

**Municipality/Organization:** Town of Stow, Highway Dept.

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**EPA NPDES Permit Number:** MA041223

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**MassDEP Transmittal Number:** W-21004712

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**Annual Report Number  
& Reporting Period:**

Year 13  
April 1, 2015 – March 31, 2016

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## NPDES PII Small MS4 General Permit Annual Report (Due: May 1, 2016)

### Part I. General Information

Contact Person: Michael Clayton

Title: Superintendent of Streets

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Telephone #: 978-897-8071

Email: highway@stow-ma.gov

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Mailing Address: 88 South Acton Road, Stow, MA 01775

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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: \_\_\_\_\_

*William Wrigley*

Printed Name: William Wrigley

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Title: Town Administrator

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Date: \_\_\_\_\_

4/27/16

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Enter your transmittal number

21004712  
Transmittal Number

Your unique Transmittal Number can be accessed online: <http://www.mass.gov/dep/counter/transmfrm.shtml> or call DEP's InfoLine at 617-338-2255 or 800-462-0444 (from 508, 781, and 978 area codes).

Massachusetts Department of Environmental Protection

### Transmittal Form for Permit Application and Payment

1. Please type or print. A separate Transmittal Form must be completed for each permit application.

2. Make your check payable to the Commonwealth of Massachusetts and mail it with a copy of this form to: DEP, P.O. Box 4062, Boston, MA 02211.

3. Three copies of this form will be needed.

Copy 1 - the original must accompany your permit application. Copy 2 must accompany your fee payment. Copy 3 should be retained for your records.

4. Both fee-paying and exempt applicants must mail a copy of this transmittal form to:

DEP  
P.O. Box 4062  
Boston, MA  
02211

\* Note:  
For BWSC Permits,  
enter the LSP.

#### A. Permit Information

BRPWMOBA

NPDES Stormwater General Permit for MS4

1. Permit Code: 7 or 8 character code from permit instructions

2. Name of Permit Category

Discharges from Municipal MS4

3. Type of Project or Activity

#### B. Applicant Information - Firm or Individual

Town of Stow

1. Name of Firm - Or, if party needing this approval is an individual enter name below:

2. Last Name of Individual

3. First Name of Individual

4. MI

P.O. Box 23

5. Street Address

Stow

MA

01775

978-897-8071

6. City/Town

7. State

8. Zip Code

9. Telephone #

10. Ext. #

Michael Clayton

11. Contact Person

highway@stow-ma.gov

12. e-mail address (optional)

#### C. Facility, Site or Individual Requiring Approval

Town of Stow

1. Name of Facility, Site Or Individual

P.O. Box 23

2. Street Address

Stow

3. City/Town

MA

01775

978-897-8071

4. State

5. Zip Code

6. Telephone #

7. Ext. #

8. DEP Facility Number (if Known)

9. Federal I.D. Number (if Known)

10. BWSC Tracking # (if Known)

#### D. Application Prepared by (if different from Section B)\*

Town of Stow

1. Name of Firm Or Individual

P.O. Box 23

2. Address

Stow

3. City/Town

MA

01775

978-897-8071

4. State

5. Zip Code

6. Telephone #

7. Ext. #

Michael Clayton

8. Contact Person

9. LSP Number (BWSC Permits only)

#### E. Permit - Project Coordination

1. Is this project subject to MEPA review?  yes  no  
If yes, enter the project's EOE file number - assigned when an Environmental Notification Form is submitted to the MEPA unit:

EOEA File Number

#### F. Amount Due

##### Special Provisions:

1.  Fee Exempt (city, town or municipal housing authority)(state agency if fee is \$100 or less).  
There are no fee exemptions for BWSC permits, regardless of applicant status.
2.  Hardship Request - payment extensions according to 310 CMR 4.04(3)(c).
3.  Alternative Schedule Project (according to 310 CMR 4.05 and 4.10).
4.  Homeowner (according to 310 CMR 4.02).

