	DPW and Channel 12	Broadcast of Town Council meetings	Televised Town Council meetings on local cable channel.	Continue to broadcast any stormwater updates at the Council meeting on local cable.
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IG	Broadcast stormwater videos on local cable network.	DPW and Jacob Edwards Library	Cable TV presentations annually during permit term. Track video rentals annually	EPA video "Reigning in the Storm" was made available at the Town library for free rental. Broadcasting of the video on local cable channel occurred 183 times beginning on 5/3/10.	Continue to broadcast the EPA video "Reigning in the Storm" on local cable and also continue to make available at the Town library for free rental.
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<i>Ib.</i>	<i>One Extra Item</i>				
IH Revised	Town of Southbridge Permitting Guidebook	Southbridge Economic Development Commission	Guidebook Issued	In early 2011 the Southbridge Economic Development Commission issued the final Permitting Guidebook which included contact information for various regulatory authorities within the Town which included checklists and matrices for potential developers.	

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 9
2A Revised	Monitor Streams	Conservation Commission	Monitor 1 stream annually	A group of volunteers working with “The Last Green Valley” tests 15 locations in the Town including the following water bodies: Quinebaug River, Dean Brook, Cohassee Brook, Lebanon Brook, McKinstry Brook and Cady brook. Waters are tested for dissolved oxygen, turbidity, conductivity, ph and temperature. Color, odor, plants, animals, and trash are recorded. Final results are organized onto a spreadsheet at the end of the year.	Continue stream monitoring program. http://www.tlgv.org/preserve/water-quality-monitoring2/water-quality-monitoring.html
2a.	2 Additional	Items			
2B Revised	Neighborhood Cleanup	DPW, Building, Fire, Police, Recycling Coordinator, church groups, Neighborhood groups	Weekly neighborhood walkthroughs during fair weather months	Performed weekly neighborhood walks during Spring through Fall. Dept. Heads targeted different neighborhoods on Friday mornings. DPW inspected for stormwater issues such as stormwater structures, evidence of flooding, trash, pet waste, etc. Walks are publicized in advance and neighborhood participation was encouraged.	Continue to perform neighborhood walks and target stormwater impacts.
2C Revised	Community meet and Greet	DPW	DPW stormwater information	A community meet and greet was held on 6/24/10 where residents could meet Dept. heads and discuss Town topics. Water quality information was made available.	Continue to attend the annual meet and greet and offer water quality information to residents.

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 9
3A Revised	Map Storm Sewer System	DPW	Map Outfalls	100% of all outfalls and stormwater system has been mapped.	In May of 2011 it will be available on the Town's web-site.
3B Revised	Amend Drainage ByLaw	Town Council	Modify Existing Bylaw	No activity.	Review and modify the existing "draft" bylaw and implement.
3C Revised	Inspect Outfalls	Health Agent	Identify Illicit Discharges	Periodic random outfall inspections have been performed.	Inspect selected major outfalls
3a.	2 Additional	Items			
3D Revised	Household Hazardous Waste Collection Events	Board of health, Recycling Coordinator, Casella Waste Systems	Annual Household Hazardous Waste Day	Southbridge hosts four Household Hazardous Waste (HHW) disposal events. They are held in June, Sept., Dec. and March. Flyers were made available at municipal buildings. Volunteers counted and tracked cars. Approximately 125 cars are present at each event.	Continue to advertize and host HHW collection events four times per year.
3E Revised	Establish Illicit Discharge Hotline	DPW	Number of phone calls	Calls and complaints were handled by the DPW. Residents can fill out a complaint form to be recorded by Town admin. Personnel. Stormwater complaints are forwarded to the DPW. The DPW documents the complaints and follows up on corrective actions.	DPW will continue to handle illicit discharge related phone calls. The DPW phone number will continue to be advertised through existing media. Track calls and record actions taken annually.
Revised					

4. Construction Site Storm water Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 9
4A Revised	Control Erosion & Sedimentation	Town Council	Enact New Bylaw	Continued NOI erosion control enforcement as needed.	Review draft bylaw, revise as necessary and move it forward to Town Council.
4a.	3 Additional	Items			
4B Revised	Establish a procedure for the receipt of information submitted by the public.	DPW	Number of phone calls	Calls and complaints were handled by the DPW. Residents can fill out a complaint form to be recorded by Town admin. personnel. Stormwater complaints are forwarded to the DPW. The DPW documents the complaints and follows up on corrective actions.	DPW will continue to handle stormwater related phone calls. The DPW phone number will continue to be advertised through existing media. Track calls and record actions taken annually.
4C Revised	Construction Site Runoff Site Plan	Conservation Commission	Erosion control site plan	Town regulations required erosion and sediment control plans for all projects requiring a Notice of Intent (NOI) to be submitted to the Conservation Commission for review prior to construction. The Conservation Commission also reviewed site calculations to check pre- and post-development stormwater runoff for compliance with the Massachusetts Stormwater Management Policy.	Continue to require Conservation Commission review of proposed developments.
4D Revised	Conduct Inspections for erosion Control	DPW	Inspections performed and documented	The DPW performed inspections of all construction sites to ensure erosion controls were working properly. Subdivision sites were inspected as a minimum once per month.	Continue the current inspection program. Continue to document major erosion and sediment control issues which require enforcement.
Revised					

