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FROM: Kristie Rabasca, P.E., Integrated Environmental Engineering, Inc.

DATE: December 20, 2013

SUBJECT: **REVISED PUBLIC EDUCATION TARGETED BEST MANAGEMENT PRACTICES  
PLAN FOR THE YORK COUNTY MS4s  
2013-2018 GENERAL PERMIT**

On behalf of the Towns of York, Kittery, Eliot, Berwick, and South Berwick (York County MS4s), Integrated Environmental Engineering, Inc. is submitting this Revised Targeted Best Management Practices (BMP) Plan for Public Education to address your comments dated November 27, 2013. The Plan is designed to fulfill the requirements of Part IV, Section H.1.a.iii – *Targeted BMP Adoption* of the General Permit for the Discharge of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4s).

The Towns of Kittery, Eliot, South Berwick and Berwick have been regulated under the MS4 program since 2003, and have been implementing a Targeted BMP Program around Yardscaping principles since they became regulated. The Town of York became regulated under this program in July 2013, and has joined the regional group. The York County MS4s will continue to focus on Yardscaping concepts to fulfill the Targeted BMP requirements throughout the 2013-2018 General Permit.

Yardscaping is a program designed to encourage homeowners to manage their yards (turf and other landscaped areas) in an environmentally friendly way. The program began with the Friends of Casco Bay “Bayscapers” program, and expanded in 2003 when many MS4s and the Maine State Board of Pesticide adopted the program. The original Statewide Yardscaping program consisted of “six easy steps to creating & maintaining healthy landscapes through ecologically sound practices that minimize reliance on water, fertilizer and pesticides”. The Towns of Kittery, Eliot, Berwick and South Berwick will continue to promote the concepts using the phrasing of Yardscaping. The Town of York, will promote similar concepts using a “Lawns to Lobsters” theme, which they have been using in other areas of Town.



The General Permit requires that specific elements of the Targeted BMP Plan be described. The following is a description of each required element of the program.

The overall goal of the program is to get 15% of the targeted audience to adopt a Yardscaping BMP that they have not previously used.

a) BMP to be adopted

One or more of the YardScaping Program’s “Six easy steps for a safe and healthy lawn”

1. Mow High
2. Let the Clippings Lie
3. Reduce/Eliminate Fertilizer use
4. Got weeds: Reduce herbicide use: Aerate annually and power rake
5. Got Bugs? Reduce Pesticide Use
6. Water wisely

One or more of the Lawn’s to Lobsters 10 things you can do to have a beautiful lawn without harming the ocean:

1. Test your soil first
2. Size matters (less lawn)
3. Read the (fertilizer) label
4. Don’t fertilize when it’s rainy
5. Taller grass needs less water
6. Clover is good
7. Don’t broadcast herbicides
8. Scoop (pet waste)
9. Stop the flow (landscape techniques)
10. Don’t wash away unused fertilizer (sweep it up)

The communities will provide a focus on reducing fertilizer use and pesticide use.

b) Target Audience

The target audience will be college graduates aged 35–55 living in the urbanized areas.

c) Outreach Tool to be Used

We will use a combination of tools in providing outreach to our target audience:

- 1) Yardscaping Workshops
- 2) Booths and informational handouts at Festivals and Point of Sale locations
- 3) Capitalizing on additional awareness messaging required by the public awareness plan

Each YardScaping Workshop will consist of a PowerPoint presentation, a site walk on designated property (if possible - locations with areas available for site walks will be selected over locations that do not have areas available for site walks), distribution of written YardScaping literature (e.g., BMP Information Sheets from YardScaping, University of Maine Cooperative Extension Service, and ThinkBlue websites), and distribution of reminder “prompts” such as magnets, totes or rain gauges.

At Festivals, a booth or table will be set up and handouts and informational articles will be provided by a person knowledgeable about Yardscaping concepts. Though not many people filled out surveys at booths, attendants stated that passers by were willing to take handouts and were engaged in conversation about the issues.

Point of sale locations will be provided with one or two informational handouts only, and will not be staffed. The various stores may have specific requirements for how information can be displayed, so each store will be approached in advance to determine exactly what can be displayed and how.

In addition to the more in-depth informational Yardscaping Workshops, the York County MS4s will incorporate Yardscaping concepts into the awareness messaging that will be conducted as part of the public awareness plan. For example, some of the posters, brochures or broadcast messaging will include links to the Yardscaping website and information on Yardscaping concepts.

#### d) Message

The message that will be used to promote the Targeted BMP will be: “YardScaping; Six Easy Steps to a safe and healthy lawn for kids, pets, and the environment.” (Kittery, Berwick, South Berwick and Eliot) and “Lawn’s to Lobsters 10 things you can do to have a beautiful lawn without harming the ocean” (York).

At each event or location, the Yardscaping.org website or lawnstolobsters.org website and the York County MS4 Facebook page will be promoted to provide interested individuals with a place to obtain additional information.

