

**Municipality/Organization: Town of Boxford**

**EPA NPDES Permit Number: MA 041184/MADEP**

**MaDEP Transmittal Number: W- 036290**

**Annual Report Number & Reporting Period: No. 16: May 2017-May 2018**

## **NPDES PII Small MS4 General Permit Annual Report**

### **Part I. General Information**

Contact Person: John C. Dold, PE

Title: Director of Public Works

Telephone #: (978) 352-6555

Email: Jdold@Town.boxford.ma.us

#### 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 in imprisonment for knowing violations.

Signature:



Printed Name: John C. Dold

Title: DPW Superintendent / Town Engineer

Date: April 11, 2018

## Part II. Self-Assessment

The Town of Boxford is on track to complete its obligations under the NPDES Phase II General Permit. Progress in meeting these obligations is detailed in Attachment A.

## Part III. Summary of Minimum Control Measures

### 1. Public Education and Outreach

BMP ID#	BMP Description	Responsible Person	Goals	Progress on Goals Permit Yr 16	Planned Activities
1A	Distribute nonpoint source pollution posters	DPW Director	Post in all schools and town buildings	Greenscapes flyers included in town-wide mailing to each household (approx. 2400) (see attached). Conducted educational program for 6 <sup>th</sup> graders (see attached).	“Keeping Waters Clean” educational program for 6 <sup>th</sup> graders to be conducted by the Ipswich River Watershed Association.
1B	Broadcast stormwater messages on local access cable channel	Conservation Director	Post one message every month	Maintained a community demonstration garden adjacent to Town Hall to showcase good gardening practices. Continued messages on BCATv cable.	Continue to broadcast messages, continue coordination with Ipswich River Watershed Association and the Merrimack Valley Planning Commission (MVPC) Stormwater Collaborative.
1C	Add stormwater info to Town website	Health Agent, Conservation Director, DPW Director	Update info quarterly	“Greenscapes” Info added to Conservation web page and updated. Provided drought and water conservation info on website. A link was provided to the MVPC Stormwater Collaborative website.	New Town website to incorporate similar updated elements as described in column to left.

## 2. Public Participation

BMP ID#	BMP Description	Responsible Person	Goals	Progress on Goals Permit Yr 16	Planned Activities
2A	Form Stormwater Advisory Committee (SAC)	DPW Director	Hold meetings twice per year	SAC met twice: Fall 2017-April 2018	SAC will meet numerous times over next year to coordinate town's response to new MS4 NPDES regulations.
2B	Hazardous waste collection	Recycling Committee	Hold waste collection annually	Held November 2017 (see attached)	To be held November 12, 2018
2C	Waste Oil collection and recycling	Recycling Committee	Collect from residents once per month	Collected once per month at Town recycling center	To be collected once per month at Town recycling center
2D	Implement a catch basin stenciling program	DPW Director	Stencil 25% of catch basins annually	Stenciling of all catch basins within the Urbanized Area was completed in 2008, and selected stenciling were refreshed as part of program of scheduled maintenance in 2017	Scheduled refreshing of stencils will be continued in 2018
2E	Hold a stream clean-up day	Lakes, Ponds and Streams Committee	Hold clean-up day annually	The Boxford Lakes Ponds and Streams Committee did not have a quorum in 2017, and therefore could not meet.	Pond and stream clean-ups will be coordinated between the Boxford DPW and Boxford Boy Scout volunteers.

