

Table of Contents

Stormwater Management Plan 2014 Annual Report Town of Belchertown

7.3	Catch Basin Cleaning	9
7.4	Stormwater BMP Inspection and Maintenance	9
7.5	Deicer Material Storage	10
7.6	Preventative Maintenance	10
7.7	Transfer Station	10
7.8	Modification to the SWMP	10
7.9	Activities Planned Next Year	10

Appendices

End of Report

A	Revised Stormwater Management Plan Summary
B	Stormwater Public Education and Outreach Materials
C	Stormwater Public Participation/Involvement Materials
D	Field Screening Data Sheets
E	Stormwater Training Materials
F	Street Sweeping Log
G	Catch Basin Cleaning Log
H	Detention Pond Cleaning List
I	Hazardous Waste Collection Materials
J	SPCC Facility Inspection Reports

General Information

Stormwater Management Plan 2014 Annual Report Town of Belchertown

Municipality/Organization: Town of Belchertown

EPA NPDES Permit Number: MA041002

Annual Report Number and Reporting Period: Report #11: May 1, 2013 through April 30, 2014

Contact Person: Steven J. Williams
Director, Department of Public Works
(413) 323-0415
swilliams@belchertown.org

Self Assessment:

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

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: STEVEN J. WILLIAMS

Title: PUBLIC WORKS DIRECTOR

Date: 4-7-14

1 Introduction

The Town of Belchertown developed a Stormwater Management Plan (SWMP) to comply with the *National Pollutant Discharge Elimination System (NPDES) General Permit for Storm Water Discharges from Small Municipal Separate Storm Sewer Systems (MS4 General Permit)* issued jointly by the United States Environmental Protection Agency (USEPA) and the Massachusetts Department of Environmental Protection (MA DEP) (effective May 1, 2003, expiring this year). The Town was granted coverage under this permit (MAR041002) on September 12, 2003. The Phase II regulated area in Belchertown consists of an approximately 1.8-square mile area located in the southwest portion of the Town. The General Permit requires the Town to prepare an Annual Report. This document constitutes the Town's Annual Report and summarizes the activities conducted to satisfy the permit requirements, modifications to the plan, and activities scheduled for the upcoming year. A copy of the modified SWMP Summary is included as *Appendix A*.

2 Public Education and Outreach

2.1 School Programs

As described in the SWMP, the Belchertown public school system provides numerous environmental educational programs in its curriculum. These programs will continue to be an integral part of the science curriculum and foster an appreciation for and a sense of responsibility for the environment. All schools participate in recycling programs. During the Year 9 permit year the schools changed over to a single stream recycling program. Overall, approximately 2,600 students received environmental-related education as a regular part of the school curriculum.

In Year 11 the Science Department continued to conducted classes and experiments at the Foley Field/Lake Wallace property. These events were a joint effort of the Belchertown High School and Swift River Elementary School.

The community also continues to develop the Lake Wallace Project, which would create a natural outdoor environment that: offers students a unique learning opportunity outside of the classroom; allows the incorporation of real-life teaching strategies into the curriculum, creates a safe haven that is accessible to the community for varied leisure and recreational uses; and maintains a natural resource which is aesthetically pleasing and that becomes a "jewel" of the community.

2.2 Educational Materials Distributed

Copies of the SWMP have been distributed to the public schools and the Town library as an educational resource. The SWMP also identified numerous educational resources for students and teachers. A stormwater link was created on the Town's website which includes links to a copy of the SWMP and annual reports. Additionally, a stormwater flyer was developed in 2007 to inform citizens and the development community about and the Town's Stormwater Bylaw and low impact development (LID) practices. The flyer continued to be distributed in 2013 and is available on the DPW website (a copy was provided with the 2007 annual report).

