

Municipality/Organization: Southbridge, Massachusetts

EPA NPDES Permit Number: MAR041161

MaDEP Transmittal Number: W-041270

Annual Report Number

& Reporting Period: No.13: May 1, 2015-April 30, 2016

NPDES PII Small MS4 General Permit Annual Report

Part I. General Information

Contact Person: Heather A. Blakeley

Title: Acting Director

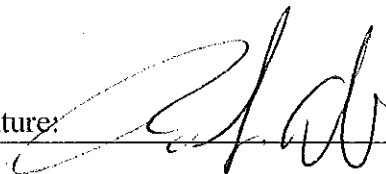
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Certification:

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: Ron San Angelo

Title: Town Manager

Date:

4/27/16

Part II. Self-Assessment

The Town of Southbridge has completed the required self-assessment and has determined that our municipality is in compliance with all permit conditions.

Notable Accomplishments/Improvements in Permit Year 13:

- Central Massachusetts Regional Stormwater Coalition (CMRSWC) membership:
 - The Town continued to be a member of and utilize the CMRSWC as a resource throughout the permit term.
 - The Town previously evaluated methods for electronic inspection tracking using tablets and other resources provided by CMRSWC, but is currently evaluating a new method. The Town recently began using tablets with Utility Cloud for the water system. Once it is fully integrated within DPW and staff are trained, this system may be used for stormwater inspections, mapping and other stormwater or water quality related data collection.
- Erosion control projects:
 - The rail trail path and some parts of river bank along the Quinbog River are eroding from fallen trees. The Town is working with MassDOT to design a solution to stop erosion and restore the area. This is still in the design stage and the Town is trying to secure grant funding.
 - Eastford Road Bridge at Cohasse Brook: the bridge abutments were repaired and adjacent slopes were stabilized to prevent further erosion.
- 2015 efforts to reduce sanitary sewer infiltration and inflow (I/I):
 - 7/22/15 – sanitary sewer crossing at Eastford Road Bridge and Cohasse Brook: the Town repaired a severely damaged main sewer line in the brook. The repaired sewer pipe is inspected on a monthly basis.
 - November/December: 16 short liners were installed to repair areas of cracked/fractured pipes.
 - July/December: root control treatment for 5,790 feet of sewer pipe.
 - A broken main line for the Harwood Farms development was repaired in the easement to the South Street pump station.
- 2015 sanitary sewer overflows (SSOs) and unauthorized discharges:
 - 3/22/15 – Hamilton Street: a call was received that water was coming out of the ground behind the houses on Hamilton Street. Investigation showed that a private shared lateral was leaking onto the dirt driveway. The line was inspected and cleaned to prevent leaking to the ground surface. The Board of Health is handling further corrective actions.
 - 3/24/16 – 110 Pine Street: wastewater was observed in a pool on the lawn. The Board of Health was notified and the private lateral line was repaired by a contractor.
 - 4/18/15 – 291 Durfee Street: a residential E-One pump pressure line cap blew off in a cleanout manhole, causing the manhole to fill and overflow. The manhole was cleaned and a new cap was installed.
 - 4/19/15 – intersection of Wall and Langlois Street: a call was received that a manhole cover was leaking sewage onto

the roadway. The overflow was caused by a blockage (rags and grease) and the entire line was cleaned, inspected and determined to be in good condition.

- 8/3/15 – intersection of River and Cliff Street: a call was received that a manhole cover was leaking sewage onto the roadway. The line was cleared and inspected, which showed roots and a cracked/fractured pipe. The roots were removed and a short liner was installed to correct the pipe defect area.
- The Town continued to invest in improvements related to its public water supply reservoirs. Construction of a new toe drain and wetland restoration/replication was completed at Dam #5. The Town is currently clearing vegetation at the spillway and monitoring of the project is ongoing.
- Numerous stormwater improvements were completed this permit year including:
 - Added 15 deep sumps to replace existing catch basins.
 - Rebuilt/ repaired 58 catch basins.
- Two culvert crossings were designed during the permit year:
 - Dresser Street - currently has a direct discharge into the water body and will now discharge through a catch basin with a deep sump. This project was redesigned in 2015 and is expected to be constructed in summer 2016.
 - Old Dudley Road – this project was delayed in 2015 and will be replaced in summer 2016.
- The Town eliminated the use of sand for winter operations, resulting in a significant reduction the amount of sand accumulation on roadways and in storm drain structures.