## 3. Illicit Discharge Detection and Elimination

BMP ID#	BMP Description	Responsible Person	Goals	Progress on Goals Permit Yr 16	Planned Activities
3A	Map outfalls and receiving waters	DPW Director/Conservation Dept.	Map 25% of outfalls in urban area per year	A mobile App was developed and utilized to update the storm water infrastructure map	A summer intern will be engaged to finalize the storm water infrastructure map.

				with the help of a summer intern hired for the purpose.	
3B	Review existing bylaws and regulations	Stormwater Advisory Committee	Determine if existing bylaws & regs fulfill EPA requirements	Done. The existing bylaws and regs fulfill requirements	Done
3C	Develop illicit discharge detection & elimination plan	Stormwater Advisory Committee	Make recommendations for inclusion into proposed plan	Potential pollutant "hotspot" activities have been incorporated into a Stormwater Management Bylaw. Boxford has no industry and very little commercial development. Septic discharge is controlled by the Board of Health (see attached measures)	Will engage consultant to prepare a Storm Water Pollution Prevention Plan for Boxford DPW facilities. Will prepare NOI for new MS4 requirements including measures to detect and eliminate illicit discharges.
3D	Develop/modify general illicit discharge bylaw	Stormwater Advisory Committee	Propose recommendations for modifying plan	Potential pollutant "Hotspot" activities addressed in Stormwater Management Bylaw adopted at Spring Annual Town Meeting, May 2006.	Will identify regulatory measures for control of illicit discharges as part of new MS4 requirements.
3E	Present bylaw for town meeting action	Stormwater Advisory Committee	Make presentations for Town meeting action	Proposed Bylaw was presented and adopted at Town Meeting, May 2006.	Done. Stormwater Regulations were adopted by The Conservation Commission in 2007.

#### 4. Construction and Site Runoff Control

BMP ID#	BMP Description	Responsible Person	Goals	Progress on Goals Permit Yr 16	Planned Activities
4A	Review existing site inspection practices	Planning Dept/Conservation Dept/Building Dept	Determine if existing practices fulfill EPA requirements	Existing practices meet requirements	Done. Inter-departmental inspectional practices continue to be reviewed and improved. Sign-off procedure for Building Department to include consideration of site construction access BMPs.
4B	Develop/modify site inspection program	Planning Dept/Conservation Dept	Make recommendations for modifying program	Site inspections are incorporated into stormwater management bylaw, Title 5 permits, building permits, wetland permits	Done, will add inspection requirements to Driveway Bylaw permits.
4C	Review existing bylaws and regulations	Stormwater Advisory Committee	Determine if existing bylaws & regs fulfill EPA requirements	Existing bylaws and regulations meet existing requirements	Done
4D	Develop/modify bylaw for construction site runoff	Stormwater Advisory Committee	Propose recommendations for developing/modifying bylaw	Stormwater Management Bylaw adopted at Town Meeting, May 2006.	Done
4E	Present bylaw for town meeting action	Stormwater Advisory Committee	Make presentations for Town meeting action	Stormwater Management Bylaw adopted at Town Meeting, May 2006. Stormwater Regulations adopted in 2007.	Done.

## 5. Post Construction Runoff Control

<b>BMP ID#</b>	<b>BMP Description</b>	<b>Responsible Person</b>	<b>Goals</b>	<b>Progress on Goals Permit Yr 16</b>	<b>Planned Activities</b>
5A	Review existing site inspection practices	Planning Dept/Conservation Dept	Determine if existing practices fulfill EPA requirements	Existing practices meet requirements	Done
5B	Develop/modify inspection and maintenance practices	Planning Dept/Conservation Dept/Health Dept	Make recommendations for modifying existing practices	Inspection and maintenance practices are incorporated into proposed stormwater management bylaw, Title 5, building permit, wetland permits. Driveway post-construction review included in Occupancy Permit review	Done
5C	Review existing bylaws and regulations	Stormwater Advisory Committee	Determine if existing bylaws & regs fulfill EPA requirements	Existing bylaws and regulations meet existing requirements	Done
5D	Develop/modify bylaw for construction site runoff	Stormwater Advisory Committee	Propose recommendations for developing/modifying bylaw	Stormwater Management Bylaw adopted at Town Meeting, May 2006.	Done
5E	Present bylaw for town meeting action	Stormwater Advisory Committee	Make presentations for Town meeting action	Stormwater Management Bylaw adopted at Town Meeting, May 2006. Stormwater Management Regulations adopted by the Conservation Commission in 2007.	Done.