#### e) Distribution System

YardScaping Workshops will be conducted through Adult Education programs and through accessing groups such as Rotary Clubs and Chambers of Commerce that already have regularly scheduled meetings with target audience members. These were proven to be most successfully attended programs (highest participation rates) during the 2008-2013 permit cycle.

Booths will be set up at local festivals such as the York Harvestfest and Marketfest, the South Berwick Strawberry Festival, Eliot Festival Days, Earth Day Celebrations, and at Nurseries during the spring when attendance will be high for individuals. Booths will be staffed with a person knowledgeable in the program in order to engage attendees in informed discussions.

A listing of available organizations for workshops, local festivals (for booths) and landscaping point of sale locations is contained in Attachment 1. Organizations will be contacted in advance to schedule outreach.

Primary advertising will be through the entity who is hosting the program. In addition, The York County MS4s have a Facebook page which will be used in addition to Town newsletters, community TV, flyers and posters, and flyers through school systems where teachers are focusing on similar environmental programs.

#### f) Timeline

The following provides an overview of the Timeline for implementing the program:

##### Permit Year 1:

- Develop Plan
- Refine materials to be used (update powerpoint, review and select informative handouts for booths and workshops, obtain new prompts, work with landscaping retailers to develop point of sale handouts)
- Implement two workshops (at least one through adult education) and three booths and two points of sale

##### Permit Year 2:

- Implement five workshops (at least one through adult education) and three booths and three points of sale
- Follow-up from Permit Year 1 workshop and booths/points of sale

##### Permit Year 3:

- Cursory evaluation of program
- Implement four workshops (at least one through adult education) and three booths and three points of sale
- Follow-up from Permit Year 2 workshop and booths/points of sale

##### Permit Year 4:

- Implement five workshops (at least one through adult education) and three booths and three points of sale

- Follow-up from Permit Year 3 workshop and booths/points of sale

Permit Year 5:

- Final evaluation of program
- Implement four workshops (at least one through adult education) and three booths and two points of sale
- Follow-up from Permit Year 4 workshop and booths/points of sale.

g) Responsible Parties

Eliot – Kate Pelletier, Planning Assistant  
South Berwick – Jon St. Pierre, Public Works Director  
Berwick – John Stoll, Town Planner  
Kittery – Jessa Kellogg, Stormwater Coordinator  
York – Leslie Hinz, Stormwater Manager

h) Impact Evaluation Protocol

Surveys will be provided at the end of the workshop to evaluate how informative the workshop was, and to determine whether the attendee is inclined to change their behavior based on the information received.

Surveys will also be handed out at the booths and contact information for follow-up surveys will be obtained.

Attachment 2 contains a copy of the survey to be given at the end of each workshop. This survey will be used to assess whether individuals currently apply fertilizers and/or pesticides, whether they intend to reduce their fertilizer and pesticide use, and whether they will adopt one or more of the six YardScaping steps. A slightly modified survey will be sent in late fall via telephone, email, or regular mail to assess long-term behavior change. A revised survey will be developed for the Lawns to Lobsters BMPs.

Follow-up mail/telephone/email surveys will be conducted in late fall. For attendees at Adult Ed workshops, the end of workshop survey informs the attendee that we will be contacting them and asks for a contact mechanism (email or phone). For workshops associated with organizations and clubs that are already formed, the organizers will be asked up front when scheduling the workshop if an email list could be developed and used to help obtain the follow-up survey information.

Handouts/flyers for point of sale will be numbered to assess how many were taken by customers.



The program's success at changing behavior will be based on the success of getting people to adopt a BMP they have not yet implemented.

i) Plan Modification Protocol

The plan set forth reflects the minimum activities of the York County MS4s. Any adjustments to the plan due to ineffectiveness or the development of more promising measures will be approved by the York County MS4s and their responsible parties and then submitted in writing to the Maine DEP. If no response is received within one month of submitting the plan modifications, the York County MS4s will move forward with the new plan.

j) Targeted Level of Change

As described previously, the target audience is college educated adults, aged 35-55, living in the urbanized areas of the communities. The urbanized area adult (aged 35-55) population of all five communities is 7,153 people (2010 Census). College educated people in the towns range from 26% to 50% of the adult population; so that college educated adults within the urbanized area total 2,950 people. This BMP Plan focuses on getting 15% of the target audience to adopt a new BMP in the long term (442 people).