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 13	Planned Activities – Next Permit Term
1A	Public Outreach	Public Works Dept.	Reach 5 th grade	1,000 EPA water quality bookmarks will be given to elementary students on April 29, 2016 for a read-a-thon.	Make presentation on water quality to selected students. Consider additional opportunities to educate the public about DPW operations.
Revised	<i>Stormwater Education for Students</i>			The DPW held a “Touch-A-Truck” event on September 19, 2015 where the catch basin cleaning truck and street sweeper were displayed.	
1B	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.
Revised					

1a. 7 Additional Items

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13	Planned Activities – Next Permit Term
1C	Stormwater Press Release	DPW / Board of Health	Annual stormwater newspaper article	Advertised the four Household Hazardous Waste (HHW) disposal events in local newspaper and at municipal buildings. Events were held on June 27, 2015; September 26, 2015; December 5, 2015 and March 26, 2016.	Advertise the four Household Hazardous Waste (HHW) disposal events in local newspaper and at municipal buildings. Post street sweeping on Town web-site.
Revised				A leaf removal program is held during the fall months. Leaves are taken by the Town and composted by Casella. Leaf bins are available at DPW during non-winter months. This was posted on the Town website.	
1D	Distribute educational flyers and advertise Household Hazardous Waste Event	Board of Health	Distribution of Flyers	Household Hazardous Waste flyer advertisements were made available at municipal buildings. The events were advertised in the local newspaper.	Advertise the four Household Hazardous Waste (HHW) disposal events in local newspaper and at municipal buildings.
Revised			Article posted		
1E	Develop Stormwater Section of Town Website	DPW and Town Website Manager	Measure number of hits annually.	Posted and updated the street sweeping schedule weekly on the Town web-site.	Continue to post and update the street sweeping schedule weekly on the Town web-site.
Revised				A GIS stormwater data layer is maintained on the Town website for public access.	Continue to update GIS information on the Town website.
1F	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.
Revised				The stormwater program was discussed at a budget hearing on May 26, 2015.	
1G	Assist with “Replanting Our Roots” initiative in tornado damaged areas.	DPW, Mass. Dept. of Cons. and Rec. and volunteers	Planting of 77 trees in tornado deforested area.	This project was previously completed.	No further activities are planned.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13	Planned Activities – Next Permit Term
1H	Obtained a \$5,000 grant and removed tornado damaged trees from flood prone areas.	DPW	Removal of many trees from flood prone areas.	This was previously completed in permit year 11.	No further activities are planned.
Revised					
1I	Created and distributed Stormwater pamphlets.	DPW	Posted in municipal offices and handed out at 6/23/11 Meet and Greet.	Handouts were posted at Town Hall and DPW.	Continue to post at public places and identify opportunities to hand out pamphlets.
Revised					

2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13	Planned Activities – Next Permit Term
2A	Monitor Streams	Conservation Commission	Monitor 1 stream annually	Prior to 2015, a group of volunteers working with “The Last Green Valley” conducted stream monitoring in Town at several water bodies. The Town is in the process of evaluating this data to consider future monitoring activities in conjunction with the new MS4 permit.	Continue stream monitoring program.
Revised					http://thelastgreenvalley.org/learn-protect/watershed-protection/water-quality-monitoring/