## 6. Municipal Good housekeeping

BMP ID#	BMP Description	Responsible Person	Goals	Progress on Goals Permit Yr 16	Planned Activities
6A	Street sweeping program	DPW Director	Sweep all streets once per year	All streets are swept once per year per contract with third party vendor. DPW sweeper will continue to maintain sensitive areas around salt shed and public water supply wells	All streets will be swept in 2018, and will be swept annually.
6B	Catch basin cleaning program	DPW Director	Clean all basins once per year	All basins cleaned once per year per contract with third party vendor and all collected materials disposed of in a secure landfill.	All basins will be cleaned in fall 2018 and annually thereafter.
6C	Perform site visits to examine existing practices at facilities	DPW Director	Target all applicable municipal facilities	Site visits of all other municipal facilities were conducted in 2017. Tight tanks at East and West Fire Stations and DPW garage were pumped multiple times in 2017.	Regular inspections of all facilities will continue in 2018.
6D	Train municipal employees at each facility	DPW Director	Target all applicable municipal facilities	Training of DPW personnel was held in 2017. Training was conducted for all DPW personnel on hazardous materials and pollutants at the DPW facility.	On-going Training of DPW personnel to be continued in 2018 .
6E	Perform follow-ups to ensure required practices are met	DPW Director	Target all applicable municipal facilities	Site visit program was continued. Building Department monitors waste disposal affidavits	Site visit program will be continued in 2018

				relating to construction debris. Boxford contracts with Clean Harbors to ensure proper reporting for oils and household hazardous materials disposal	
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## **“Keeping Water Clean” Greenscapes School Program**

*An educational experience for 6th grade students in your community.*

The goal of this program is to engage students in fun, hands-on activities that introduce them to the following concepts: the effect of the built environment on the natural water cycle, what happens to water that enters the storm drain, water conservation and how water flows in the local watershed.

Program components:

- Pre-visit classroom activity (power point) that provides students and teachers with background information about the watershed and Jeopardy game that engages students in a fun review of what they learned.
- Hands-on, interactive stations for students conducted by *Greenscapes* educators and parent volunteers.

On the day of the program:

- Program will be implemented with the fifth grade classes at one school in one day.
- Two classes will participate in the program at a time.
- The program will take about one hour per 2 classes.
- Parent volunteers and *Greenscapes* educators will lead all stations.
- Teachers will participate in managing students.

School responsibilities:

- Communicate with our educator to schedule event
- Recruit at least 6 parent volunteers to arrive one hour before the program and stay for the entire program.
- Conduct the pre-visit activity in the classroom before the day of the program.
- Provide 2 classrooms or a large enough space to hold two classes of students (i. e., gymnasium) without carpeted floors for two hours.
- Classroom teachers participate in the program, helping to manage students.

**Stormwater Advisory Committee  
Minutes of Meeting held April 11, 2018**

**Present:** Ross Povenmire, Director of Conservation  
John Dold, DPW Superintendent  
Kendell Longo, Health Agent  
Guest: Joe Cosgrove, Merrimack Valley Planning Commission

**Discussion:** A draft of the NPDES PII Small MS4 General Permit Annual Report was reviewed and approved with changes. Ross will make changes and send to John. John Dold will expand upon the description of the DPW training program in the annual report.

Access to the East Village culvert discharge point was discussed. Elimination of the policy of allowing basement sump discharges to the storm sewer system was discussed.

Joe Cosgrove discussed the Municipal Vulnerability Preparedness program. The SAC members agreed to consider joining the program. Joe will provide the application information by email.

The new MS4 program requirements were discussed. A meeting to complete the NOI submission (due September 2018) was tentatively scheduled for July 11 at 10:00 a.m.

