

**Municipality/Organization:** Town of Sudbury MA

**EPA NPDES Permit Number:** MAR04-1224

**MassDEP Transmittal Number:** \_\_\_\_\_

*Annual Report Number*  
**& Reporting Period:** Year 12 - April 1, 2014 – March 31, 2015

**NPDES PII Small MS4 General Permit  
Annual Report  
(Due: May 1, 2015)**

**Part I. General Information**

**Contact Person:** I. William Place Title: Director of Public Works

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**Certification:**

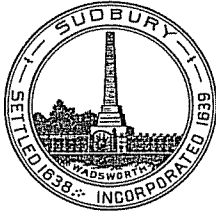
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage 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:** Maryanne Bilodeau

**Printed Name:** Maryanne Bilodeau

**Title:** Interim Town Manager

**Date:** April 24, 2015



# Town of Sudbury

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April 24, 2015

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5 Post Office Square – OEP06-01  
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Massachusetts Department of Environmental Protection  
One Winter Street - 5th Floor  
Boston, MA 02108

Re: NPDES DEP & EPA Permit #MAR041224  
2014-2015 Year 12 Report

Dear DEP and EPA:

In accordance with our 2003 NPDES permit, please accept this document as our twelfth annual report required under our MS4 Phase II Storm water Permit covering April 1, 2014 to March 31, 2015. The purpose of the annual report is to document the status of Storm Water Management Program (SWMP) implementation through a self-assessment review of compliance with the permit conditions; an assessment of the appropriateness of the selected 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 continues our comprehensive efforts to protect our water quality through appropriate use of storm water best management practices, controlling erosion, public education, illicit discharge detection and elimination, water quality monitoring of stormwater discharges, encouragement of low impact development; and green infrastructure techniques.

#### Assessment of Compliance with Permit

The Town of Sudbury has completed the self-assessment and determined that it is in compliance with the current permit. The Town also continues to plan for the new permit. In 2014, the Town of Sudbury engaged Woodard & Curran to perform an assessment of the Town's current Stormwater Management Program in order to improve efficiency and effectiveness while increasing compliance and water quality protection. The assessment evaluated the Town's current actions against requirements of the US EPA's NPDES General Permit for stormwater discharges from MS4s and considered anticipated components of future permit obligations. The evaluation summarized the Town's current practices and identified strengths and opportunities to improve compliance with the 2003 MS4 General Permit and prepare for future requirements under the anticipated General Permit.

### Appropriateness of Selected BMPs

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

### PROGRESS TOWARDS ACHIEVING MEASURABLE GOALS

#### Year 12 Measurable Goals:

During Year 12, Sudbury met and exceeded its requirements for each of the 2003 MS4 General Permit Minimum Control Measures for maintenance of its roadway and walkway drainage systems.

- The culverts and associated drainage structures at the Town's DPW facility were inspected and cleaned on a quarterly basis.
- Forebays were cleaned at Ironworks Road, Arboretum Way, North Road Borrow Pit, Candy Hill Road, an open ditch was cleaned on Witherell Drive and a detention basin was constructed at Grinnell Park.
- The Sudbury Engineering Dept. worked with consultants from VHB, Inc. to design a drainage and stormwater treatment system for the Sudbury Town Center intersection project which will result in treatment of approximately .5 acres of impervious surfaces (pavement) not currently treated. Funding has been secured for the project, with construction anticipated beginning in spring, 2015. The project involves installing a new roadway surface collection system designed for the 25 year storm event which will include the following items:
  - New drainage outfall to provide additional capacity to accommodate runoff from Peakham Road;
  - Replace an existing culvert and headwalls on Concord Road to provide additional capacity;
  - Install additional catch basins on Concord and Hudson Roads;
  - Clean and reline an existing channel downstream of the Concord Rd culvert, install erosion control measures;
  - Improvements to existing wetlands adjacent to the Penn Central right of way – remove silt accumulation to create additional storage volume, replace collapsed culvert, fit with v-notched weir to provide outflow control during major storm events and maintain water volume in wetland;

