

Town of Sudbury

Office of the Town Manager
www.sudbury.ma.us

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278 Old Sudbury Rd
Sudbury, MA 01776-1843
978-639-3381
Fax: 978-443-0756

Melissa Murphy-Rodrigues
Town Manager

Email: townmanager@sudbury.ma.us

Municipality/Organization: Town of Sudbury MA

EPA NPDES Permit Number: MAR04-1224

MassDEP Transmittal Number: _____

**Annual Report Number
& Reporting Period:** Year 14 –
April 1, 2016 – March 31, 2017

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

Part I. General Information

Contact Person: Daniel Nason **Title:** Director of Public Works

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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.

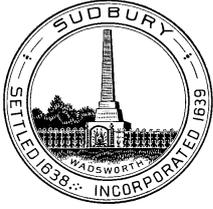
Signature: 

Printed Name: Melissa Murphy-Rodrigues

Title: Town Manager

Date: 4/19/17

APR 20 2017



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May 1, 2017

Glenda Velez – CIP
U.S. Environmental Protection Agency - Region 1
5 Post Office Square – OEP06-01
Boston, MA 02109-3912

Fred Civian
Massachusetts Department of Environmental Protection
One Winter Street - 5th Floor
Boston, MA 02108

Re: NPDES DEP & EPA Permit #MAR041224
2016-2017 Year 14 Report

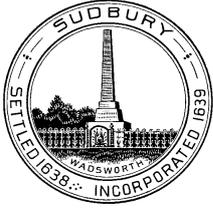
Dear DEP and EPA:

In accordance with the Town of Sudbury's 2003 NPDES permit, please accept this document as the fourteenth annual report required under MS4 Phase II Stormwater Permit covering April 1, 2016 to March 31, 2017. The purpose of the annual report is to document the status of Stormwater Management Program (SWMP) implementation through a self-assessment review of compliance with the permit conditions; an assessment of the appropriateness of the selected Best Management Practices (BMPs); an assessment of the progress towards achieving the measurable goals; a summary of results of any information that has been collected and analyzed; a discussion of activities for the next reporting cycle; a discussion of any changes in identified BMPs or measurable goals; and reference to any reliance on another entity for achieving any measurable goal.

The Town of Sudbury (Town) continues its comprehensive efforts to protect water quality through appropriate use of stormwater BMPs, controlling erosion, public education, illicit discharge detection and elimination (IDDE), encouragement of low impact development; and green infrastructure techniques.

Assessment of Compliance with Permit

The Town has completed the self-assessment and determined that it is in compliance with the current permit. In 2016, the Town of Sudbury continued to engage Woodard & Curran to assist in improving the efficiency and effectiveness of its stormwater program while increasing compliance and water quality protection. The Town also engaged Woodard & Curran with preparation efforts for the 2016 MS4 permit obligations. A summary document was developed that outlines anticipated action items and associated deadlines. The summary also addressed the future permit's outfall monitoring requirements and other obligations as they pertain to the Town's impaired waters. Lastly, an evaluation of estimated labor required for the Town to maintain compliance under the impending permit requirements was also completed in 2016. Several meetings with various Town staff including Town Manager and Finance Director were held in 2016 to ensure familiarity with existing and new permit conditions.



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Appropriateness of Selected BMPs

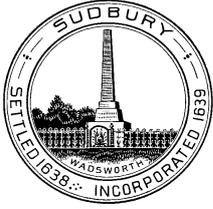
The Town continues to find that its program BMPs are appropriate and effective for improving the quality of stormwater runoff. The Town continues to evaluate its program and its physical infrastructure to determine the priority areas where upgrades to BMPs will result in the greatest improvement of stormwater runoff quality.

Progress Towards Achieving Measurable Goals

Year 14 Measurable Goals:

During Year 14, the Town of Sudbury met and exceeded its requirements for each of the 2003 MS4 General Permit Minimum Control Measures for maintenance of its municipal drainage systems.