The Conservation Commission distributed a flyer that describes wetlands protection in Belchertown. The flyer includes details regarding impacts of lawn chemicals on wetlands when conveyed by stormwater (a copy was included in the 2010 annual report). The Conservation Commission distributed a second brochure on wetland protection during Year 9 stormwater (a copy was included in the 2011 annual report). To continue the campaign, in Year 10 a half page educational advertisement regarding wetland protection was placed in *The Sentinel* newspaper (appearing March 14, 2013) (see *Appendix B* for a copy of this educational advertisement). In Year 11, the Town posted an advertisement in *The Sentinel* newspaper on wetlands during the week of February 13, 2014. The same advertisement was also linked to the Town's website as of February 7, 2014 (see *Appendix B* for a copy of the educational material).

As described in *Section 6*, the Town adopted a Stormwater and LID Bylaw and associated regulations in January 2008. A checklist and flowchart were prepared to assist citizens and developers in determining whether the new bylaw applies to their project. This flow chart has been available throughout permit year 10. Copies of these documents were included in the 2009 annual report.

The Town also worked with Pioneer Valley Planning Commission to complete a LID Guidance Document in June 2008 that is currently available to local land use boards, municipal staff, the development community, and the public. A copy of this document was included in the 2009 annual report. The documents are also available on the Town website (link provided to Pioneer Valley Planning Commission page)

Educational material promoting recycling was disseminated to Belchertown residents with transfer station stickers. This campaign also appeared in *The Sentinel* newspaper (see *Appendix B* for a copy).

2.3 Citizen Groups

The following local citizen groups and organizations have been identified in the SWMP that provide public education resources on stormwater quality issues or could provide a public outreach avenue in developing stormwater awareness and developing partnerships with the public:

- Connecticut River Watershed Council
- Pioneer Valley Planning Commission
- Tri-Lakes Association
- Belchertown Land Trust

These groups continue to provide and/or have the capacity to provide public education resources on stormwater quality issues and continue to exist as support for future stormwater education programs in Belchertown.

In Year 8 the Pioneer Valley Planning Commission began revising the regional land use plan, Valley Vision.

2.4 Modifications to Plan

No changes to the Public Education and Outreach Components of the SWMP are proposed at this time.

2.5 Activities Schedule for Next Year

The current MS4 General Permit expired at the end of Year 5. All MS4s in Massachusetts are now covered under an administratively extended version of the prior general permit (MAR041002) until a new permit is issued. Belchertown will implement requirements of the new permit, including modifications to this SWMP as necessary, when it is issued. Activities for the coming year include:

- Continue existing school educational programs.
- Continue to develop the Lake Wallace Project, which would create a natural outdoor environmental classroom
- Publish educational material in The Sentinel Newspaper

3 Public Participation

3.1 School Programs

Students in the Belchertown public schools are encouraged to volunteer in environmental activities over the summer vacation, in addition to after-school activities. Some of these ongoing programs include:

- An annual science fair open to the public
- Arbor Day ceremonies
- A trail cleanup event coordinated by the Science Department

3.2 Boy and Girl Scouts of America

Boys and girls may be involved in the Scout programs from ages 5 to 17. Scouts are involved in various community service programs and are available to assist with implementation of the Town's stormwater management program.

3.3 Community Activities

The Town of Belchertown Conservation Commission has been working to protect lands within the Town. The Town was notified in late November 2013 that they were awarded a \$133,650 grant from the State of Massachusetts. The Conservation Commission will use the funds to acquire the 63 acres Jabish Brook Conservation area with an additional 90 acres to be purchased in the future through the Local Acquisitions for Natural Diversity, (LAND) Grant program of the Mass. Executive Office of Energy and Environmental Affairs (land purchase to be voted on by the Town in May 2014). These 63 acres (along with an adjacent 27 acres previously acquired), located on Daniel Shays Highway (Route 202), contains wildlife habitat and connectivity to the Quabbin Reservoir.

