

Social Marketing Plan for Lawn Fertilizer Use Behavior Change
Midshore Riverkeeper Conservancy, Inc
November, 2014

1. Background/Campaign Purpose:

An influx of excessive nutrients is affecting water quality in the streams and rivers of Maryland's Eastern Shore. One contributor to these excess nutrients is lawn fertilizer. There are over 3.5 million acres of turf receiving 214 million pounds of nitrogen in the Chesapeake Bay watershed. Studies suggest that the majority of homeowners fertilize their lawns, contributing to these excess levels of nutrients in our waterways. Midshore Riverkeeper Conservancy (MRC) has conducted formative research on the attitudes and behaviors associated with home lawn maintenance and fertilizer use to identify the barriers and benefits associated with changing that behavior in Talbot and Queen Anne's (QA's) Counties on the Eastern Shore of Maryland. Using this research, MRC created messages and materials that were tested on focus groups and through in depth interviews and surveys. MRC will translate the results of that research into clear messages to be implemented in Phase II of the behavior change campaign.

The intended goal of the behavior change campaign is to engage 10 percent of our target audience in reducing their lawn fertilizer use by 50 percent or more within two years of the campaign launch. Ultimately, MRC hopes to leverage the results of this campaign by partnering with other environmental organizations in the Bay area to achieve a much broader impact. The primary findings of previous research are that homeowners apply lawn fertilizer in order to maintain a lawn that conforms to neighborhood norms. In a survey done by the Maine Lawn Care Behavior Change campaign, "homeowners claimed that a good neighbor maintains a lush, green lawn," and a lush green lawn requires applying ample fertilizer (University of Maine, Cooperative Extension.).

2. Situation analysis: ("Strengths, Weaknesses, Opportunities, and Threats")

MRC's strengths stem from six years of experience as advocates for river protection and restoration. We lobbied for Maryland's first statewide lawn fertilizer legislation and we helped develop the regulations in support of the new *Lawn Fertilizer Use Act of 2011*. Our Project Director, Kristin Junkin, has fifteen years of prior experience as the owner of a market research company in Washington, DC. This company market tested and produced film and print materials for commercial advertising campaigns, developed federal government public service media campaigns, and developed and tested social marketing campaigns on health and transportation safety issues. Other strengths include MRC's strong and active community relationships, MRC's 1200 members and 1000 volunteers, and MRC's partnerships with homeowners associations (HOAs), master gardener groups, and the University of Maryland (UMD) Extension Service. In addition, MRC has multiple staff members with advance science degrees and science-based expertise that has supported our efforts throughout our lawn fertilizer use awareness and behavior change initiatives.

MRC's weaknesses are:

- limited funds to launch a behavior change campaign.
- the target audience members' likely perception that a campaign led by an environmental organization is biased. Focus group participants emphasized that they wanted "truthful, scientific evidence," but they want it from an unbiased source, such as a government agency, or a

university. (Focus group participants failed to recognize that the lawn fertilizer management plans they follow are also biased – companies that sell fertilizer are telling homeowners to over apply.) To overcome this weakness, MRC will emphasize our relationship with trusted third-party messengers such as the UMD Extension Service and UMD scientists to combat the perception that our message and data are biased. The fact that MRC has developed a reputation of working collaboratively with the agricultural community may also help mitigate this perception.

MRC is prepared to take advantage of numerous opportunities: existing broad environmental awareness in the two target counties, public health concerns related to pesticides and chemicals in lawn fertilizer, cost savings that can be achieved by homeowners when they reduce use of lawn fertilizer, and the UMD Extension Service's complementary lawn fertilizer campaign. MRC is also benefitting from the fact that this behavior change campaign is taking place in conjunction with public education regarding the state's Lawn Fertilizer Law that came into effect October 2013.

Another key opportunity that emerged from our research is that active fertilizers view themselves as industrious, smart, and virtuous. Many are willing to consider alternatives, but our outreach will attempt to appeal to their positive sense of self. (For example, a tag line in one of our ads, "Don't be Duped," plays on the desire to be smart and "in the know.")

The threats to the lawn fertilizer campaign are:

- potential challenges from landscaping companies or lawn fertilizer manufacturers that could incur financial losses,
- some HOAs have mandatory fertilizing requirements. MRC will have to attempt to minimize this conflict.
- the cultural norms that equate a lush green lawn with beauty, a homeowner's pride, and property value
- pejorative view by some active fertilizers that non-fertilizers are lazy or stupid
- tendency for people to blame agriculture for water pollution problems, and think that "my little bit of fertilizer on my one lawn doesn't make a difference"

MRC has conducted a literature review of previous behavior change campaigns associated with lawn care and fertilizer application. When creating our social marketing plan, MRC has taken into account the successes and failures of previous behavior change campaigns. See attached Lawn Fertilizer Behavior Literature Review for further information.