2a. 4 Additional Items

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13	Planned Activities – Next Permit Term
2B	Neighborhood Cleanup	DPW, Recycling Coordinator, church groups, Neighborhood groups	Weekly neighborhood walkthroughs during fair weather months	This program was discontinued.	No further action at this time.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13	Planned Activities – Next Permit Term
2C	Community Meet and Greet	DPW	DPW stormwater information	A “Touch-A-Truck” event was held on September 19, 2015 at the Southbridge Airport for the Cops N Kids Runway Car Show. Two DPW volunteers took a catch basin cleaning truck and street sweeper to students to explain what it does and why this equipment is so important.	Continue to attend similar events and offer water quality information to residents. Continue “Touch-A-Truck” event and incorporate stormwater topics.
Revised					
2D	Assist with “Replanting Our Roots” initiative in tornado damaged areas.	DPW, Mass. Dept. of Cons. and Rec. and volunteers	Planting of 77 trees in tornado deforested area.	This task was previously completed.	No further action needed at this time.
Revised					
2E	Assist with trash removal from annual Earth Day Cleanup.	DPW	Clean up debris and advertize in newspaper.	45 volunteers participated in the May 16, 2015 event and 87 bags were picked up. Volunteers will be picking up trash during the April 29, 2016 Earth Day Cleanup event.	Continue to assist volunteers by picking up the trash from the annual Earth Day Cleanup event. Continue tracking public participation at event.
Revised					

3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13	Planned Activities – Next Permit Term
3A	Map Storm Sewer System	DPW	Map Outfalls	100% of all outfalls and the stormwater system were mapped in permit year 11. The map is maintained on the Town’s website. The Town recently began using tablets with Utility Cloud for the water system. Once it is fully integrated within DPW and staff are trained, this system may be used for stormwater inspections, mapping and other stormwater or water quality related data collection.	Update and maintain the map as new data is collected.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13	Planned Activities – Next Permit Term
3B	Amend Drainage ByLaw	Town Council	Modify Existing Bylaw	No significant activity occurred, but the Town continued to review existing bylaws from other Towns in the CMRSWC.	Review and modify the existing “draft” bylaw and move it forward to Town Council by Fall 2016.
Revised					
3C	Inspect Outfalls	Health Agent	Identify Illicit Discharges	As discussed in the Year 12 annual report, a WPI project was completed where students gathered information on 10 outfalls and collected data during both wet and dry weather conditions. The Town plans to review this data in conjunction with the new MS4 permit to develop follow up actions. As discussed in the “Notable Accomplishments”, five sanitary sewer overflows were identified and were either corrected or remain under an enforcement action by the Board of Health in Year 13. In Year 13, the DPW also discovered and repaired a severely damaged sanitary sewer line crossing for Cohasse Brook at the Eastford Road Bridge. The repaired sewer pipe is inspected on a monthly basis.	Continue to inspect selected major outfalls for potential illicit discharges and respond to/clean up incidents when illicit discharges occur.
Revised					

3a. 3 Additional Items

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13	Planned Activities – Next Permit Term
3D	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. Events were held on June 27, 2015; September 26, 2015; December 5, 2015 and March 26, 2016. Flyers were made available at municipal buildings. Volunteers tracked around 350 cars containing mainly paints, chemicals, and CRTs.	Continue to advertize and host HHW collection events four times per year. Continue to track results and participation.
Revised					
3E	Establish Illicit Discharge Hotline	BOH / DPW	Number of phone calls	The Stormwater hotline is identified on the Town website. 4 calls were received related to sanitary sewer overflows this permit year. Refer to “Notable Accomplishments” for additional information. Calls and complaints were handled by the BOH and DPW. Residents can fill out a complaint form to be recorded by Town personnel. Stormwater complaints are forwarded to the DPW. The DPW documents the complaints and follows up on corrective actions. BOH enforces action as necessary.	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					
3F	A sewer lateral off of Elm St. was cracked and overflowing into a catch basin causing pollution in the downstream Cohasse Brook.	BOH	The pipe repaired and the overflow stopped.	This activity was completed. Additional sewer issues and repairs are discussed in the “Notable Accomplishments”.	Continue to address sewer main issues as they become known.
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 13	Planned Activities – Next Permit Term
4A	Control Erosion & Sedimentation	Town Council	Enact New Bylaw	Continued erosion control enforcement as needed. The Town continued to review existing bylaws from other Towns in the CMRSWC.	Review draft bylaw, revise as necessary and move it forward to Town Council by Fall 2016.
Revised				The rail trail path and some parts of river bank along the Quinbog River are eroding from fallen trees. The Town is working with MassDOT to design a solution to stop erosion and restore the area. This is still in the design stage and the Town is trying to secure grant funding. Eastford Road Bridge at Cohasse Brook: the bridge abutments were repaired and adjacent slopes were stabilized to prevent further erosion.	