In Year 11, the Conservation Committee was involved in numerous conservation area stewardship projects, collaborating with both private and public organizations, as well as individuals. Both the Meads Corner Conservation Area and the Holland Glenn Conservation Area have had baseline documents completed by the Kestrel Land Trust and additional signage was posted. The Town's Department of Public Works and volunteers assist with stewardship and maintenance of the conservation areas.

On April 22, 2013, the Department of Public Works (DPW) sponsored an Earth Day trash collection. The DPW provide anyone wishing to collect curbside trash with trash bags. The DPW then accepted the collected trash at the Town Transfer Station for disposal. A total of 90 trash bags were given out to 9 participants who collected trash in various locations throughout the town. All trash was disposed of at the towns' Transfer Station (see *Appendix C* for additional information).

3.4 Stormwater Management Committee

In 2003, the Town established a Stormwater Management Committee to develop and implement the SWMP. The Committee consists of the following Town employees, board members, and an interested citizen:

- Gary Brougham, Town Administrator
- Steven Williams, DPW Director
- LeeAnn Connolly, Conservation Commission Administrator
- Judy Metcalf, Direction of Public Health, Quabbin Health District
- Doug Albertson, Town Planner
- Paul Adzima, Building Inspector
- Ted Bock, Fire Chief
- Don Minney, citizen representative

Members of the committee met during Year 11 to discuss the implementation of the Stormwater Bylaw, associated regulations, and the Town's program on the whole. The Town received its first application under the bylaw in Year 5 and continued to receive applications (20 applications in Year 11). The Committee met once in Year 11 (March 26, 2014).

3.5 Public Meetings

The SWMP and Phase II Stormwater Program were presented at a Board of Selectmen's meeting on January 29, 2003. Notice of the meeting was published in a local newspaper approximately one week prior to the meeting. The presentation was taped and aired on the local public access television station. This and previous annual reports are made available to the public on the Town of Belchertown website.

The Stormwater Management Committee intends to continue to meet periodically in Year 12 to review implementation of the bylaw and related issues.

The Belchertown Conservation Commission held thirty-two hearings under the Wetlands Protection Act; twenty-two of these were Requests for Determination, eight were Notices of Intent, and two to amend

Order of Conditions. The Commission issued five Emergency Certificates for the protection of public health and safety.

In Year 8, the Town of Belchertown was designated a “Green Community” under the Massachusetts Department of Energy Resources program. The goals of the program include maximize energy efficiency in public buildings, including schools, city halls, and public works and public safety buildings; generate clean energy from renewable sources; and manage rising energy costs. The Highway Department's efforts towards saving energy have not only met the required 20% goal in decreased consumption but exceeded it submitting a 24.4 % decrease in permit Year 10 (the third year of reporting)(see *Appendix C* for additional information).

3.6 Citizen Groups

In Year 7, the Board of Selectmen granted an official liaison, Kenneth Elstein, Selectman, to the Tri-Lakes Association.

3.7 Modifications to the SWMP

No changes to the Public Participation components of the SWMP are proposed at this time.

3.8 Activities Planned for Next Year

The current MS4 General Permit expired at the end of Year 5. All MS4s in Massachusetts are now covered under an administratively extended version of the prior general permit (MAR041002) until a new permit is issued. Belchertown will implement requirements of the new permit, including modifications to this SWMP as necessary, when it is issued. Activities for the coming year include:

- Periodic meetings of the Stormwater Committee

4 Illicit Discharge Detection and Elimination

4.1 Activities Conducted

A preliminary storm sewer outfall map showing stormwater outfalls within the Phase II regulated area has been prepared. The preliminary outfall map was prepared from the town's Geographic Information System (GIS) data, which includes storm drainage layers, as well as an initial outfall inventory performed by DPW staff during March 2003. Dry weather screenings of twenty-five (25) outfalls for detection of illicit discharges were performed on September 14, 2012. Outfalls were inspected using an outfall reconnaissance inventory (ORI) field sheet. One outfall had small amount of flow at the time of inspection. However, there was no physical indication (e.g., odor, color, turbidity, etc) that the discharge was of an illicit nature. Copies of the ORI field data sheets from these dry weather screening events and a summary of follow up actions from the screenings are included in *Appendix D*.