DEP Use Only

Permit No:

Rec'd Date:

Reviewer:

Check Number

Dollar Amount

Date

## **Part II. Self-Assessment**

**This year's planned activities within all of the sections of our SWMP have been met with the exception of the acquisition of materials needed to plan and follow through on the poster and photo contests for the school students. This is not a financial issue but more so a question of where to purchase materials from. Flyers were distributed to residents and business' and the Town has shown a stormwater video to the public on Stow's local axis cable channel.**

**Annual roadside trash pickup was held again in the Spring and residents volunteered time towards cleaning up the Town.**

**The Town's BOH has made the decision to not hold Hazardous Waste collection days and instead to have residents bring hazardous materials to a regional collection site in Devens, MA.**

**All outfalls have been visually screened and nothing unusual was found.**

**All BMPs for sections 3-7 have been and are completed on an annual basis.**

**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 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1-1 Revised	Stormwater flyer to residents	SUASCO/BOS	Flyer distributed to 75% of residents	Flyer distribution to 100% residents	
2-1 Revised	5 <sup>th</sup> grade lesson plan	Same	Develop, distribute, teach	No materials available. SUASCO unresponsive	
3-1 Revised	Flyer to business'	Same	Distirbute to at least 50% of business'	100% distribution to business'	
4-1 Revised	Media Campaign	Same	Info packet to media with press releases		Plan press release for 2016
5-1 Revised	Stormwater video	Same	Shown on public television	Shown Spring '15	Plan on showing on StowTV Spring '16
6-1 Revised					

**1a. Additions**


## 2. Public Involvement and Participation

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1-2 Revised	Travelling Display	SUASCO/BOS	Circulate for 3 months and display in 3 public places	Shown at Town Building, Library and Highway Dept. Spring 2015	Planned showings Spring '16, Town Building, Spring Festival and library
2-2 Revised	Poster contest for grade 5 students	Same	Poster contest held, receipts judged and displayed	No progress	
3-2 Revised	Photo contest for HS	Same	Photo contest held, receipts judged and displayed	No progress	
4-2 Revised	Stormwater summit special	Same	Advertise and hold a multi town stormwater summit	Same	
5-2 Revised	Participate in super summit; assess public awareness		Self test distributed to 75% of residents	Same	Locate or create self test for residents
Revised					

### 2a. Additions


### 3. Illicit Discharge Detection and Elimination

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1-3	Provide written instructions to cb cleaning contractors	Highway Dept	Plan written and issued annually	Done annually	
Revised					
2-3	Develop map of drainage system outfalls	Same	Map completed	Done	
Revised					
3-3	Bylaw making non stormwater discharges and dumping illegal	Planning Board	Pass bylaw at town meeting	Existing bylaw found	
Revised					
4-3	Outfall screening and plan for public reporting	Highway Dept or BOH	Publish where to report; test outfall waters	Visual screenings performed. No testing needed	Perform more screenings. Test as needed
Revised					
5-3	Hold hazardous waste collection day	BOH	Cost included in annual budget	Hazardous waste collection has been outsourced to Devens and Town will no longer do locally	
Revised					
Revised					

#### 3a. Additions


#### 4. Construction Site Stormwater Runoff Control

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1-4	Bylaw covering runoff and waste on 1-5 acre construction sites	Planning Board and Cons Comm	Subcommittee established to review existing laws and regs	Done	
Revised					
2-4	Ensure site plan reviews, consider water quality	Same	Site plan review procedure in place	Done	
Revised					
3-4	Develop means to consider reports received from public	Same	Written procedures in place	Done	
Revised					
4-4	Same as 1-4 above	Same	Subcommittee drafts bylaws	Done	
Revised					
5-4	Same as 1-4 above	Same	Bylaw presented to town meeting for approval	Done	
Revised					
Revised					

#### 4a. Additions


## 5. Post-Construction Stormwater Management in New Development and Redevelopment

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1-5 Revised	Develop program to address runoff from developments	Planning Board and Cons Comm	Appoint committee	Done	
2-5 Revised	Same	Same	Preliminary report to joint boards	No need. Bylaws and Regs in place already require permit, and conditions on permits will prevent post construction issues	
3-5 Revised	Develop BMP strategies appropriate for Stow	Same	Stow appropriate structural BMP list presented and distributed	Planning Board has adopted a list of preferable BMPs	
4-5 Revised	Regulatory changes to address runoff	Same	Proposed bylaw and rule changes proposed by committee	No need. Current bylaws and rules already cover this	
5-5 Revised	Long term maintenance of BMPs	BOS	Town Departments adopt a plan	Plan written and adopted by Highway Dept.	
Revised					