3. Primary Target Analysis:

The primary target audience is the residents of Talbot and Queen Anne's Counties who fertilize their lawns. A Center for Watershed Protection survey revealed that the demographic most likely to fertilize multiple times a year are older, college educated, homeowners who make an annual income of \$50,000 or higher (A Survey of Residential Nutrient Behavior in the Chesapeake Bay, 2000, Center for Watershed Protection). A Lawn Fertilizer Behavior Change Campaign conducted in Maine found the same results (University of Maine, Cooperative Extension.) The residents of Talbot and Queen Anne's Counties reflect these demographics and MRC's own research suggested similar trends. MRC has identified homeowner's associations, garden clubs, and waterfront property owners as sub-groups of the target audience to address.

A green lawn was a high priority with the homeowners in the target audience, and there was a strong sense of personal pride and satisfaction in having a green lawn. MRC's findings also suggest that there was a lack of accurate knowledge about the impacts of lawn fertilizer use and how to best apply it. For most of the homeowners, water quality issues resulting from lawn fertilizer use were a secondary concern, but the health of children and pets in relation to lawn chemicals was a major concern. Research participants stated that they might be persuaded to change their behavior by "good science," suggested alternatives, and cost savings if they can still maintain a green lawn.

4. Marketing Objectives:

The marketing objective of the lawn fertilizer use campaign is to convince 10 percent of the residents of Talbot and Queen Anne's Counties to reduce their lawn fertilizer use by 50 percent or more within two years of the campaign launch. This reduction could come in either the quantity of fertilizer applied to lawns or in the frequency of application. After MRC's campaign has been conducted and evaluated, we will share our social marketing plan and a Toolkit of materials and guidelines with other Riverkeepers and environmental organizations, and lobby them to participate in the campaign effort, with the goal of building a Chesapeake Bay-wide cohesive effort, so as to have a broader impact across the Bay watershed. We will note the extent to which MRC's experience is Eastern Shore centric and may not apply equally to markets in other parts of Maryland.

Through the campaign the target audience will get the message that fertilizer is wasted if used in excess or applied at the wrong time of the year, and that wasted fertilizer pollutes our waterways. Also, reducing lawn fertilizer use saves money while allowing residents to maintain a healthy lawn. Homeowners will see messages that pesticides in lawn fertilizers pose potential health risks especially to children and pets that spend a lot of time on lawns. MRC will promote the campaign through newspaper articles, public speaking opportunities, social media, video, print advertising, mass emails, and billboards. In articles and public speaking opportunities MRC will stress that individual actions can in fact make a difference.

This behavior change campaign is important in our watersheds considering that Talbot County contains about 25,000 acres of turf and Queen Anne's County contains between 40,000 and 50,000 acres of turf. If Talbot County were to eliminate all lawn fertilizer use, it could meet its Watershed Implementation Plan urban nutrient management goals through this practice alone. This campaign is relevant in these counties because the majority of residents in Queen Anne's and Talbot counties are in the demographic that are most likely to use lawn fertilizer.

In Spring 2014, MRC released an online survey to collect baseline data among our target audience. With over 400 responses, the results confirmed many of MRC's assumptions about homeowners' behavior. Sixty-four percent of respondents fertilize 1-2 times a year, with spring and fall being the most popular seasons to apply. Of the 32% that apply fertilizer 3-5 times a year, applications included summer and winter months. When asked about how one determines the amount of fertilizer to apply only 11% conducted a soil test; 32% follow the instructions on the bag; the remaining majority estimated the amount they needed or let their lawn care company decide for them. When asked the primary reason they fertilized, homeowners answered, "I don't

want weeds” and “I want a green lawn” almost evenly. The baseline survey results were used to create the focus group moderator’s guide and in-depth interview questions.

Lawn fertilizer behavior change campaigns are not a new concept. (See Literature Review attached.) There have been successful lawn fertilizer campaigns in Maine and Florida. In addition, organizations have informally taken up the lawn fertilizer cause throughout the Bay watershed. In 2004, the Chesapeake Club ran a humorous advertising campaign that provided homeowners with alternatives to traditional fertilizing practices.

5. Barriers, Benefits, and Competition:

There are three barriers that MRC will address in the behavior change campaign. The first is a knowledge barrier. There are some homeowners who are ignorant of the negative effects of excessive lawn fertilizer use. Within this group of homeowners there are many misguided ideas of best management practices. Some of our focus group participants claimed to be using best practices but were not. The second barrier MRC will address is an attitude barrier. A green lawn reflects a homeowner’s values, pride, socio economic status, and community acceptance. Maintaining one’s lawn is a public action, and people do not want to be perceived poorly because they do not have a green lawn. Finally, MRC will need to fight the influence of the lawn care industry. Scotts has a 4-step fertilizing plan, and MRC is advocating for a serious reduction by suggesting that fertilizing once in the fall (if at all) is sufficient.