A regulatory review was completed relative to illicit discharge detection and elimination in Belchertown. Although a bylaw does not exist in Belchertown that specifically prohibits illicit discharges, regulatory

mechanisms that address non-stormwater discharges are in place to meet this requirement. These include the revised Stormwater Management Standards that were incorporated into the Massachusetts Wetlands Protection Act. These standards, which are administered and enforced by the Conservation Commission, specifically prohibit all non-stormwater discharges (with limited exceptions) to wetlands and watercourses or to stormwater management systems which discharge to wetlands and watercourses. Additionally, the Belchertown Board of Health regulations also address non-stormwater discharges relative to protection of public health and the environment.

4.2 Modifications to the SWMP

No changes to the Illicit Discharge Detection and Elimination component of the SWMP are proposed at this time.

4.3 Activities Planned for Next Year

The current MS4 General Permit expired at the end of Year 5. All MS4s in Massachusetts are now covered under an administratively extended version of the prior general permit (MAR041002) until a new permit is issued. Belchertown will implement requirements of the new permit, including modifications to this SWMP as necessary, when it is issued. Activities for the coming year include:

- Continue to perform an additional round of dry weather screening of outfalls.

5 Construction Site Runoff Controls

5.1 Activities Conducted

Approximately six new building lots were created along existing town roads through Subdivision Approval Not Required plans. The Planning Board did not review any preliminary subdivision or definitive subdivision plans during permit Year 11. One subdivision was completed during permit Year 11. The Planning Board granted one site plan approval; this project was not located within the Phase II regulated area.

The Belchertown Conservation Commission reviewed and commented on all septic system installation permits, site plan reviews and subdivision applications that occurred in the Town in Year 11. The Commission also reviewed the applications for all forest cutting plans and the Yearly Operational Plans for the vegetation management for the Massachusetts Electric Company and the New England Central Railroad Company.

The Town of Belchertown has adopted a Stormwater Bylaw that regulates construction and post-construction stormwater runoff for new development and redevelopment projects. The bylaw provides a clear set of stormwater management goals, standards, and design criteria to minimize the adverse impacts of stormwater runoff from land development projects. The bylaw also promotes LID and sustainable design practices. Copies of the existing bylaw, associated regulations, and permit application materials were included with prior annual reports. In Year 8, the Town began the process of revising the

Stormwater Management Regulations (a copy of the proposed amendments to the regulations was provided in the 2011 annual)

The Stormwater Bylaw addresses construction site runoff and erosion and sediment controls, including inspections and enforcement. Starting in July of 2009, the Conservation Commission administrator, under the guidance of the conservation commission, was assigned as the Stormwater Authority for the Town. Projects subject to the new bylaw will be documented by the Conservation Commission (the Stormwater Authority) and by Reviewing Boards. There were twenty stormwater permit applications in Year 11. The Department of Public Works continued to also review the Stormwater Management applications annually.

In Year 11, the Conservation Commission also conducted numerous site visits to monitor ongoing projects throughout the year including subdivisions currently under construction, ANR lots and Stormwater site visits. In addition, the Commission has dealt with several outstanding enforcement issues and has been concentrating their efforts to bring these projects back into compliance. The Commission has also been working with the new owners of the Cold Spring Golf Course to assist them with the monitoring of the construction for the new golf course and driving range.

5.2 Modifications to the SWMP

At this time, no changes to the Construction Site Runoff components of the SWMP are proposed.

5.3 Activities Planned for Next Year

The current MS4 General Permit expired at the end of Year 5. All MS4s in Massachusetts are now covered under an administratively extended version of the prior general permit (MAR041002) until a new permit is issued. Belchertown will implement requirements of the new permit, including modifications to this SWMP as necessary, when it is issued. Activities for the coming year include:

- Provide training for Town staff (i.e., land use board members and staff) responsible for reviewing site plans to determine compliance with the proposed Stormwater Bylaw.