## **“Keeping Water Clean” Greenscapes School Program**

*An educational experience for 5<sup>th</sup> grade students in your community.*

The goal of this program is to engage students in fun, hands-on activities that introduce them to the following concepts: the effect of the built environment on the natural water cycle, what happens to water that enters the storm drain, water conservation and how water flows in the local watershed.

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**Boxford Residents**

**Join Us to Get Rid of Litter!**

# **Earth Day**

**April 28, 2018**

**11:00am to 3:00pm**

**Paper Shredding 1:30-3pm**

**1 box (up to 1' x1' x2' ) of paper free per household**

## **Town-Wide Effort**

**Clean up your favorite roadside,  
play ground, ball-field, pond or stream for a  
more beautiful Boxford!**

**Drop off bags of litter at the Recycling Center  
Proceed to Town Hall for an ice cream treat**

**Trash bags available at The Boxford Town Hall  
2 weeks before event**

**The Horticultural Society of Boxford (Kelsey Arboretum)  
joins us in support of Earth Day activities this year!**

**Event Sponsors:**

**Boxford Village Garden Club  
Boxford Recycling Committee**

# Scoop it!



## Scoop the Poop- Whenever and Wherever

- **Always bring bags**
- **Always put filled bags in trash cans!**
- **Never put dog waste into a storm drain!**
- **Never leave bags of poop**

Scooping Poop is not just about  
the mess - it's about  
clean water and our health!

[www.greenscapes.org](http://www.greenscapes.org)

# What washes into the STORM DRAINS



Comes out into  
the OCEAN

## Stormwater: Why should we care?

Because it runs down into the ocean where we swim or go fishing. It is full of bacteria from organic waste, including pet waste, which causes our beaches to be closed after big rain storms. It carries trash out onto our beaches, including dangerous syringes. It picks up poisonous chemicals from our lawns and gas and oil from our vehicles.

## Our lawns: Did you know?

Watering lawns consumes huge amounts of expensive water, much of which runs off, carrying herbicides, pesticides and fertilizers to water supplies, rivers and oceans. Our children and pets pick up these poisons on their little bare feet.

## Here's how you can help:

- **Save money and water only when your lawn is thirsty.** Frequent, light watering discourages root growth. Encourage deep root growth by watering weekly or use a rain gauge. Water only in the morning to reduce evaporation.
- **Leave grass clippings on the lawn as natural mulch and fertilizer.**
- **Sharpen mower blades for healthy grass.**
- **Keep your grass at least 3" tall for deeper roots.**
- **Switch from a chemically-treated lawn to natural turf.** Approximately 80% of synthetic lawn products wash into our rivers, lakes and ocean.



## Is your landscaper a Greenscaper?

You'll know your landscaping company is a Greenscaper if it...

- ✓ Tests soil to determine best lawn treatments and schedules
- ✓ Gives you its list of products safe for your lawn, family & pets
- ✓ Applies products when needed and not on a fixed schedule
- ✓ Sets your sprinkler system to run only when needed

### Then..

- ✓ Your family and pets will be safer from dangerous chemicals
- ✓ Your lawn will be healthier
- ✓ Your beaches and ocean will be less polluted from runoff of chemicals and wasted water
- ✓ **YOU WILL SAVE MONEY** on chemicals, products and water!

greenScapes  
 20000 15th Avenue, Suite 100  
 Irvine, CA 92618  
 949.453.8888  
 www.greenscapes.org  
 design: mary jo mitchell



## Did you know? Unscoped poop pollutes our water!

Every time your dog or cat goes to the bathroom in your yard...

...it leaves behind a little mess that can pollute our water.

...and that mess can wash into our waterways.

...and that mess can pollute our water.

...and that mess can pollute our water.

## All dogs pollute, even small dogs! Consider this:

...a small dog can pollute a lot of water.

...and that mess can pollute our water.

...and that mess can pollute our water.