1. The drainage system at the Sudbury DPW facility continued to be inspected and cleaned annually. A needs assessment has been contracted for the Sudbury Public Works facility. This needs assessment will identify improvements for several areas that have an influence on outdoor materials exposure (i.e. fueling and outdoor storage). It is anticipated that this needs assessment will result in a facility master plan and capital improvements for Sudbury DPW. Updates to facility SWPPP and SPCC will be undertaken as capital improvements are made or at times consistent with 2016 MS4 General Permit requirements.
2. The Town of Sudbury is a non-sewered community. The Board of Health continued to maintain a database that tracks septic systems by parcel ID, age of system, street number, failing systems, and Title 5 inspections.
3. The Town has an ongoing inspection, maintenance, and cleaning program for the Town's drainage system. Key highlights include:
 - 30 catch basins were repaired.
 - The Town continues to systematically replace failed corrugated metal drainage pipes with reinforced concrete pipes. As part of the Goodmans Hill Road Project, 615 linear feet of 18-inch drainage CMP were replaced with RCP.
 - 831 catch basin sumps were cleaned.
 - Replacement of 1 and installation of 3 precast leaching tanks.
 - 31 outfalls/open ditch channels were cleaned.
4. A total of 14 permits were issued and monitored under the Stormwater Management Bylaw for the Year 14 reporting period.
5. To assist in the review and permitting of an SMP, the Town of Sudbury continued to contract with the Horsley Witten Group for review of Major Stormwater Permit applications, and performs construction monitoring/inspections for these projects. This third-party review is



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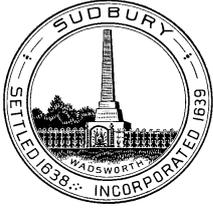
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funded by the applicant in accordance with the SMP bylaw and regulations. The Town DPW recently hired professional staff and is providing supplemental review of all stormwater permit applications. DPW staff perform construction inspections for projects that are permitted under the Town's General Stormwater Management Permit. In addition, DPW supplements Horsley Witten's inspections of Major Stormwater Management Permit projects. Third-party reviews are conducted for many Wetlands Protection Act permit applications. The Conservation Department also utilizes a third-party contractor, Scofield Brothers, for review of site development projects regulated under Wetlands Protection Act jurisdiction involving stormwater requirements.

6. The Planning and Community Development Office maintains an on-going database of all Stormwater Management Permits.
7. Conservation Commission tracks all Orders of Conditions through a database.
8. In Fall 2014, the Sudbury DPW developed a written IDDE Program Manual in order to refine and aggregate its current IDDE program and procedures. The program manual included staff roles and responsibilities, a diagram of standard screening, investigation and enforcement workflow processes, preliminary prioritization of stormwater outfall catchment areas, and a training program. Public Works, Department of Health and Conservation staff have been trained on the components of the new program manual. Following the training, the Town purchased chlorine, ammonia, surfactants testing equipment, and a pole sampler to enhance stormwater outfall screening program components. The Town is currently considering modifications to the 2014 IDDE Program Manual for consistency with the 2016 MS4 General Permit and as the basis for refined IDDE program implementation in 2017.
9. In preparation for the requirements of the upcoming permit, the Town purchased PeopleGIS Stormwater Management module in Year 14. Additionally, the Town's stormwater infrastructure GIS database was rebuilt in Year 14 to be consistent with 2016 MS4 permit required mapping elements and to improve the ability of Town staff to utilize the database during field data collection. A meeting of IT and DPW staff took place on January 7, 2017 to review the updated GIS database, its use within the Stormwater Management module of PeopleGIS and data collection needs.
10. On February 26, 2015 the Town of Sudbury DPW conducted a facilitated workshop with Town staff from Police, Fire, Parks and Recreation, Sudbury Housing Authority, and School Department to refine understanding of municipal property ownership and facility management, operations, and use activities that may contribute to stormwater pollution. An updated SOP manual for pollution prevention practices on these properties was developed in PY13 and delivered to facility managers. The Town continues to rely on the "Clean Water" SOP Manual as a basis for its municipal facility stormwater water pollution best practices.
11. The Town conducts a springtime annual roadside cleanup where residents place trash bags on curbs full of roadside debris and DPW crews collect the bags.