4a. 3 Additional Items

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13	Planned Activities – Next Permit Term
4B	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 administrative personnel. Stormwater complaints are forwarded to the DPW to document and follow up with 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.
Revised				Complaints identified approximately 50 catch basins in need of repair. All complaints were addressed and many repairs were completed during Year 13. The remainder were put on the list of repairs for 2016. No calls related to construction sites were received.	

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13	Planned Activities – Next Permit Term
4C	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.	Continue to require Conservation Commission review of proposed developments.
Revised				The Conservation Commission also reviewed site calculations to check pre- and post- development stormwater runoff for compliance with the Massachusetts Stormwater Management Policy.	
4D	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. No major construction projects were conducted during the permit year. Construction of a Cumberland Farms was completed during Year 13.	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 13	Planned Activities – Next Permit Term
5A	Regulate Post Construction runoff	Town Council	Amend Drainage Control Bylaw	Continued construction site erosion control enforcement as needed. The Town continued to review existing bylaws from other Towns in the CMRSWC.	Review draft bylaw, revise as necessary and move it forward to Town Council by Fall 2016.
Revised					

5a. 2 Additional Items

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13	Planned Activities – Next Permit Term
5B	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.	Continue current inspection program. Continue to document the acceptance of new public drainage systems and incorporate the system into the Town drainage system map.
Revised				In Permit Year 11, the DPW compiled a list of required repairs before accepting responsibility for the drainage infrastructure. This effort is ongoing and the systems were not accepted in Permit Year 13. The Town conducts ongoing inspections at Graywood Estates. Tall Pines is a subdivision project that was completed in Permit Year 12 and acceptance is anticipated in 2016.	
5C	As-Built Plans	DPW	Plans documenting construction	DPW requires as-built plans to be submitted upon completion of construction.	Continue to require and receive as-built plans for all projects.
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 13	Planned Activities – Next Permit Term
6A	Street Sweeping	DPW	Sweep Streets Annually	All streets swept annually between April and June and 602.90 tons were collected and disposed at the Southbridge landfill in 2015.	Continue to sweep all streets annually and post on website and local cable access.
Revised				Sweeping schedules were updated weekly and posted on the website and on the local access channel. Priority areas are identified and repeated as needed though out the year.	

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13	Planned Activities – Next Permit Term
6B	Catch Basin Cleaning	DPW	Clean critical basins annually	The DPW cleaned approximately 60% of the 2,379 catch basins in the Town. Not all catch basins were cleaned due to multiple equipment repairs that occurred. 313.88 tons of catch basin debris were removed and disposed at the Southbridge landfill in 2015. As discussed previously, the Town is re-evaluating the use of tablets and standardized form to track catch basin cleaning activities.	Continue annual catch basin cleaning program. Critical basins cleaned first and more than once as needed. Continue use of a tablet to track data from catch basin inspections.
Revised					