...and that mess can pollute our water.

greenScapes [www.greenscapes.org](http://www.greenscapes.org)

...and that mess can pollute our water.

BOXFORD - MIDDLETON - TOPSFIELD RESIDENTS  
[Households Only - No Businesses]



# HOUSEHOLD HAZARDOUS WASTE COLLECTION DAY

**When:** Saturday, October 28, 2017  
**Where:** MASCONOMET REGIONAL HIGH SCHOOL (Parking Lot)  
**Time:** 9:00 a.m. to \*1:00 p.m. Proof of residency required  
\*collection will be ended sooner if funds run out.

**WHAT TO BRING:** Household Hazardous Waste no longer needed, up to 25 gallons of liquid chemicals or 25 pounds of dry chemicals, kept in original, sealed and labeled container with screw cap if possible, i.e.:

- paints: oil-based only, consolidate
- gas cylinders- propane\*\*, helium\*\*
- cleaners: oven, toilet bowl, drain
- corrosives, degreasers
- polishes: furniture, floor
- resins & adhesives
- poisons, pesticides, insecticides
- herbicides, fertilizers, fungicides
- mercury: fluorescent bulbs, thermometers
- waste fuels: kerosene, gasoline
- spot removers
- varnish strippers
- solvents, stains
- fire extinguishers\*\*
- batteries: car\*\*, rechargeable
- photo chemicals
- chemistry kits
- swimming pool chemicals
- anti-freeze
- auto products

**\*\*charges will apply**

## WHAT NOT TO BRING:

\*waste motor oil  
latex paint: pop lid, let  
dry, throw away  
tires  
smoke detectors  
radioactive wastes

pathological wastes  
asbestos  
PCBs  
EMPTY containers  
commercial wastes  
alkaline batteries

ammunition  
any unknown chemicals  
light ballasts  
capacitors  
sharps/needles

**SPONSORED BY:** the Towns of Boxford, Middleton, Topsfield and the League of Women Voters of Topsfield-Boxford-Middleton.

**INQUIRIES:** 978-887-6000 X 172

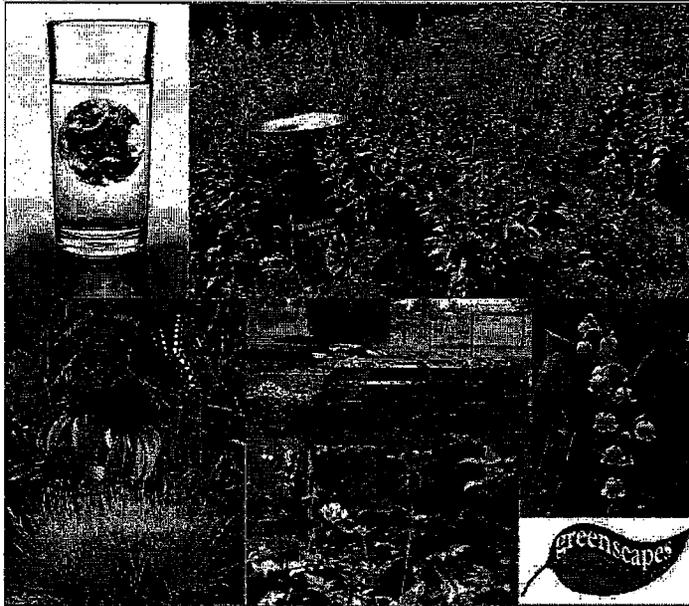
**\*REMINDER:** Waste motor oil is collected on a regular basis at the Boxford and Middleton Waste Oil Facilities. Call for scheduled dates and times.



# Andover Seed Library Lecture Series

## Greenscapes 101

### Create a Healthier Landscape



Learn how to transform your lawn and gardens into healthy "Greenscapes."

