

**Municipality/Organization:** Southbridge, Massachusetts

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**EPA NPDES Permit Number:** MAR041161

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**MaDEP Transmittal Number:** W-041270

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**Annual Report Number  
& Reporting Period:** No.15: May 1, 2017-April 30, 2018

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## NPDES PII Small MS4 General Permit Annual Report

### Part I. General Information

Contact Person: Heather A. Blakeley

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: 

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Printed Name: Ron San Angelo

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Title: Town Manager

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Date:

4/30/2018

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## **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 15:***

- 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. The Town continued to use tablets with Utility Cloud for the water system in Year 15 and began integrating this method with the sewer 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.
  - The Town participated in a new state-wide Coalition and Public Education Survey.
- DPW staff attended multiple workshops / training sessions on relevant stormwater topics.
  - March 30, 2017 – Stormwater Conference at Marriot in Marlborough, hosted by CEI.
  - May 9, 2017 – NPDES MS4 NOI Workshop at the CMRPC Offices.
  - February 28, 2018 – UMTC Stormwater Training at UMass Springfield, hosted by VHB.
- 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. Funding has been secured and the design is being finalized. Bidding and construction are anticipated to begin in Spring 2019.
  - Clemence Hill – the hill's slope was re-stabilized to address erosion.
- 2017 efforts to reduce sanitary sewer infiltration and inflow (I/I):
  - Root control was completed May 2017 for a total of 4,482 linear feet of pipeline and December 2017 for a total of 3,067 linear feet of pipeline.
- 2017 sanitary sewer overflows (SSOs):
  - 1/23/18 - 122 Charlton Street: force main for "private" pump station at Schott Lighting & Imagining froze and cracked. When tested, less than 50 gallons of sewage went onto the ground and flowed into Quinebaug River.
  - 3/17/18 - 425 East Main Street: private ejector pump discharge coupling blew off and approximately 20 gallons of sewage was released through the manhole and flowed onto the ground. Clean-up was completed with a vacuum truck.
- The Town continued to invest in improvements related to its public water supply reservoirs. Cohasse Dam was cleared of vegetation and plans for additional improvements to Hatchet Dam are being made.
- Numerous stormwater improvements were completed this permit year including:
  - Added 2 deep sumps to replace existing catch basins.
  - Rebuilt/ repaired 29 catch basins.

- Approximately 1,200 feet of storm drains were TV'd in Lebanon, Cedar, Elm, and Highland Streets.
- Additional improvements for storm drain systems and culvert crossings continued:
  - Dresser Street - currently has a direct discharge into the water body and is planned to discharge through a deep sump catch basin. This project is still under review with the DOT and is anticipated to begin construction in 2018.
  - Old Dudley Road – this project was delayed and will be replaced in summer 2018.
  - Installation continued for a new culvert and catch basin on Ashland Ave, as the old culvert collapsed.
  - A Mass Works grant for \$419,000 was received to repair drain lines and install necessary drainage structures at Moon and Laurel Street. The project is currently out to bid.
- MassDOT plans to replace the Mill Street and Ashland Avenue bridges and a grant application was submitted.
- An Earth Day Celebration event “Beautify Southbridge” occurred on April 21, 2018. Earth day events attracted 135 participants who collected a total of 211 bags of trash along with 16 tires and ~50 assorted car parts.

### 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 15	Planned Activities – Next Permit Term
1A	Public Outreach	Public Works Dept.	Reach 5 <sup>th</sup> grade	EPA water quality bookmarks are available to the public at the Town Hall. The DPW held a “Touch-A-Truck” event for Community Day on June 9, 2017 at the Eastford Road School, where a catch basin cleaning truck was displayed for over 200 students.	Consider additional opportunities to educate the public about DPW operations.
Revised	<i>Stormwater Education for Students</i>			The DPW Director gave a presentation on the State of the Roads on 9/25/17 that was televised to the public on a local station. The DPW Director provided stormwater funding information to council members in April 2018.	
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**