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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 9
5A Revised	Regulate Post Construction runoff	Town Council	Amend Drainage Control Bylaw	Continued construction site erosion control enforcement as needed.	Review draft bylaw, revise as necessary and move it forward to Town Council.
5a.	2 Additional	Items			
5B Revised	Post-Construction Site Inspection	DPW	Inspections performed	Before accepting maintenance responsibility for new construction sites, the DPW performs a full inspection of public drainage systems. Due to the economy, no new systems were inspected this year.	Continue current inspection program. Continue to document the acceptance of new public drainage systems and incorporate the system into the Town drainage system map.
5C Revised	As-Built Plans	DPW	Plans documenting construction	DPW required that as-built plans be submitted upon completion of construction.	Continue to require and receive as-built plans for any project.
Revised					
Revised					
Revised					

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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 9
6A Revised	Street Sweeping	DPW	Sweep Streets Annually	All streets swept annually between April and June. 1,232 tons were collected last year. Collected material was disposed of in the Southbridge landfill. Sweeping schedules were updated weekly and posted on the website and on the local access channel. Priority areas are identified and repeated as needed throughout the year.	Continue to sweep all streets annually and post on website and local cable access.
6B Revised	Catch Basin Cleaning	DPW	Clean critical basins annually	The DPW cleaned all catchbasins in the Town. Collected material disposed of in landfill.	Continue annual catchbasin cleaning program. Critical basins cleaned first and more than once as needed.
6a.	5 Additional	Items			
6C Revised	Storm Drain System inspection and Maintenance	DPW	Inspect and maintain storm drain system at least annually	Known problem outfalls were inspected as outlined in BMP 3C. Catchbasins were inspected for structural deficiencies when cleaned by DPW staff. Approximately 40 structures are rebuilt per year.	Continue outfall and catchbasin inspections and maintenance. Track work required and completed.
6D Revised	Ensure Covered Storage for Winter Salt	DPW	All salt is covered.	All salt for winter storm operations was covered in new salt shed at the new DPW building.	Continue to cover salt materials and track winter salting quantities.
6E Revised	Conduct Town Employee Stormwater Training	DPW	Develop pollution prevention workshop for municipal employees	No real formal training performed specifically on the importance of stormwater maintenance.	Train DPW employees.

6F Revised	Perform Neighborhood Roadway Trash Cleanups	DPW, Town Manager, Police, BOH	Amount of trash collected after weekly neighborhood walkthroughs	Southbridge roads were cleaned of trash and debris following the weekly neighborhood walkthroughs (see BMP 2B). The Town is currently working with the Dept. of Corrections to assist with trash cleanup. Residents can contact the BOH to set up pickup times for bulk items at their homes. The items are disposed of at the landfill. Haz-Waste specialists are used as needed. Recently 8 barrels of medical waste were removed from the side of the road in one location. Police are investigating. Volunteers are used on Earth Day for cleanups.	Continue neighborhood roadway cleanup and Earth Day cleanup.
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6G Revised	Evaluate municipal facilities	DPW, Police, Fire	All municipal facilities evaluated and BMP's implemented within 2 years.	DPW and Police properly manage vehicle wash water. DPW has and utilizes a new wash bay facility. The Police washes its vehicles at the Red Carpet carwash on East Main St. Wash water is properly collected and disposed of.	Continue vehicle washing program for the DPW and Police Dept.'s. evaluate all remaining municipal facilities fro stormwater pollution prevention.
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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 8 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Permit Year 9
Revised	<i>Not applicable</i>				
Revised					
7a.	1 Additional	Items			
7A	Develop a Water Quality Strategy for 303d waters	DPW, Conservation Commission	Summary of pollution prevention efforts, future needs, and responsible parties.	The Town continued with implementation of the existing SWMP to address impaired waters.	Review impaired waterlist and TMDLs as they are developed, along with information collected as part of the Ph II program and upcoming PhII permit requirements.
Revised					
Revised					
Revised					
Revised					

7b. WLA Assessment

The proposed TMDL schedule for FY 2010-11 outlines several waterbodies in Southbridge that are classified as category , mwaning water bodies in need of a TMDL:

Cady Brook (4129125)	MA41-06	Charlton City WWTP, Charlton to confluence with Quinebaug River, Southbridge.	5.3 miles	-Nutrient/Eutrophication Biological Indicators -(Love flow alterations*)
Cohasse Brook	MA41-12	From the outlet of Cohasse Brook Reservoir, Southbridge, through Wells Pond (formerly pond segment MA41053) to the confluence with the Quinebaug River, Southbridge	2.7 miles	-Aquatic Macroinvertebrate Bioassessments -Sedimentation/Siltation
Hatchet Brook	MA41-14	From the outlet of No. 3 Reservoir, Southbridge, to the confluence with the Quinebaug River, Southbridge	1.3 miles	-Escherichia coli -Escherichia coli
McKinstry Brook	MA41-13	Headwaters, east of Brookfield Road, Charlton (excluding intermittent portion) to the confluence with the Quinebaug River, Southbridge	7.3 miles	-Escherichia coli -(Debris/Floatables/Trash*)
Morse Pond (41033)	MA41033	Southbridge	41.4 acres	-Oxygen, Dissolved
Quinebaug River (4128875)	MA41-02	Sturbridge WWTP, Sturbridge to confluence with Cady Brook, Southbridge	6.6 miles	-Aquatic Plants (Macrophytes) -Excess Algal Growth -Turbidity
Quinebaug River (4128875)	MA41-03	Southbridge WWTP, Southbridge to West Dudley Impoundment, Dudley.	2.2 miles	-(Debris/Floatables/Trash*) -Other (unspecified nutrients) -Oxygen, Dissolved
Quinebaug River (4128875)	MA41-09	Confluence with Cady Brook to Southbridge WWTP in Southbridge.	1.3 miles	-(Physical substrate habitat alterations*) -Fecal Coliform -Taste and odor -(Debris/Floatables/Trash*) -Aquatic Macroinvertebrate Bioassessments -Ambient Bioassays - Chronic Aquatic Toxicity -Turbidity -(Debris/Floatables/Trash*)

There are currently no TMDLs completed for waters in Southbridge. Water quality concerns associated with 303d waters are addressed through the implementation of BMPs under the six minimum measures for Phase II. The approach for addressing impaired waters will be updated based on the new permit.

Part IV. Summary of Information Collected and Analyzed

The Town needs to focus on the following items in the next permit year; public outreach to school kids, develop and utilize a stormwater flyer., develop more stormwater information on the web-site, finalize and submit a stormwater bylaw to the Council for approval, provide stormwater training to DPW employees.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	N
Annual program budget/expenditures	(\$)	0

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	Unknown
Stormwater management committee established	(y/n)	No
Stream teams established or supported	(# or y/n)	One
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	N/A
Household Hazardous Waste Collection Days (Oil, tires, Batteries and Paint)		
▪ days sponsored	(#)	4
▪ community participation	(%)	500 cars
▪ material collected	(tons or gal)	
School curricula implemented (Flyers mailed to all homes)	(y/n)	n

Legal/Regulatory

Regulatory Mechanism Status (indicate with "X")	In Place			Drafted	Adopted
	Prior to Phase II	Under Review			
▪ 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

Outfall mapping complete	(%)	100%
Estimated or actual number of outfalls	(#)	206
System-Wide mapping complete	(%)	100%
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	
Outfalls inspected/screened	(# or %)	100%
Illicit discharges identified	(#)	0
Illicit connections removed	(#)	0
	(#)	N/A
% of population on sewer	(est. gpd)	
% of population on septic systems	(%)	85%
	(%)	15%

Construction

Number of construction starts (>1-acre)	(#)	1
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	(#)	0

Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	100%
Site inspections completed	(# or %)	100%
Estimated volume of stormwater recharged	(gpy)	Unknown

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)	>1
Total number of structures cleaned	(#)	2379
Storm drain cleaned	(LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	466 Tons
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Landfill
Cost of screenings disposal	(\$)	0

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)	>1
Qty. of sand/debris collected by sweeping	(lbs. or tons)	1232 tons
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.)	(location)	Landfill
Cost of sweepings disposal	(\$)	0
Vacuum street sweepers purchased/leased	(#)	0
Vacuum street sweepers specified in contracts	(y/n)	0

Reduction in application on public land of: ("N/A" = never used; "100%" = elimination)

▪ Fertilizers	(lbs. or %)	No reduction
▪ Herbicides (Roundup Pro)	(lbs. or %)	No reduction
▪ Pesticides	(lbs. or %)	No reduction

Anti-/De-Icing products and ratios	% NaCl	50%
	% CaCl ₂	0
	% MgCl ₂	0
	% CMA	0
	% Kac	0
	% KCl	0
	% Sand	50%
Pre-wetting techniques utilized	(y/n)	N
Manual control spreaders used	(y/n)	Y, not many
Automatic or Zero-velocity spreaders used	(y/n)	Y, mostly auto
Estimated net reduction in typical year salt application	(lbs. or %)	0%
Salt pile(s) covered in storage shed(s)	(y/n)	100%
Storage shed(s) in design or under construction	(y/n)	Complete