6 Post-Construction Stormwater Management

6.1 Activities Conducted

As described in *Section 5.1*, a number of the new development and redevelopment projects that were constructed in Belchertown during the previous year included post-construction stormwater management controls to satisfy the performance standards in the Wetlands Protection Act and 401 Water Quality regulations and the *Massachusetts Stormwater Handbook*.

Specific information on the number of projects and the types of post-construction stormwater management measures was not tracked this year. Activities conducted and their method of tracking will largely be determined as stormwater management permit applications are received.

The Stormwater Bylaw addresses post-construction stormwater management and erosion and sediment controls, including inspections and enforcement. Projects subject to the bylaw will be documented by the Conservation Commission (the Stormwater Authority) and by Reviewing Boards. See *Section 5.1* for more information on permit applications and approvals.

6.2 Modifications to the SWMP

At this time, no changes to the Post-Construction Stormwater Management component of the SWMP are proposed.

6.3 Activities Planned Next Year

The current MS4 General Permit expired at the end of Year 5. All MS4s in Massachusetts are now covered under an administratively extended version of the prior general permit (MAR041002) until a new permit is issued. Belchertown will implement requirements of the new permit, including modifications to this SWMP as necessary, when it is issued. Activities for the coming year include:

- Continue to implement the new Stormwater Bylaw and associated regulations.
- Provide training for Town staff (i.e., land use board members and staff) responsible for reviewing site plans to determine compliance with the proposed Stormwater Bylaw.

7 Pollution Prevention/Good Housekeeping

There are no municipal facilities located within Belchertown's Phase II regulated area. Therefore, the focus of this minimum control measure is to ensure that municipal operation and maintenance activities associated with the infrastructure (e.g., roads and storm drainage system) within the regulated area are performed in a manner to reduce and prevent the discharge of pollutants to stormwater. Activities at other municipally-owned facilities are also addressed in this annual report as they relate to the requirements of this minimum measure.

7.1 Employee Training

Twenty-four Public Works staff (representing administrative, cemetery, highway, and water staff) received environmental-related training this year. The Belchertown Safety Committee also organized departmental training in topics including: Work Zone /Traffic Safety, CPR, Confined Space, Lockout/Tag out, Fall Protection, and OSHA 10.

Stormwater training for DPW and other Town employees was conducted on April 2, 2014. The training was conducted in conjunction with annual training required by the EPA industrial stormwater permit program for the highway garage and wastewater treatment plant. The training included education on goals/objectives of the Phase II program, pollution prevention for public works activities, waste management, and good housekeeping. A copy of the employee attendance log for this and other highway trainings are included in *Appendix E*.

7.2 Street Sweeping

All of the streets within the regulated area were swept at least once during the previous year. A street sweeping log has been developed by the Town to record the names of the streets swept and the amount of street sweepings recovered. A copy of this log is included in *Appendix F*. All of the roads in Belchertown were swept by the Town using a Town-owned sweeper (2005 Elgin Pelican) and approximately 1,354 yards of material were recovered throughout the Town. A majority of the roads that were not swept by the Town are privately-owned or State-owned. The DPW continues to follow a program for managing and disposing of street sweepings consistent with the Massachusetts solid waste regulations and applicable DEP guidance.

7.3 Catch Basin Cleaning

Appendix G shows the roads within the Town where catch basins were cleaned in Year 11. This was the second year funds were appropriated for three weeks of basin cleaning (attempting to get basins on a three to four year cleaning rotation). In 2013, 112 hours were spent cleaning Town basins at a cost to the community of approximately \$19,000 (not including disposal costs). The Belchertown DPW inspected a representative cross-section of the catch basins within the regulated area (see inspection log in *Appendix G*). Thirty-three (33) tons of catch basin spoils were collected in Year 11.