### 5a. Additions

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## 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 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1-6 Revised	Pollution prevention plan for maintenance operations	Highway Dept.	Official adoption of posting and training	Done annually	
2-6 Revised	Develop inspection procedures for structural BMPs	Same	Plan written and implemented	Done	
3-6 Revised	Formalize pollution control for streets yards and lots	Same	Plan written and implemented, annual CB cleaning and streets sweeping	Done annually	
4-6 Revised	Year round sweeping program	Same	Plan written and documented	Done	
5-6 Revised	Pollution prevention from ball field runoff	Recreation Commission	Include requirement in RFP to contractors to meet DEP standards	Done	
Revised					

### 6a. Additions


**7. BMPs for Meeting Total Maximum Daily Load (TMDL) Waste Load Allocations (WLA) <<if applicable>>**

BMP ID #	BMP Description	Responsible Dept./Person Name	Measurable Goal(s)	Progress on Goal(s) – Permit Year 13 (Reliance on non-municipal partners indicated, if any)	Planned Activities
1-7	Install structural BMPS at the outfalls to Lake Boon	Highway Dept	Survey, ID outfalls around lake	Done	
Revised					
2-7	Same	Same	Propose schedule of funding for structural BMPs	Done	
Revised					
3-7	Same	Same	Install 1/3 BMPs	Done	
Revised					
4-7	Same	Same	Install 1/3 of BMPs	Done	
Revised					
5-7	Same	Same	Complete installation of required BMPs	Done	
Revised					
Revised					

**7a. Additions**


**7b. WLA Assessment**

**Part IV. Summary of Information Collected and Analyzed**

**Part V. Program Outputs & Accomplishments (OPTIONAL)**

(Since beginning of permit coverage unless specified otherwise by a \*\*, which indicates response is for period covering April 1, 2010 through March 31, 2011)

**Programmatic**

	(Preferred Units)	Response
Stormwater management position created/staffed	(y/n)	n
Annual program budget/expenditures **	(\$)	
Total program expenditures since beginning of permit coverage	(\$)	
Funding mechanism(s) (General Fund, Enterprise, Utility, etc)		

**Education, Involvement, and Training**

Estimated number of property owners reached by education program(s)	(# or %)	100%
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.)	
Shoreline cleaned since beginning of permit coverage	(mi.)	
Household Hazardous Waste Collection Days		
▪ days sponsored **	(#)	outsourced
▪ community participation **	(# or %)	
▪ material collected **	(tons or gal)	
School curricula implemented	(y/n)	

## Legal/Regulatory

	In Place Prior to Phase II	Reviewing Existing Authorities	Drafted	Draft in Review	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

	(Preferred Units)	Response
Outfall mapping complete	(%)	100%
Estimated or actual number of outfalls	(#)	20
System-Wide mapping complete (complete storm sewer infrastructure)	(%)	
Mapping method(s)		
▪ Paper/Mylar	(%)	
▪ CADD	(%)	
▪ GIS	(%)	In progress
Outfalls inspected/screened **	(# or %)	100%
Outfalls inspected/screened (Since beginning of permit coverage)	(# or %)	100%
Illicit discharges identified **	(#)	0
Illicit discharges identified (Since beginning of permit coverage)	(#)	0
Illicit connections removed **	(#); and (est. gpd)	0
Illicit connections removed (Since beginning of permit coverage)	(#); and (est. gpd)	0
% of population on sewer	(%)	0
% of population on septic systems	(%)	100%

### Construction

	(Preferred Units)	Response
Number of construction starts (>1-acre) **	(#)	
Estimated percentage of construction starts adequately regulated for erosion and sediment control **	(%)	
Site inspections completed **	(# or %)	
Tickets/Stop work orders issued **	(# or %)	
Fines collected **	(# and \$)	
Complaints/concerns received from public **	(#)	