- Save on water bills
- Nurture a safe & healthy environment
- Create habitat for wildlife
- Reduce maintenance
- Reduce runoff pollution
- Protect your community's water resources

**Thursday, March 8 at 7:00pm**

**In Memorial Hall**

**Sign up at [www.mhl.org/calendar](http://www.mhl.org/calendar).**



Presenter 'Rusty' Russell is Merrimack River Watershed Council's executive director. He has taught in the environmental policy and planning program at Tufts University, and worked as a Journalist and corporate lawyer. He is a certified planner.

The Greenscapes North Shore Coalition is a collaborative of municipalities and partner organizations, focusing on stormwater, water conservation, and other watershed-related issues.

A collaboration of the Andover Municipal Services Department, Greenscapes North Shore & Andover Seed Library at MHL.

# Scoop it!



## Scoop the Poop— Whenever and Wherever

...even in your own yard,  
...even in the woods or remote locations,

...even in the snow,  
...even if you have a small dog.

- **Always bring bags**  
Be prepared, bring more than one.
- **Always put filled bags in  
trash cans!**  
Even bio-degradable bags.
- **Never put dog waste into a  
storm drain!**  
Storm drains flow directly into our local  
waters — they are not connected to the  
sanitary sewer.
- **Never leave bags of poop**  
by the side of the road, in bushes, or  
lying around.

**Scooping Poop is not just about  
the mess — it's about  
clean water and our health!**

[www.greenskapes.org](http://www.greenskapes.org)

SENT TO 2400 HOUSEHOLDS IN BOXFORD

## Ross Povenmire

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**From:** Kristen Grubbs <kgrubbs@ipswichriver.org>  
**Sent:** Wednesday, March 07, 2018 9:50 AM  
**To:** Kristen Grubbs  
**Subject:** Greenscapes North Shore Coalition - Updates  
**Attachments:** Greenscapes 101 - Andover - 3.8.18.pdf

Dear Ipswich River Watershed municipal Greenscapes North Shore Coalition members,

Greenscapes has been busy in FY'18.

The Keeping Water Clean Program continues to be a big hit with schools! So far Greenscapes has worked with 1,323 students in 16 different schools. Multiple communities in the North Shore are now bringing the program to more than one elementary school. Many more KWC programs are scheduled for the remainder of FY'18. Many of you have been able to attend, which has been great. The parent volunteers and teachers (and even one principal) who help out with the programs have been amazing. Many of the schools post our Greenscapes information on their school websites and/or send information home with the kids so our reach is even greater and includes adults.

Here are a couple blogs and photos we have posted about recent programs:

<https://www.ipswichriver.org/news/greenscapes-stems-topsfield/>

<https://www.ipswichriver.org/news/precious-resources-boxford/>

The single-page pet waste "Scoop It" flyer has been delivered to your town and has been sent out electronically, mailed out with dog licenses or other mailings, and added to town websites. Let us know if you need anything else in this arena.

The Greenscapes website continues to be updated! With the new look and constant optimization, everything [greenscapes.org](https://www.greenscapes.org) has to offer can be accessed more quickly. Two stormwater PSAs can be viewed online and can be sent to your local public access TV station for additional coverage.

The Public Presentations have continued to draw people in with upcoming presentations in Andover, Ipswich, Peabody, and the tri-town Grow Spring Expo in Topsfield on April 7th. Please feel free to extend invitations to these public events to your community. Just this week, Rusty Russell from Merrimack River Watershed Council will be presenting "Greenscapes 101" at the [Andover Public Library – Thursday, March 8<sup>th</sup>, 7pm](#). See flyer attached and info below. Please help spread the word!

**Greenscapes 101: Create a Healthier Landscape**

Learn how to transform your lawn and gardens into "Greenscapes"! Established Greenscapes have plants and turf with deep roots, which are naturally resistant to drought, weeds, and disease. Greenscapes are good for you, your wallet and your environment in many ways. By following the recommendations in this presentation, you will:

- Save money on your water bills;
- Nurture a safe environment for your family;
- Create more habitat for wildlife;
- Enjoy more free time by doing less landscape maintenance;
- Reduce stormwater pollution; and
- Protect your community's water resources.