7.4 Stormwater BMP Inspection and Maintenance

All of the facilities (33) were inspected in Year 11. Brush and other vegetation within Town-owned detention basins were cut as needed (see cleaning log in *Appendix H*). In addition to the cleanings listed in the log, in Year 11, the Town conducted maintenance/mowing at the following stormwater basins:

- Dana Woods Subdivision, 12/30/2013 through 01/09/2014
- Oakridge Drive (located within the regulated area), 01/16/2014
- Sheffield Drive, 01/17/2014 through 01/23/2014
- Spring Hill Road, 01/17/2014
- Mountain View Drive (located within the regulated area), 01/24/2014
- Pendleton Road (located within the regulated area), 01/24/2014
- Pepper Ridge Road (located within the regulated area), 01/24/2014
- Two Ponds Road, 01/28/2014 through 01/29/2014
- Meadow Pond Road, 01/28/2014
- Segur Lane, 01/28/2014
- Willow Lane, 01/28/2014 through 01/29/2014
- Tucker Lane, 01/28/2014
- Helen Lane (located within the regulated area), 03/10/2014

No stormwater management facilities were accepted by the Town in Year 11.

7.5 Deicer Material Storage

Salt is stored at the DPW maintenance garage inside two dedicated salt storage buildings, constructed in 2004 and 2012. Approximately 1,460 tons of salt and 2,460 yards of sand were used in the winter of 2012-2013. Liquid deicers are no longer used in Belchertown – salt is pretreated instead.

7.6 Preventative Maintenance

DPW staff conducts weekly inspections of the waste oil collection area at the highway garage. Facility inspections, two, related to the garage's Spill Prevention, Control, and Countermeasure (SPCC) plan were also completed in Year 11 (see *Appendix J* for inspection reports). Routine maintenance of the Town's fleet of equipment and vehicles is also performed at the highway garage.

The Wastewater Department also completed the seventh year of their ten-year inflow and infiltration mitigation plan that was adopted to identify areas, which are allowing groundwater to enter the wastewater collection system. During 2013, activities included visual inspections of trouble areas, video inspections (and re-inspections of lines inspected previously with unresolved problems), and flow monitoring of problematic sewer lines.

7.7 Transfer Station

The Transfer Station and Recycling Center accepts household trash, recyclables, yard waste, waste motor oil, tires, appliances and bulky items such as furniture and mattresses. Approximately 419 tons of general recyclables, 48 tons of scrap metal, 5 tons of textiles/clothing, 9 tons of electronics/computers, 1,050 gallons of waste oil, and 220 tires were collected.

Belchertown sponsored a hazardous wastes collection day in Year 11 on September 28, 2013. 158 households (vehicles) participated in the event. In total, 2,180 lbs of material was collected and disposed of properly (see *Appendix I* for additional details and newspaper articles about the event).

7.8 Modification to the SWMP

At this time, no changes to the Pollution Prevention / Good Housekeeping components of the SWMP are proposed.

7.9 Activities Planned Next Year

The current MS4 General Permit expired at the end of Year 5. All MS4s in Massachusetts are now covered under an administratively extended version of the prior general permit (MAR041002) until a new permit is issued. Belchertown will implement requirements of the new permit, including modifications to this SWMP as necessary, when it is issued. Activities for the coming year include:

- Conduct annual stormwater pollution prevention training for Town employees at the highway garage and wastewater treatment plant as a requirement of the EPA Water Multi-Sector General Permit. Incorporate awareness training on waste oil management.
- Continue to maintain record keeping procedures for street sweeping, catch basin cleaning, deicer application and usage, and stormwater BMP inspections and maintenance within the Phase II regulated area.
- Implement the inspection and maintenance schedule that has been developed for storm drainage structures and stormwater BMPs within the Phase II regulated area.
- Conduct street sweeping and catch basin cleaning in the Phase II regulated area.
- Dispose of street sweepings and catch basin cleanings in accordance with MA DEP guidance and regulations.