- Improvements to heritage Park outfall – replace existing 12” corrugated metal pipe with 18” reinforce concrete pipe, remove sand and fines accumulated, clean stream bed of debris and line with stone and natural lining
- 659 catch basin sumps were cleaned, three culverts were replaced and leach pits installed at Dudley Road and Featherland Park.
- 31 catch basins, outfalls, or manholes were repaired. The Town continues to systematically replace old corrugated metal drainage pipes with reinforced concrete pipes. Low impact development techniques continue to be encouraged for new developments or retrofits, when feasible.
- A total of 14 permits were issued and monitored under the Stormwater Management Bylaw for the Year 12 reporting period.
- To assist in the review and permitting of a SMP, Sudbury entered into a new contract with Hancock Associates for review of the individual stormwater permit applications, including construction monitoring. This third-party review is funded by the applicant in accordance with the SWMP bylaw and regulations.
- The Planning and Community Development Office maintains an on-going database of all Stormwater permits.
- 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. On October 6, 2014 Public Works, Department of Health and Conservation staff were trained on the components of the new program manual. Following the training, Sudbury purchased chlorine, ammonia, surfactants testing equipment and a pole sampler to enhance stormwater outfall screening program components.
- Sudbury DPW staff continued outfall visual screening on 82 outfalls in preparation for reprioritization of catchments and outfall monitoring in 2015.
- 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 understanding of municipal property ownership and facility management, operations or use activities that may contribute to stormwater pollution. Updated SOP manual for these properties in development for 2015.
- The Town continues to identify and mark the actual outfall locations of some of the most historic drainage systems in town (pre 1950). A new culvert was installed at Horse Pond Road that has experienced severe flooding.
- The Town conducts an annual roadside cleanup, where residents place trashbags on curbs full of roadside debris and DPW crew picks the bags up.

### MCM#1: Public Education and Outreach

The Sudbury Conservation Commission publishes article, in easy to understand format, on the Town's website and in the local newspaper to educate the public regarding stormwater issues. Two articles were published in 2014, *Keeping Up With Stormwater Regulations*, and *What is Stormwater and Why Does It Matter?*. These articles can be found on the town's website at [www.sudbury.ma.us](http://www.sudbury.ma.us)

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 maintain the Town's quality of life.

The Ponds & Waterways Committee activities continued the "Adopt-a-Pond" program, as well as the Eco-Friendly Lawn Program to promote environmentally-sensitive lawn care practices by minimizing the impact of lawn care on the surrounding environment. The lawn program was launched in 2010 and is still popular with residents in 2015. Lawns signs are displayed in the spring starting during Earth Week through the end of May, and again at the start of autumn, from September 1 through September 30. 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. A chapter of the Massachusetts Climate Action Network (MCAN), Sustainable Sudbury is dedicated to raising environmental awareness and sponsoring sustainable, earth-friendly activities in our community and beyond by encouraging residents to compost, recycle, practice organic gardening, sponsoring quarterly plastics collections and annual foam collections. Activities have included rain barrel programs and Earth Machine composters are available for the discounted price of \$45. They are easy to assemble, rodent-resistant and allow for efficient aerobic composting. They are made from a minimum of 50 percent post-consumer recycled plastic.

The Town website ([www.sudbury.ma.us](http://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

Sudbury 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 opportunity is advertised on the Town website, [www.sudbury.ma.us](http://www.sudbury.ma.us), in the local newspaper, and on flyers throughout Town.

The Town of Sudbury 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](http://www.sudbury.ma.us)

Public hearings on large construction sites under the Town's Stormwater Management Bylaw are advertised in the local newspaper for 2 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 specially trained engineers at the hearings. During the current year reporting period, the Planning Board and Conservation Commission held over 10 public hearings on various applications for Stormwater Management Permits.

