

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

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

**MassDEP Transmittal Number:** W-

**Annual Report Number  
& Reporting Period:** April 1, 2011 – March 31, 2012

**NPDES PII Small MS4 General Permit  
Annual Report  
(Due: May 1, 2012)**

**Part I. General Information**

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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: Maureen G. Valente

Title: Town Manager

Date: April 30, 2012



Maureen G. Valente  
Town Manager

## TOWN OF SUDBURY

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April 30, 2012

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Re: NPDES DEP & EPA Permit #MAR041224  
Year 9 Report

Dear DEP and EPA:

In accordance with our 2003 NPDES permit, please accept this document as our ninth annual report required under our MS4 Phase II Storm water Permit covering April 1, 2011 to March 31, 2012. 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.

Funding to meet the requirements of our EPA MS4 Phase II Permit is challenging. We continue to seek ways to fund system upgrades, monitoring, staffing, equipment, etc. Implementation of a Stormwater Utility is problematic for Sudbury, and similar Towns, where there is no public sewer with the administrative and tracking infrastructure already in place. In addition, Sudbury Town government and the Sudbury Water District are two totally separate entities.

### **Assessment of Compliance with Permit**

Since the passage of the Stormwater Management Bylaw in 2009, 45 permits have been issued with conditions to prevent erosion and sedimentation during construction and ensure

continued stabilization post construction. All Individual Permits involve a site visit during and upon completion of construction. BMP maintenance is required for larger projects through covenants, escrow, deed restrictions, etc.

To assist in the review and permitting phase of a SWMP, Sudbury has issued a Request for Proposals for a dedicated Stormwater Consultant for review Stormwater of all individual permit application under the SWMB. It is anticipated that this position will be staffed shortly. Under consideration is the creation of a full-time Stormwater Management Coordinator position to provide additional inspections, reporting, and monitoring of SWMB permits.

The DPW continues to maintain and update the stormwater database of structures and locations. As a result of this tracking and monitoring, the stormwater management system is compliant with our EPA MS4 Phase II permit.

### **Appropriateness of Selected BMPs**

Sudbury continues to find that our chosen bmps are appropriate and effective for improving the quality of our stormwater runoff. We continue to expose citizens to the needs to improve runoff quality and to educate them as to how they can change their habits to work toward this goal.

Through our Stormwater Management Bylaw we are able to review projects on two tiers\*. The first tier includes small projects not meeting a threshold where specific corrective or preventive actions need to be taken. We use this opportunity to educate a faction of the population who is proposing work where runoff quality is a consideration.

The second tier targets specific larger projects with a potential to impact runoff quality. These permits received comprehensive conditions specific to the site.

### **PROGRESS TOWARDS ACHIEVING MEASURABLE GOALS**

Year 9 Measurable Goals:

During 2011, 288 lane-miles of public roadways were swept. This represents the entire Town and is accomplished one time each year. 1,500 tons of sand/debris was collected and stockpiled for beneficial use. Four rotary brush sweepers (owned/leased) were used. A total of \$50,000 was appropriated for street sweeping.

Over 20% of the catch basins were cleaned using the Town's clam-shell truck. No vactor trucks were used or leased. The annual budgeted cost of catch basin cleaning totals \$10,000 at \$25 per basin.

The culverts and associated drainage structures at the Town's DPW facility were inspected cleaned on a quarterly basis. Floor drains in the DPW garage were repaired. A degreaser was added to the DPW wash bay.

Six drainage easements were obtained and/or staked in the field to allow redesign of drainage in areas of known flooding issues.

The "country" drainage structures (ditches) along eight major roads were excavated to their original capacity. A brush bin was set up for public use at the Transfer station to help prevent roadside dumping of brush.

Five leach pits were installed. Berms were repaired in 24 locations. Drainage pipes were unplugged at six locations. A major culvert on Route 117 was repaired. A detention basin was constructed at the Town Gravel Pit. The Town is systematically replacing old corrugated metal drainage pipes with reinforced concrete pipes. Low impact development techniques continue to be encouraged.

## **Public Education and Outreach:**

Sudbury satisfied the public education and outreach component for Year 9 through the use and on-line distribution of the EPA educational materials (*"After the Storm, A Citizens Guide to Understanding Stormwater"*); re-airing of the SuAsCo's *"Stormwater Matters"* on the local cable television channel, upgrades to the information posted on our website; and by two articles in the local newspaper related to stormwater. The first article was information to the public on the negative impacts of driveway sealants that use coal-tar based ingredients. The second article emphasized practices that individuals can implement to assist the Town in preventing pollution and water quality impairments caused by everyday activities on residential properties.

The SuAsCo Public Awareness Survey was again made available at annual Town Meeting and at the DPW facility.

## **Public Participation and Involvement**

During 2011 the Ponds & Waterways Committee (PWC) again provided lawn signs indicating lawns that were eco-friendly to protect the town waterways. The purpose is to show residents that nice lawns are possible without the need for chemicals. Many town buildings adopted and displayed this sign in 2010 and 2011. The PWC and the Hop Brook Protection Association (HBPA, a private citizen organization) continues to monitor the Marlborough Easterly Wastewater Treatment Plan to ensure they abide by their permit limitations for the discharge of nitrogen and phosphorous to the downstream ponds and waterways in Sudbury. During 2011, the HBPA began preliminary discussions and investigations into the dredging of Carding Mill Pond to reduce nitrogen and phosphorous trapped in the sediment which produces algal blooms in warm weather.