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 15</b>	<b>Planned Activities – Next Permit Term</b>
1C Revised	Stormwater Press Release	DPW / Board of Health	Annual stormwater newspaper article	<p>Advertised the four Household Hazardous Waste (HHW) disposal events in local newspaper and at municipal buildings. Events were held on June 24, 2017; September 30, 2017; December 2, 2017 and March 31, 2018.</p> <p>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. The DPW offers a Christmas tree pick-up during the month of January. The trees are mulched and used for various planting projects. Last year 437 trees were collected. This information is posted on the Town website.</p>	Advertise the four Household Hazardous Waste (HHW) disposal events in local newspaper and at municipal buildings.
1D Revised	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.
1E Revised	Develop Stormwater Section on the Town Website	DPW and Town Website Manager	Measure number of hits annually.	<p>Posted and updated the street sweeping schedule weekly on the Town Website.</p> <p>A video about stormwater pollution prevention created by the WPI Massachusetts Water Resource Center is available through an internet media player on the Town web page. The webpage also links to EPA’s NPDES Stormwater Program web page. A GIS stormwater data layer is maintained on the Town website for public access.</p>	<p>Continue to post and update the street sweeping schedule weekly on the Town Website.</p> <p>Continue to update GIS information on the Town website.</p>

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15	Planned Activities – Next Permit Term
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. A meeting to discuss stormwater topics was held on April 23, 2018 for the DPW subcommittee. A meeting to discuss the condition of roads is planned for September 25, 2018 with the Town Council.	Continue to broadcast any stormwater updates at the Council meeting on local cable.
Revised					
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					
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 15	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 and will consider future monitoring activities following the effective date of the new MS4 permit.	Continue stream monitoring program.  <a href="http://thelastgreenvalley.org/learn-protect/watershed-protection/water-quality-monitoring/">http://thelastgreenvalley.org/learn-protect/watershed-protection/water-quality-monitoring/</a>
Revised					

## 2a. 6 Additional Items

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15	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					
2C	Community Meet and Greet	DPW	DPW stormwater information	A “Touch-A-Truck” event was held on June 9, 2017 at the Southbridge Community Day event at the Eastford Road School. Two DPW volunteers took a catch basin cleaning truck to explain to over 200 students 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.
Revised					
2E	Assist with trash removal from annual Earth Day Cleanup.	DPW	Clean up debris and advertise in newspaper.	The April 21, 2018 Earth Day Cleanup event attracted 135 participants who collected a total of 211 bags of trash along with 16 tires, and ~50 assorted car parts.	Continue to assist volunteers by picking up the trash from the annual Earth Day Cleanup event. Continue tracking public participation at event.
Revised					
2F	Maintain Animal Waste Collection Bags in Key Areas of Concern	Animal Control Officer	Provide pet waste disposal solutions to residents	Four pet waste disposal stations were maintained throughout the town. Stations are refilled weekly using donated used newspaper bags.	Continue to maintain existing disposal stations. Evaluate need for additional stations.
Revised					
2G	Community Volunteer Cleanup Events	Director of Recreation	# Volunteers	Multiple volunteer cleanup events occurred during the permit year.	

### 3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15	Planned Activities – Next Permit Term
3A Revised	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 continued to use tablets with Utility Cloud for the water system in year 15 and began implementing tablet use for the sewer system. Once the tablets are 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.
3B Revised	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 2018.
3C Revised	Inspect Outfalls	Health Agent	Identify Illicit Discharges	<p>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.</p> <p>As discussed in the “Notable Accomplishments”, two sanitary sewer overflows were identified and corrected in Year 15.</p> <p>20,000 LF of new sewer line was installed at the Southbridge Airport to replace the previous septic system. This project was completed in August 2017.</p> <p>The Town inspects all critical areas of the drain system and culverts that are prone to clogging during and after significant rain events, and performs maintenance if required.</p>	Continue to inspect selected major outfalls for potential illicit discharges and respond to/clean up incidents when illicit discharges occur.

### 3a. 3 Additional Items

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 14	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 24, 2017; September 30, 2017; December 2, 2017 and March 31, 2018. Flyers were made available at municipal buildings. Volunteers tracked around 560 cars that dropped off hazardous waste.	Continue to advertise 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. 2 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 15	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 2018.
Revised				The rail trail path and some parts of river bank along the Quinbog River are eroding from fallen trees. The Town continued to work with MassDOT to design a solution to stop erosion and restore the area. Funding has been secured and the design is being finalized.	

#### 4a. Additional Items

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15	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 30 catch basins in need of repair. All complaints were addressed and 29 repairs were completed during Year 15. The remainder were put on the list of repairs for 2018.	