6a. 7 Additional Items

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13	Planned Activities – Next Permit Term
6C	Storm Drain System Inspection and Maintenance	DPW	Inspect and maintain storm drain system at least annually	Outfalls were inspected as outlined in BMP 3C. Catch basins were inspected for issues when cleaned by DPW staff.	Continue outfall and catch basin inspections and maintenance. Inspect all catch basins for structural deficiencies when cleaned by DPW staff.
Revised				As discussed under BMP 4B, complaints from the public identified 50 catch basins in need of repair. Approximately 73 structures were rebuilt last year.	Begin using a tablet to track work required and completed.
6D	Ensure Covered Storage for Winter Salt	DPW	All salt is covered.	All salt for winter storm operations was covered in the salt shed at the DPW building.	Continue to cover salt materials and track winter salting quantities.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13	Planned Activities – Next Permit Term
6E	Conduct Town Employee Stormwater Training	DPW	Develop pollution prevention workshop for municipal employees	Pesticide application training is also completed for the licensed Town applicators. A pesticide application plan and Vegetation Management Plan are in place and reviewed each year to update the Yearly Operation Plan.	Conduct training for DPW employees using resources from stormwater consortium.
Revised				Storm drain system maintenance practices were also discussed with staff as part of routine cleaning activities.	
6F	Perform Neighborhood Roadway Trash Cleanups	DPW, Town Manager, Police, BOH	Amount of trash collected after weekly neighborhood walkthroughs	Neighborhood walks were not performed during the permit year. The Earth Day cleanup event is scheduled for April 29, 2016. 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. DPW assists with the cleaning of illegal dumping that occurs throughout the year.	Seek to conduct neighborhood roadway cleanups in the future and Earth Day cleanup.
Revised					
6G	Evaluate municipal facilities	DPW, Police, Fire	All municipal facilities evaluated and BMP's implemented within 3 years.	DPW and Police properly manage vehicle wash water. DPW has and utilizes a wash bay facility. The Police wash their vehicles at the Red Carpet carwash on East Main St. Wash water is properly collected and disposed at both locations.	Continue vehicle washing program for the DPW and Police Dept.'s. Evaluate all remaining municipal facilities for stormwater pollution prevention needs.
Revised					
6H	Town purchased a new street sweeper	DPW	Maintain annual sweeping.	This item has been completed and the Town continued to sweep streets.	Continue existing street sweeping practices.
Revised					

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13	Planned Activities – Next Permit Term
6I	Enhance Winter Road Management Policies	DPW	Improved efficiency for winter road management to meet target road treatment rates.	Calibrated all trucks and used 100% salt (eliminated) during the permit year. Maintained a target salt application rate of 250 lbs/lane mile. Continued to use a pre-treating approach and the use of automatic (speed-set) spreaders. This has resulted in a noticeable reduction in the salt application rate compared to previous practices.	Continue to enhance winter road management activities. Continue to modify policies to better fit the Town's needs and maximize the efficiency of winter road maintenance activities.
Revised					

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 13	Planned Activities – Next Permit Term
Revised					

7a. 1 Additional Item

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities – Next Permit Term
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.	Continue to implement the existing SWMP and evaluate the new Phase II permit. Review impaired water list and TMDLs as they are developed, along with information collected as part of the Phase II Stormwater Program and new Phase II permit requirements to develop a water quality strategy to address impaired waters in Town.
Revised					

7b. WLA Assessment

The Massachusetts Year 2014 Integrated List of Waters outlines several water bodies in Southbridge that are classified as category 5, meaning water bodies in need of a TMDL:

Name	Segment ID	Description	Size	Impairment Cause
Cady Brook	MA41-06	Charlton City WWTP outfall, Charlton to confluence with Quinebaug River, Southbridge.	5.1 miles	-Nutrient/Eutrophication Biological Indicators -(Low 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 -Escherichia coli
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
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	MA41033	Southbridge	41.4 acres	-Oxygen, Dissolved -Aquatic Plants (Macrophytes)
Quinebaug River	MA41-02	Sturbridge WWTP outfall, Sturbridge to confluence with Cady Brook, Southbridge	6.5 miles	-Excess Algal Growth -Turbidity -(Debris/Floatables/Trash)
Quinebaug River	MA41-03	Southbridge WWTP outfall, Southbridge to dam just upstream of West Dudley Road, Dudley.	2.2 miles	-Other (unspecified nutrients) -Oxygen, Dissolved -(Physical substrate habitat alterations) -Fecal Coliform -Taste and odor -(Debris/Floatables/Trash)
Quinebaug River	MA41-09	From confluence with Cady Brook, Southbridge to Southbridge WWTP outfall, Southbridge.	1.3 miles	-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