The DPW's Complaint/Reporting phone number received a total of 79 calls last year. Twenty-four calls reported drainage structure issues (e.g. catch basins sinking, etc.); 37 callers reported flooding or water problems (e.g. drains backing up, culvert clogged, etc.); 3 residents called and asked if they could assist with clearing snow or debris from catch basins; and 15 callers reported damage to berms, curbs, and lawns from roadway work.

The Sudbury Board of Health 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, in the local newspaper, and in flyers throughout Town.

The Town of Sudbury participates 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. The ditch maintenance program is intended to remove sand, sediment and debris from existing ditches in order to provide a clear channel through wetlands for runoff from storm water or melting snow. The Project utilizes a Low ground pressure excavator to remove sand and sediment from ditches. This track-mounted excavator is specifically designed to work in wetland areas. Crews use hand tools including chain saws to remove fallen trees, limbs and other debris from ditches. EMMC works closely with the Board of Health and Conservation Commission.

The Project's public education program serves as a resource to residents, schools, municipal officials and the local media on controlling mosquitoes, breeding sites, mosquito borne diseases, biting flies and ticks. Sudbury routinely uses the services of EMMC to assist in keeping the drainage free-flowing.

### **Illicit Discharge Detection and Elimination**

The following Illicit Detection procedure has been established and revised pending the issuance of the new EPA MS4 permit. Funding for the purchase of 2 portable Chem-Metrics field test kits was approved in early 2011. Prioritization of outfalls for testing has been completed and it has been determined, based on a review of land uses, that if there is no visible evidence of sewage that testing for ammonia and surfactants (laundry detergents) is the most logical and cost-effective approach. The physical characteristics of the flow (e.g. approximate rate and depth of flow, color, visible sheen, turbidity, floatables, and odor) are recorded and any indications of sewage flow flagged for further investigation.

The continuation of the comprehensive program for outfall testing is pending EPA's release of the new permit to be sure the appropriate parameters are being tested. Limited testing will be conducted during dry periods in early summer.

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. DPW crews have been directed to report any findings as well. None were reported.

### **Pollution Prevention/Good Housekeeping**

For the past several years, Sudbury has been working in Committee to redesign the roadway system in the Town Center. A major part of this redesign is focusing on stormwater upgrades and a proposed purchase of land for location and installation of appropriate bmps. The 2012 Annual Town meeting will vote on this purchase. If successful, the Town will have an area available for bmp installation for the purpose of collecting and treating roadway runoff. The runoff from this mile+- area currently only sheet flows directly into waterways and wetlands.

(see Progress Toward Achieving Measurable Goals above for further items in this category)

### **Construction Site and Post-Construction Runoff Control**

For the past two years, Sudbury's 2009 Stormwater Management Bylaw and regulations have been in effect and staff has had an opportunity to see what works and what might need modification. At our 2012 Annual Town Meeting we are proposing some minor adjustments to the Stormwater Management Bylaw to make it easier to administer while not compromising the purpose of the Bylaw. The changes involve slightly increasing thresholds without compromising environmental quality to allow for focus and follow-up and larger projects.

The Conservation Commission enacted Regulations under the local Wetlands Administration Bylaw to protect Cold Water Fisheries Resources. Sudbury recognizes the importance of runoff control for the maintenance of high quality CWFR and we believe Sudbury is the first Town in the Commonwealth to enact Regulations to strengthen the MA Wetlands Protection Act Stormwater Standards to require specific bmps when a CWFR is involved. A comprehensive program in conjunction with Trout Unlimited is underway to identify all the CWFR streams in Town.

### **Activities for Next Reporting Cycle**

- Continued sampling of catch basins as prioritized by the DPW, Conservation Commission and Board of Health
- Continued operation and maintenance of drainage structures in accordance with the increasing database schedule

- Review issues associated with forming a storm water utility
- Earth Removal and Erosion Control Bylaws to be drafted by Planning Board for presentation to Town Meeting
- Work closely with the Ponds & Waterways Committee to identify areas where joint water quality goals can be achieved
- The Planning Board continues to work on new regulations for Water Resource Protection District Bylaw during 2012
- Consider annual permit and fee for discharge to MS4
- Sudbury has contracted with SuAsCo to provide the Public Participation/Public Involvement and the Public Education/Outreach components for Year 10 reporting cycle.
- Increase publicity 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
- Investigate the use and cost of less-toxic salt alternatives, such as liquid calcium magnesium acetate

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

Sincerely,

Maureen G. Valente  
Town Manager

**\*Standard Conditions in All Stormwater Permits:**

The following source control and pollution prevention measures shall be employed on the site to prevent contamination of stormwater runoff:

- Sweep pavement areas regularly, preferably with a vacuum or regenerative air sweeper
- Employ measures to control litter on the site
- Cover dumpsters and maintain them to prevent leaks
- Cover loading docks and fueling areas
- Store lawn and deicing chemicals under cover
- Apply fertilizers and pesticides sparingly to prevent washoff
- Use of slow release nitrogen and low phosphorus fertilizers is encouraged
- No fertilization or pesticide application in or near any wetland resource area
- Limit exterior washing of vehicles and equipment to locations that drain to pervious surfaces and away from storm drains
- Clean up spills immediately with absorbent materials; avoid washing of pavement
- Educate personnel on implementation of spill abatement and containment procedures
- Pump and maintain septic systems
- Use alternative deicers such as calcium chloride and magnesium chloride in lieu of sodium based deicers
- Designate areas for snow storage in upland locations where meltwater can drain onto pervious surfaces away from water resources and wells
- No coal tar based pavement sealants are to be used on any site subject to the GSMP.