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 15</b>	<b>Planned Activities – Next Permit Term</b>
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.  The Conservation Commission reviews 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.
Revised					
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. As mentioned under BMP 3C, 20,000 LF of sewer line was installed at the Southbridge Airport to replace the previous septic system. During this project, the Conservation Commission issued a stop work order to the contractor due to erosion issues. The Town worked with the contractor to address the erosion issues and the project was completed in August 2017.	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

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 15</b>	<b>Planned Activities – Next Permit Term</b>
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 2018.
Revised					

**5a. 2 Additional Items**

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15	Planned Activities – Next Permit Term
5B Revised	Post-Construction Site Inspection	DPW	Inspections performed	<p>Before accepting maintenance responsibility for new construction sites, the DPW performs a full inspection of public drainage systems. The DPW compiles a list of required repairs before accepting responsibility for the drainage infrastructure.</p> <p>Acceptance is currently being finalized for the following subdivisions: Greywood Estates &amp; Harwood Farms Road, Maggie Lane, and Servant Way. Acceptance is anticipated in May 2018.</p> <p>Tall Pines is a subdivision project that was completed in Permit Year 12. The Town is pulling the bond for this project.</p> <p>The River’s Edge Estates project and Pleasant Hill project is ongoing and periodically inspected by the DPW. The Hunters Ridge project is in the process of being taken over by the Town.</p>	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 requires as-built plans to be submitted upon completion of construction.	Continue to require and receive as-built plans for all projects.

## 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 15	Planned Activities – Next Permit Term
6A	Street Sweeping	DPW	Sweep Streets Annually	All streets are swept annually between April and June and 316.4 tons were collected and disposed at the Southbridge landfill in 2017.	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 throughout the year.	
6B	Catch Basin Cleaning	DPW	Clean critical basins annually	The DPW cleaned approximately 75% of the 2,379 catch basins in the Town. Not all catch basins were cleaned due to multiple equipment repairs that occurred. 347 tons of catch basin debris were removed and disposed at the Southbridge landfill in 2017.	Continue annual catch basin cleaning program. Critical basins cleaned first and more than once as needed.
Revised				As discussed previously, the Town is re-evaluating the use of tablets and standardized form to track catch basin cleaning activities.	Continue use of a tablet to track data from catch basin inspections.

### 6a. Additional Items

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 15	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 as well as during and after storm events.	Continue outfall and catch basin inspections and maintenance. Inspect all catch basins for structural deficiencies when cleaned by DPW staff. Begin using a tablet to track work required and completed.
Revised				As discussed under BMP 4B, complaints from the public identified 30 catch basin structures which were rebuilt last year.	

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 15</b>	<b>Planned Activities – Next Permit Term</b>
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					
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.  Storm drain system maintenance practices were also discussed with staff as part of routine cleaning activities.	Conduct training for DPW employees using resources from stormwater consortium.
Revised					
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 was held on April 21, 2018.  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					

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 15</b>	<b>Planned Activities – Next Permit Term</b>
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					
6I	Enhance Winter Road Management Policies	DPW	Improved efficiency for winter road management to meet target road treatment rates.	Calibrated all trucks and continued to use 100% salt during the permit year. Maintained a target salt application rate of 250 lbs/lane mile. The Town purchased a computer tracking system for salt application to better control and track the quantity of applied salt. A pre-treated approach and the use of automatic (speed-set) spreaders continued. These methods reduce 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>>**

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 15</b>	<b>Planned Activities – Next Permit Term</b>
Revised					

**7a. 1 Additional Item**

<b>BMP ID #</b>	<b>BMP Description</b>	<b>Responsible Dept./Person Name</b>	<b>Measurable Goal(s)</b>	<b>Progress on Goal(s) – Permit Year 15</b> (Reliance on non-municipal partners indicated, if any)	<b>Planned Activities – Next Permit Term</b>
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.
Revised					Review impaired waters 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.

## 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 15, the Town focused on the removal of sanitary sewer overflows, sanitary sewer I/I issues, and repair of damaged/deteriorated catch basins.

**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 %)	
Stormwater management committee established	(y/n)	N
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	(%)	560 cars
▪ material collected	(tons or gal)	See BMP 3D
School curricula implemented ( <i>bookmarks</i> )	(y/n)	Y*
*Bookmarks are available at the Town Hall.		

## 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 %)	
Illicit discharges identified	(#)	2
Illicit connections removed	(#) (est. gpd)	2
% 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 %)	1
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 %)	Numerous
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	(#)	75% of 2,379
Storm drain cleaned	(LF or mi.)	1,200 LF
Qty. of screenings/debris removed from storm sewer infrastructure	(lbs. or tons)	347 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)	316.4 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 <sub>2</sub>	0
	% MgCl <sub>2</sub>	0
	% CMA	0
	% Kac	0
	% KCl	0
	% Sand	0
<i>Approach for anti/deicing roads:</i>		
• 100% NaCl application was used for the entire winter season.		
• A treated salt was used with the winter applications.		
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