The Town website ([www.sudbury.ma.us](http://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 article, in easy to understand format, on the Town's website and in the local newspaper to educate the public regarding stormwater issues. Two articles were published in 2014, *Keeping Up With Stormwater Regulations*, and *What is Stormwater and Why Does It Matter?*. These articles can be found on the town's website at [www.sudbury.ma.us](http://www.sudbury.ma.us)

#### 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 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. On October 6, 2014 Public Works, Department of Health and Conservation staff were trained on the components of the new program manual. Following the training, Sudbury purchased chlorine, ammonia, surfactants testing equipment and a pole sampler to enhance stormwater outfall screening program components. Sudbury DPW staff continued outfall visual screening on 82 outfalls in preparation for reprioritization of catchments and outfall monitoring in 2015.

During Year 12, the 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.

- Sudbury's drainage system mapping includes both point infrastructure (outfalls, catch basins and manholes) and much of the pipe connectivity. The Town intends to continue maintaining this mapping exercise.

- The DPW has an established and formalized work order system, software, and mobile field collection tools, which allow for field documentation of infrastructure cleaning, condition and illicit discharge detection and removal.
- 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 has an annual leak detection program for municipal water lines.
- DPW's Stormwater Drain Tie-In permit application and monitoring reports and tracks drainage tie-ins and provides better management of private pipe connections to public system.

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

Sudbury's Stormwater Management Bylaw and regulations have been in effect since 2009 and staff has had an opportunity to see what works and what might need modification.

The Stormwater General Permit and Stormwater Management Permit thresholds regulate site development and obligate stormwater treatment systems far below the one acre threshold currently defined by the MS4 permit. 14 permits have been issued by either the Planning Board or Conservation Commission during year 12.

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.

#### MCM #6 Pollution Prevention/Good Housekeeping

The redesign of the roadway system and major drainage upgrades in the Town Center is complete, the construction phase was funded at 2013 Annual Town Meeting and construction is to begin early spring of 2015. Significant drainage improvements throughout the Town Center are included in the project, described above in Year 12 Measurable Goals.

The Town contracted Woodard & Curran to complete a municipal facility and property inventory for those public properties that may have the potential to contribute to stormwater pollution. On February 26, 2015 Sudbury DPW conducted a facilitated workshop with Town staff from Police, Fire, Parks and Recreation, Housing Authority, and School Department to refine understanding of municipal property ownership and facility management, operations or use activities that may contribute to stormwater pollution. Updated SOP manual for these properties in development for 2015.

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.

Activities for Next Reporting Cycle:

- Prepare for implementation of the new EPA Phase II MS4 permit requirements. To accomplish this, Sudbury has hired outside consultation to refine current stormwater management program and identify opportunities for enhanced compliance. This project will specifically:
  - Refine standing operating procedures for all public properties that have the potential to contribute to stormwater pollution.
  - Update to IDDE Plan – Enhance prioritization of catchments and prepare for screening and investigation procedures in high priority areas.
  - Erosion and Sediment Control Permit and Inspection Tracking – Enhance usefulness of Town’s current permit tracking software for tracking and management of construction site and post-construction programs.
  - GIS Database Updates and Data Entry – Consider modifications to the Town drainage system GIS database to improve functionality under future MS4 permit requirements.
- Continued screening and sampling of outfalls as prioritized by the DPW, Conservation Commission and Board of Health.
- Continued operation and maintenance of drainage structures.
- Continue investigating the formation of a storm water utility.
- Work closely with the Ponds & Waterways Committee to identify areas where joint water quality goals can be achieved. Schedule a meeting in 2015 between the DPW Department and the Ponds & Waterways Committee to inform them of the Town’s activities regarding pollution prevention and stormwater compliance.
- Consider annual permit and fee for discharge to MS4.
- As funding permits, continue to provide the Public Participation/Public Involvement and the Public Education/Outreach components.
- Maintain or increase the visibility of the “Stormwater Matters” message and continue to encourage public education and involvement concerning the need to report any illegal discharges or release of illegal substances into the Town’s stormwater system.

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

Sincerely,

A handwritten signature in black ink, reading "Maryanne Bilodeau". The signature is written in a cursive, flowing style.

Maryanne Bilodeau  
Interim Town Manager