In Year 13, the Town focused on the removal of sanitary sewer overflows, sanitary sewer I/I issues, and repair of damaged/deteriorated catch basins. Sanitary sewer repairs such as the damaged main sewer line that crosses Cohasse Brook at the Eastford Road Bridge are anticipated to have significant benefits to water quality for water bodies in Southbridge.

Part V. Program Outputs & Accomplishments (OPTIONAL)

Programmatic

Stormwater management position created/staffed	(y/n)	N
Annual program budget/expenditures	(\$)	\$6,575*
*Number only consists of cost of Annual Report preparation and cost of the matching portion of stormwater grant – total program cost not calculated.		

Education, Involvement, and Training

Estimated number of residents reached by education program(s)	(# or %)	90%
Stormwater management committee established	(y/n)	No
Stream teams established or supported	(# or y/n)	N
Shoreline clean-up participation or quantity of shoreline miles cleaned	(y/n or mi.)	Y
Household Hazardous Waste Collection Days		
▪ days sponsored	(#)	4
▪ community participation	(%)	350 cars
▪ material collected	(tons or gal)	See BMP 3D
School curricula implemented (bookmarks)	(y/n)	Y*
*1,000 EPA water quality bookmarks will be given to elementary students on April 29, 2016 for a read-a-thon.		

Legal/Regulatory

	In Place Prior to Phase II	Under Review	Drafted	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

Outfall mapping complete	(%)	100%
Estimated or actual number of outfalls	(#)	206
System-Wide mapping complete	(%)	100%
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	100%
Outfalls inspected/screened	(# or %)	10
Illicit discharges identified	(#)	5
Illicit connections removed	(#) (est. gpd)	4
% of population on sewer	(%)	85%
% of population on septic systems	(%)	15%

Construction

Number of construction starts (>1-acre)	(#)	0
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 %)	5
Estimated volume of stormwater recharged	(gpy)	Unknown

Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets)	(times/yr)	1/yr
Average frequency of catch basin cleaning (commercial/arterial or other critical streets)	(times/yr)	>1/yr
Total number of structures cleaned	(#)	60% of 2,379
Storm drain cleaned	(LF or mi.)	~2,000 LF
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	313.88 tons
Disposal or use of sweepings (landfill, POTW, compost, recycle for sand, beneficial use, etc.)		Landfill
Cost of screenings disposal	(\$)	0

Operations and Maintenance (con't)

Average frequency of street sweeping (non-commercial/non-arterial streets)	(times/yr)	1/yr
Average frequency of street sweeping (commercial/arterial or other critical streets)	(times/yr)	>1/yr
Qty. of sand/debris collected by sweeping	(lbs. or tons)	602.90 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 change
▪ Herbicides (Roundup Pro)	(lbs. or %)	No change
▪ Pesticides	(lbs. or %)	No change

Anti-/De-Icing products and ratios	% NaCl	100%
	% CaCl ₂	0
	% MgCl ₂	0
	% CMA	0
	% Kac	0
	% KCl	0
	% Sand	0
Approach for anti/deicing roads:		
• 100% NaCl application was used for the entire winter season.		
• “Ice-Be-Gone” and “Cargills Clear Lane” was used with the winter applications as a catalyst.		
Pre-wetting techniques utilized	(y/n)	Pretreatment
Manual control spreaders used	(y/n)	N
Automatic or Zero-velocity spreaders used	(y/n)	Y (9 total)
Estimated net reduction in typical year salt application	(lbs. or %)	Unknown
Salt pile(s) covered in storage shed(s)	(y/n)	100%
Storage shed(s) in design or under construction	(y/n)	Complete