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12. A working group of Town staff met on September 13, 2016, including DPW, Planning, Finance and Town Manager to review new obligations under the 2016 MS4 General Permit and to discuss financial and/or labor needs associated with the new requirements.
13. The Town is participating in efforts to establish the Minutemen Advisory Group on Interlocal Coordination (MAGIC) Stormwater Partnership. An application for the MA Department of Revenue's Efficiency and Regionalization Grant was submitted in November 2016 to support the establishment of the MAGIC Stormwater Partnership. The Partnership seeks to provide technical assistance to 12 communities for improved stormwater management and compliance with the new MS4 Permit, and to do so efficiently by utilizing regional collaboration. This collaborative structure is anticipated to increase efficiencies and reduce costs for participating towns. Four Sudbury staff members engaged in scoping meetings and other relevant discussions in Year 14. The first MAGIC Stormwater Partnership meeting was held on March 29, 2016, and it offered an overview of the new MS4 Permit requirements, as well as training on stormwater mapping approaches.

MCM#1: Public Education and Outreach

The Town's abundant waterways - ponds, streams, rivers, and wetlands - and their proximity to vast acres of National Wildlife Refuge, Sudbury Valley Trustees (SVT) and Town-owned lands give Sudbury its special character. Safeguarding the integrity of Sudbury's ponds and waterways is critical to maintaining the Town's quality of life.

The Ponds & Waterways Committee activities continued the Eco-Friendly Lawn Program to promote environmentally-sensitive lawn care practices by minimizing the impact of lawn care on the surrounding environment. For more information on this program visit:

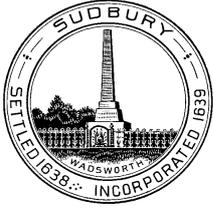
<https://sudbury.ma.us/pwc/2010/03/08/sudburys-eco-friendly-lawn-program>

Sustainable Sudbury, an outgrowth of the 2000 Earth Decade Committee, serves as a way to connect with neighbors and fellow citizens interested in protecting the environment and to learn how to help locally and globally. As a chapter of the Massachusetts Climate Action Network (MCAN), Sustainable Sudbury is dedicated to raising environmental awareness and sponsoring sustainable, earth-friendly activities in the community and beyond by encouraging residents to compost, recycle, and practice organic gardening. The organization also sponsors quarterly plastics collections and annual foam collections.

The Town's website (www.sudbury.ma.us) is a well-organized public notification tool for education and outreach. Articles written by Town staff on stormwater and other environmental issues appear regularly.

MCM#2: Public Involvement and Participation

The Town provides household hazardous waste collection through the Hartwell Avenue Compost Facility in Lexington, MA. Residents have the opportunity to participate in seven Household Hazardous Waste Days in Lexington by pre-registering with the Sudbury Board of Health. This



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opportunity is advertised on the Town website, www.sudbury.ma.us, in the local newspaper, and on flyers throughout Town.

The Town continues to participate in the East Middlesex Mosquito Control Project. The Project services include mosquito and wetland surveillance, larval and adult mosquito control, ditch maintenance, and public education. Spray times and locations are advertised on the Town's website at www.sudbury.ma.us. For more information, visit the project webpage at <https://sudbury.ma.us/emmcp/>

Public hearings on all stormwater permit applications under the Town's Stormwater Management Bylaw are advertised in the local newspaper for two consecutive weeks prior to the hearing, on the Town's website, and notices are sent to all direct abutters. These hearings not only satisfy the statutory requirements under the Town's bylaws, but they also educate residents and contractors on BMPs for stormwater collection and treatment, site stabilization, and maintenance of systems after construction. Reports are often given by engineers at the hearings. During the current year reporting period, the Planning Board and Conservation Commission held eight public hearings on applications for Stormwater Management Permits. One of the applications was a Mass DOT project proposing stormwater improvements along Route 20 to treat discharges to Gristmill Pond and an unnamed tributary. The installation of treatment swales and other stormwater treatment measures are proposed.