FY19 is shaping up to be another great year! The Greenscapes municipal fee will remain at \$2,500. As the new MS4 permit goes into effect in FY' 19, we will be following up with you about additional deliverables to assist in completing your Notice of Intent.

We want to let you know that Lori Watson, our North Shore Greenscapes coordinator, has moved on to a new position. If your community would like to request a presentation, an additional school program, or has need of any support on water issues, please feel free to contact me.

Best wishes and thanks again for your Greenscapes partnership,  
Kristen

#### **Greenscapes North Shore Coalition**

The Greenscapes North Shore Coalition is a collaborative of municipalities and partner organizations, focusing on stormwater, water conservation, and other watershed-related issues. Since its founding in 2007, Greenscapes partners have delivered outreach and education services across the North Shore. Partner organizations include Ipswich River Watershed Association, Eight Towns and the Great Marsh, Salem Sound Coastwatch, and the Merrimack River Watershed Council. There are currently 19 municipal members of Greenscapes North Shore.

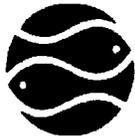
Visit [www.greenscapes.org](http://www.greenscapes.org) for more information.

Kristen C. Grubbs  
Environmental Planner



**IPSWICH RIVER**  
WATERSHED ASSOCIATION

P.O. Box 576  
Ipswich, MA 01938  
[www.ipswichriver.org](http://www.ipswichriver.org)  
978-412-8200  
[kgrubbs@ipswichriver.org](mailto:kgrubbs@ipswichriver.org)



**IPSWICH RIVER  
WATERSHED ASSOCIATION**  
*The Voice of the River*



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## Precious Resources in Boxford

📅 December 8, 2017   📁 [Events / Fun / Greenscapes / Make a Difference / News](#)

👤 Rachel Schneider



Tuesday, November 28th marked my second Keeping Water Clean program at Spofford Pond Elementary School in Boxford. At the map station, we show the students how their town lies in the watershed: Boxford's school sits right on the border between the Ipswich and Parker River watersheds. Pointing out the elevations markers on the map, we explain to the kids how the undulations of the land shape watersheds. Using our groundwater model, we show them how rain moves over, through and under the ground.

It was interesting to think that rainfall at the school would be moving down two slopes, with some flowing into the Parker watershed and some into the Ipswich. It was also a great example of how the contamination of one watershed can impact another. Using our groundwater model, with dye representing pollution, we can illustrate how contaminated water moves through a watershed. By dropping dye down into the artesian wells, students see how quickly water is carried through aquifers. Boxford relies entirely on wells, including the school, so the issues of their being compromised or running dry is close to home.



Feeling inspired by the legislative participation by another group of students in the watershed, I spoke to the students about how laws and regulations help protect our drinking water. Using the groundwater model to illustrate the point again, I showed how a damaged or ill-maintained underground storage tank (UST) can pollute groundwater and how that pollution can travel to other areas of a

### Support the River

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### EVENTS CALENDAR

< April 2018 >						
M	T	W	T	F	S	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
					...	
23	24	25	26	27	28	29
		*	**		*	*
30						

[See all Events](#)



watershed like rivers, lakes and wells. To prevent this from happening the EPA has regulations on how UST's must be installed, maintained and inspected.

The Keeping Water Clean program not only prompts students (and parents) to think about their water, but hopefully it inspires in them a sense of power. It is in their reach to demand water be treated as the valuable resource it is, and ensure that it is protected.



Share this:



← The Great Marsh Coastal Adaptation Plan Is Now Online

Andover Gets Water Wise →

CONTACT

Located at:  
143 County Road, Ipswich, MA

Mailing address:  
P.O. Box 576, Ipswich, MA 01938

Phone: 978-412-8200

Fax: 978-412-9100

Email us >

Document Library

ABOUT US

We work to protect nature and make sure that there is enough clean water for people, fish and wildlife, today and for our children and theirs.