### Post-Development Stormwater Management

Estimated percentage of development/redevelopment projects adequately regulated for post-construction stormwater control	(%)	
Site inspections (for proper BMP installation & operation) completed **	(# or %)	
BMP maintenance required through covenants, escrow, deed restrictions, etc.	(y/n)	
Low-impact development (LID) practices permitted and encouraged	(y/n)	

### Operations and Maintenance

Average frequency of catch basin cleaning (non-commercial/non-arterial streets) **	(times/yr)	1 time/2 years
Average frequency of catch basin cleaning (commercial/arterial or other critical streets) **	(times/yr)	1 time/2 years
Qty of structures cleaned **	(#)	300/year+/-
Qty. of storm drain cleaned **	(%, LF or mi.)	
Qty. of screenings/debris removed from storm sewer infrastructure **	(lbs. or tons)	100 tons +/-
Disposal or use of screenings (landfill, POTW, compost, beneficial use, etc.) **	(location)	DPW

Basin Cleaning Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	\$3,959
• Hourly or per basin contract rate **	(\$/hr or \$ per basin)	89.98/ hour
• Disposal cost**	(\$)	
Cleaning Equipment		
• Clam shell truck(s) owned/leased	(#)	
• Vacuum truck(s) owned/leased	(#)	
• Vacuum trucks specified in contracts	(y/n)	n
• % Structures cleaned with clam shells **	(%)	
• % Structures cleaned with vactor **	(%)	

(Preferred Units) Response

Average frequency of street sweeping (non-commercial/non-arterial streets) **	(times/yr)	1/year or as needed
Average frequency of street sweeping (commercial/arterial or other critical streets) **	(times/yr)	Same
Qty. of sand/debris collected by sweeping **	(lbs. or tons)	100 tons+/-
Disposal of sweepings (landfill, POTW, compost, beneficial use, etc.) **	(location)	DPW
Annual Sweeping Costs		
• Annual budget/expenditure (labor & equipment)**	(\$)	
• Hourly or lane mile contract rate **	(\$/hr. or ln mi.)	
• Disposal cost**	(\$)	
Sweeping Equipment		
• Rotary brush street sweepers owned/leased	(#)	
• Vacuum street sweepers owned/leased	(#)	1/ owned
• Vacuum street sweepers specified in contracts	(y/n)	
• % Roads swept with rotary brush sweepers **	%	
• % Roads swept with vacuum sweepers **	%	100%

Reduction (since beginning of permit coverage) in application on public land of:  
 ("N/A" = never used; "100%" = elimination)

▪ Fertilizers	(lbs. or %)	
▪ Herbicides	(lbs. or %)	
▪ Pesticides	(lbs. or %)	
Integrated Pest Management (IPM) Practices Implemented	(y/n)	

	(Preferred Units)	Response
Average Ratio of Anti-/De-Icing products used ** (also identify chemicals and ratios used in specific areas, e.g., water supply protection areas)	% NaCl % CaCl <sub>2</sub> % MgCl <sub>2</sub> % CMA % Kac % KCl % Sand	
Pre-wetting techniques utilized **	(y/n or %)	Y 15%
Manual control spreaders used **	(y/n or %)	Y 20%
Zero-velocity spreaders used **	(y/n or %)	Y 80%
Estimated net reduction or increase in typical year salt/chemical application rate	(±lbs/ln mi. or %)	
Estimated net reduction or increase in typical year sand application rate **	(±lbs/ln mi. or %)	
% of salt/chemical pile(s) covered in storage shed(s)	(%)	100%
Storage shed(s) in design or under construction	(y/n or #)	
100% of salt/chemical pile(s) covered in storage shed(s) by May 2008	(y/n)	100%

### Water Supply Protection

Storm water outfalls to public water supplies eliminated or relocated	# or y/n	
Installed or planned treatment BMPs for public drinking water supplies and their protection areas	# or y/n	
Treatment units induce infiltration within 500-feet of a wellhead protection area	# or y/n	