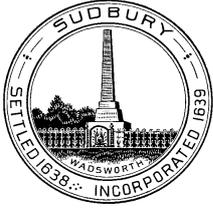
The Town's website (www.sudbury.ma.us) is a well-organized public notification tool for events and construction project updates. Opportunities for public involvement are posted to the "Front Page News" on the website's home page. The Sudbury Conservation Commission publishes articles, in an easy to understand format, on the Town's website, and in the local newspaper to educate the public regarding stormwater issues.

MCM#3: Illicit Discharge Detection and Elimination

Illicit Discharge and Detection procedures have been established and DPW employees have been educated on illicit discharge detection. DPW drainage maintenance crews are trained to be aware of and note via work order system any unusual odors, sheen, turbidity, etc. while working in the field.

Sudbury DPW developed a written IDDE Program Manual to refine and aggregate its current IDDE program and procedures. The program manual included staff roles and responsibilities, a diagram of standard screening, investigation and enforcement workflow processes, preliminary prioritization of stormwater outfall catchment areas, and a training program. The Town purchased chlorine, ammonia, surfactants testing equipment, and a pole sampler to conduct stormwater outfall screening program components. Sudbury DPW staff continued preparation efforts for the obligations of the upcoming 2016 MS4 General Permit.

During Year 14, Sudbury DPW did not identify any illicit discharges. The Reporting and Complaint phone line in the DPW did not receive any reports of suspicious odors or substances in catch basins or waterways during the past year.



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- The Town's drainage system mapping includes both point infrastructure (outfalls, catch basins, and manholes) and much of the pipe connectivity. The Town continues to refine its drainage system mapping through field investigation and has migrated all drainage system geographic database information into an updated database format to comply with the upcoming MS4 General permit obligations.
- Sudbury DPW continues to utilize a digital work order system, software, and mobile field collection tools, which allow for field documentation of infrastructure cleaning and condition coding. Expansion of the utilization of digital data collection is anticipated in 2017 with the recent purchase of PeopleGIS Stormwater Management solutions.
- The Board of Health maintains a database that tracks septic systems by parcel ID, age of system, street number, failing systems, and Title 5 inspections.
- Sudbury Water District carries out an annual leak detection program for municipal water lines.

MCM #4 and #5 Construction Site and Post-Construction Runoff Control

Sudbury's Stormwater Management Bylaw and regulations have been in effect and fully implemented since 2009.

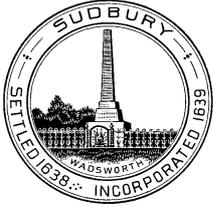
The Stormwater General Permit and Stormwater Management Permit thresholds regulate site development and obligate stormwater treatment systems for projects below the one-acre disturbance threshold currently defined by the MS4 permit. Fourteen (14) stormwater management permit applications were reviewed during Permit Year 14.

Contractors performing work on sites with steep slopes and/or resource areas that could be at risk if erosion control measures fail are required to hire a Construction Monitor who is expected to report bi-weekly and after large storm events to the Conservation Commission or Planning Board. Third-party peer reviews are undertaken for both erosion and sediment control and stormwater treatment system design during the permitting of all significant SWPs. Construction inspections are required. All reports generated by these reviews are in the permit files at the Town Offices.

A database of past permits and ongoing permits are maintained by the Planning and Community Development Office in coordination with DPW and the Conservation Office. The Town has been utilizing ViewPoint as a data management tool for building permits. The Town is currently considering utilizing ViewPermit for tracking projects and post-construction BMPs in the future. In addition, the Town plans to integrate the newly acquired PeopleGIS module for improved mapping of installed BMPs and inspection tracking for Town-operated BMPs.