**ATTACHMENT 1**

**LIST OF VENUES FOR WORKSHOPS, BOOTHS AND POINT OF SALE**

<b>Potential Existing Organizations to approach for Workshops</b>	<b>Town</b>
York Land Trust	York
Kittery Land Trust	Kittery
Great Works River Land Trust	Berwick and South Berwick
Greater York Chamber of Commerce	Kittery, Eliot, South Berwick, York
Greater Somersworth Chamber of Commerce	Berwick
Kittery Chamber of Commerce	Eliot
Eliot Chamber of Commerce	Eliot
Eliot Garden Club	Eliot
Lettuce B Community Garden	Kittery
Harbourside Garden Club	Kittery
Great Cove Boat Club	Eliot
Old York Garden Club	York
Piscataqua Garden Club	York
American Legion	York
American Legion	Kittery
Rotary Club of Kittery	Kittery
Rotary Club of Berwick	Berwick
Rotary Club of York	York
Marshwood Adult and Community Education	Eliot and South Berwick
Kittery Adult Education	Kittery
York Adult Education	York

<b>Potential Festivals for Manned Booths</b>	<b>Town</b>
Market fest	York
Harvest fest	York
Summer Farmers Markets	York
Winter Farmers Market	York
Block Party	Kittery
Dog Dayz	Eliot





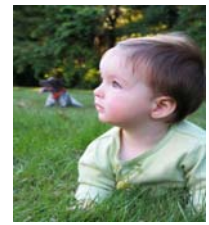
<b>Potential Point of Sale Locations</b>	<b>Town</b>
Coastal Landscape and Garden Center	York
Eldredge Lumber and Hardware (sells organic plants, fertilizer honey, seeds, etc.)	York
Salmon Falls Nursery	South Berwick/Berwick
Agway (Rt 236)	Eliot
Piscataqua Landscaping	Eliot
Ace Hardware	Kittery
Touching Earth (Plant sales)	Kittery



**ATTACHMENT 2**  
**END OF WORKSHOP SURVEY**



# “Six Easy Steps” Survey – End of Workshop



**Thank you for attending a YardScaping Workshop!**

**By turning in this survey, your name will be entered into a drawing for a great prize!**

Date of presentation \_\_\_\_\_  
Name \_\_\_\_\_  
Street Address \_\_\_\_\_  
Town/zip \_\_\_\_\_

**Your feedback is critical to improving and evaluating this program. We will be contacting you in about three months for a follow-up survey. Please indicate the best method in which to reach you:**

Telephone \_\_\_\_\_ - \_\_\_\_\_       email \_\_\_\_\_@\_\_\_\_\_       Regular mail

**Do you:**       Carry out your own lawn care?       Have a landscaper or lawn care company?

**Do you presently use PESTICIDES on your lawn?**      Yes      No

**As a result of this workshop, what is the likelihood that you will reduce or eliminate your use of PESTICIDES in the future?**

1 (not likely)      2      3      4 (very likely)

**Do you presently use FERTILIZERS on your lawn?**      Yes      No

**As a result of this workshop, what is the likelihood that you will reduce or eliminate your use of FERTILIZERS in the future?**

1 (not likely)      2      3      4 (very likely)

**Please check all that apply:**

Already Do      Plan To      Don't Plan To

### 1) Mow High – with a sharp blade!

Set mower to a height of 3 inches.                 

Benefits include:

Drought resistance       reduced runoff       higher pest tolerance       increased shading to weeds

### 2) Let the clippings lie

Leave grass clippings on the lawn.                 

Benefits include:       They are free fertilizer       Lower phosphate levels in our surrounding waters

### 3) Reduce/eliminate fertilizer use

Is your lawn less than 10 years old?      Yes      No

Have your soil tested for N-P-K (one time)                 

*\* Please continue on the other side \**

Please check all that apply:

Already Do      Plan To      Don't Plan To

**Reduce/eliminate fertilizer use (continued)**

- Use a Nitrogen-only fertilizer, only if needed                    
Apply once in late August or September.                    
Apply only the amount needed (based on bag directions and size of lawn)

Benefits include:       Lower nitrogen and phosphorus levels in surrounding waters and drinking water

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**4) Got weeds?**

- Reduce use of herbicides by overseeding                    
Be tolerant of a few weeds

Benefits include:       Safer for children and pets       Safer for aquatic life

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**5) Got Bugs?**

- Overseed                    
Use a variety of grass species.                    
Use insect and disease-resistant grasses                    
Use beneficial nematodes                    
Be tolerant of a few bugs

Benefits include:       Safer for children and pets       Safer for beneficial bugs and other critters

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**6) Water Wisely**

- Use a rain gauge to ensure you don't over water.                    
Water slowly and deeply (only 1-1/2" per week is needed)                    
Water between the hours of 6 a.m. and 10 a.m.                    
Install a rain barrel to capture rainwater for later use.                    
Consider not watering your lawn at all

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Which one of the following carries the greatest amount of pollutants to our local waterways?

Industry       Stormwater

As a result of this workshop, do you care more about water quality?      Yes      No

Do you think your actions can affect water quality?  
(in either good or bad ways?)      Yes      No

Are you happy with the quality of your lawn?      Yes      No

Would you like to spend less time caring for your lawn?      Yes      No

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**Additional comments**

If you wouldn't mind being quoted in a press release, please indicate (check the box and initial):  \_\_\_\_ initials  
Please note: A group photo of this Workshop may be submitted to local media (newspapers/newsletters/webpages) by means of a press release. If you **DO NOT** wish to have your photo used in this way, please speak with *Amy Stratford* **BEFORE** leaving the Workshop.

*Thank you for completing this survey!!*