RECENT NEWS

Working With Local Communities for the Future April 10, 2018

Miles River Watch April 9, 2018

Getting Kids Excited About Nature April 2, 2018

RiverWatch Highlights: Thunder Bridge March 30, 2018

RiverWatch Highlight: Mortalo Landing March 22, 2018

SEARCH

CONNECT



Review This Charity on GreatNonprofits

15 reviews.

Average rating:



Read reviews about Ipswich River Watershed Association inc

Volunteer. Donate. Review.

RIVER FORUM

Log In

Username:

Password:



GREENSCAPES



10/31/17

Dear Parents,

Your child enjoyed an interactive in-school program today called "Keeping Water Clean". They learned how the built environment affects the natural water cycle, what happens to water when it enters a storm drain, how water flows through the local watershed, and how water can be cleaned and conserved.

Your community funded this science and technology program, brought to you by the **Greenscapes North Shore Coalition**, a partnership of Salem Sound Coastwatch, Eight Towns and the Great Marsh, and the Ipswich River Watershed Association. With help from parent volunteers, your student rotated through 6 stations.

**Questions You Can Ask Your Child:**

1. **What is a watershed?**

*Hint:* Students studied a map of their community and located important features in the watershed.

2. **How does pollution travel under the ground?**

*Hint:* Using a sand and gravel model and colored dye, they saw how contaminants travel with the groundwater and how droughts or overuse can deplete our groundwater supply.

3. **How does water flow over the land carrying pollution with it?**

*Hint:* Using a spray bottle to simulate rainfall, students saw what happens when water doesn't have a chance to enter the groundwater and flows over the surface, where it picks up pollutants.

4. **Where does our dirty water go?**

*Hint:* Students learned about wastewater treatment plants and septic systems.

5. **Where does our drinking water come from?**

*Hint:* With a comparative water taste test, students are asked to consider the impact of their choices.

6. **How does permeable pavement work?**

*Hint:* After watching two short videos, they discussed several practical ways to help capture stormwater runoff and allow it to percolate into the ground.

Please be sure to ask your son/daughter about the program. If your child enjoyed this program, please thank your principal. This program was funded by your town.

We couldn't have done this without the help of our enthusiastic parent volunteers! Thank you.

Sincerely,

*Lori Watson*

Lori Watson  
Greenscapes Coordinator  
Salem Sound Coastwatch  
(978) 741-7900

P.S. The video that we showed during the program can be found on our website at:  
<http://www.salemsound.org/stormwater.htm>

## **"Keeping Water Clean" Greenscapes School Program**

*An educational experience for 6th grade students in your community.*

The goal of this program is to engage students in fun, hands-on activities that introduce them to the following concepts: the effect of the built environment on the natural water cycle, what happens to water that enters the storm drain, water conservation and how water flows in the local watershed.

Program components:

- Pre-visit classroom activity (power point) that provides students and teachers with background information about the watershed and Jeopardy game that engages students in a fun review of what they learned.
- Hands-on, interactive stations for students conducted by *Greenscapes* educators and parent volunteers.

On the day of the program:

- Program will be implemented with the fifth grade classes at one school in one day.
- Two classes will participate in the program at a time.
- The program will take about one hour per 2 classes.
- Parent volunteers and *Greenscapes* educators will lead all stations.
- Teachers will participate in managing students.

School responsibilities:

- Communicate with our educator to schedule event
- Recruit at least 6 parent volunteers to arrive one hour before the program and stay for the entire program.
- Conduct the pre-visit activity in the classroom before the day of the program.
- Provide 2 classrooms or a large enough space to hold two classes of students (i. e., gymnasium) without carpeted floors for two hours.
- Classroom teachers participate in the program, helping to manage students.