MCM #6 Pollution Prevention/Good Housekeeping

On February 26, 2015, Sudbury DPW conducted a facilitated workshop with Town staff from Police, Fire, Parks and Recreation, Sudbury Housing Authority, and School Department to refine



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understanding of municipal property ownership and facility management, operations, and use activities that may contribute to stormwater pollution. An updated SOP manual for pollution prevention practices on these properties was developed in PY13 and delivered to facility managers. A list of all municipally-operated facilities will be updated on an ongoing basis.

In Year 14, as part of the efforts to improve facility management and management of hazardous materials, the Town contracted for assistance with inventory, training and data management of these materials. As a part of this contract, Town staff attended a training regarding hazardous materials, material compliance and right-to-know. The Town now hosts an online inventory of chemicals used in Town facilities.

Planning staff have a dedicated budget for professional development and take advantage of regional conferences, workshops, and other training opportunities. Planning Board members are often asked to attend trainings on an as needed basis. Members of the Town Planning Department attended several regional conferences in Year 14, including the International LID Conference in Portland, ME, and several regional meetings facilitated by MAPC and MAGIC in preparation for the upcoming 2016 MS4 Permit.

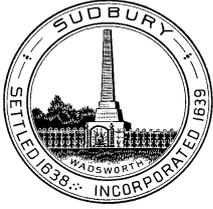
All members of the Sudbury Conservation Commission are actively taking advantage of education and training offered by MA Association of Conservation Commissions, MA Department of Environmental Protection, MA Department of Ecological Restoration, Association of MA Wetland Scientists, Bay State Roads, SuAsCo Watershed Council, and private entities, as it pertains to stormwater and water quality. Three Conservation Commission members obtained MACC certifications which include a stormwater training module.

Other Town departments were also engaged in trainings during Year 14. Members of the Town engineering staff attended a three-day culvert hydraulic design seminar by Bay State Roads. DPW staff hosted a Snow Operations training under Bay State Roads for calibration of spreaders and other snow-fighting best practices.

Sudbury staff also received training during the first MAGIC Stormwater Partnership meeting, which was held on March 29, 2016. The meeting provided an overview of the requirements of the new MS4 Permit, training on stormwater mapping approaches, and information on regional resources that may be available to Sudbury that would help improve its stormwater management program.

Activities for the Next Reporting Cycle:

1. The Town has hired outside consultation to refine the current stormwater management program and identify opportunities for enhanced compliance under the 2016 MS4 General Permit. It is anticipated that major milestones for the next reporting cycle will include:
 - Preparation of a 5-year stormwater management program plan and submission of the Notice of Intent for continued coverage under the MS4 General Permit.



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- Revise the Town's IDDE Program Manual including preliminary screening of outfalls. Implement analytical screening and investigation procedures in high priority areas.
 - Develop an Erosion and Sediment Control Permit, Inspection and Post-Construction BMP Program Manual. This written document will summarize the Town's current permit tracking and management program and hopefully enhance the management of construction site and post-construction programs.
 - Modify and Refine Educational Programs
 - Review and Refine the existing Clean Water SOP Manual.
2. Continued operation and maintenance of drainage structures.
 3. The Town will participate in the MAGIC Stormwater Partnership programs. It is anticipated that quarterly meetings will be held as part of this effort. Through these proposed programs, the Metropolitan Area Planning Council (MAPC) is to provide participating municipalities with technical assistance and the opportunity to learn about the new MS4 Permit stormwater regulations and the resources, analyses, and templates available that will aid in delivering effective stormwater management. The collaborative structure of the MAGIC Stormwater Partnership is anticipated to increase efficiencies and reduce costs for participating towns.

We once again appreciate this opportunity to provide a status report on the Town of Sudbury's progress toward its Stormwater Management Goals.

Sincerely,

Melissa Murphy-Rodrigues, Esq.
Town Manager