The target audience reported that they would be particularly motivated by two key messages: the cost savings from no longer needing to purchase as much fertilizer, and the fear of health-related issues for their children and pets. Some indicated that they could also be motivated by the knowledge that their fertilizing practices can affect water quality if they are given facts backed by sound scientific evidence. We did not notice uniform gender differences in the way research participants reacted to lawn fertilizer issues and messages. But overall the target men seemed a bit more intransigent than the women about fertilizer use. (In some cases, women focus group participants referred to their absentee husbands as less flexible about the fertilizing practice, but that is not necessarily reliable because “I’m married to a man who hates dandelions” could easily reflect the speaker’s own opinions.) The women were more likely to respond to the message targeting the health effects on pets and children, but both sexes responded equally to the message about the wasted money from excess fertilizer use. MRC has chosen not to constrain its target market to one gender or the other.

The competing alternative behavior is using lawn fertilizer to excess because many target audience members believe that more fertilizer will result in a greener, lusher lawn. They also believe that this greener lawn will result in community admiration.

6. Positioning Statement:

MRC wants Talbot and Queen Anne’s County homeowners with lawns to view the reduction of lawn fertilizer use as a behavior that promotes the health of their children and pets, saves them money, is beneficial to water quality, and is more beneficial than excessive fertilizing or fertilizing multiple times each year. MRC wants to convey the desired behavior as smart, better lawn management, and reflective of a greater sense of caring about home and property.

7. Develop Marketing Strategies:

Product:

MRC researched tangible products or services that might be offered to homeowners to change their lawn fertilizing behavior. We asked participants what they might need to have or to know to reduce the use of fertilizer. The research showed that the core products the target audience cared most about were: 1. Money in their pockets that they otherwise would have spent on lawn fertilizer, 2. Perception of healthier pets and children because they are exposed to fewer chemicals, and 3. Cleaner waterways. The value of these three products/benefits outweighed others discussed including organic fertilizer, a lawn stake demonstrating a fertilizer free lawn, saving time, healthier seafood, and our obligation to future generations to have clean water. One additional concept surfaced from the research, given the fact that our target counties are heavily agricultural: participants appreciated that a lawn fertilizer reduction campaign recognizes that groundwater pollution is not solely caused by agriculture and that homeowners must share in the responsibility for pollution.

In terms of knowledge, participants said they wanted information based on science and facts. For example, they were persuaded by the scientific information about the polluting effects of excess lawn fertilizer use. MRC will therefore incorporate the science behind excess lawn fertilizer use in all of our outreach materials where there is an opportunity to elaborate (e.g., news articles, door hanger materials, brochures, tabling events, speaking engagements, workshops, high school education program.)

We asked participants what services might be helpful to homeowners to encourage them to fertilize less. One service of interest to participants was the distribution of soil test kits that enable homeowners to determine the needs of their individual lawns. MRC will obtain these kits in bulk from the UMD Extension Service and distribute them at tabling events, workshops, in our office and promote their availability through our website, emails, and all promotional materials. MRC will promote soil sampling as a smart homeowner practice.

MRC considered partnering with lawn care companies to help homeowners determine whether they need to fertilize, but given the financial disincentive to the commercial companies of selling less fertilizer and having their employees spend less time fertilizing, we were unable to engage any lawn care companies in this campaign. We will, however, suggest the use of organic lawn fertilizer or the planting of native grasses as an alternative to excess traditional fertilizer.

Price:

There is no monetary cost associated with adopting the desired behavior of using less lawn fertilizer. Rather there is a cost savings. MRC will provide a nonmonetary incentive for a pledge to reduce lawn fertilizer. The incentive may be a small native plant, a bumper sticker, a reusable tote bag, or an “environmental incentive card” entitling the bearer to a discount on products from environmentally friendly businesses in our target area. MRC researched preferences among the target market for these incentives and found that the most popular choice was the small native plant.

The only nonmonetary disincentive is the requirement to comply with the 2011 Maryland Lawn Fertilizer Law. Provisions of the law will be disseminated in all campaign materials where there is the opportunity to provide detailed information. Examples include: news articles, door hanger materials, brochures, tabling events, speaking engagements, the high school education program, and the UMD Extension Service workshops (see more on the workshops below.)

Place: The target audience performs the desired behavior on their own properties. The target audience will receive any pledge incentive by collecting it at MRC's office in Easton, MD, or through the mail from MRC.

Target market participants said they made their lawn fertilizer purchasing decisions at local "big box" stores like Lowe's. MRC was unsuccessful in engaging Lowe's to collaborate on this campaign. There were no other local retailers mentioned where participants bought lawn fertilizer. And there is no financial incentive for these kinds of stores to reduce their sales of lawn fertilizer. MRC will concentrate on reaching homeowners while they are in their communities or at home rather than at the point of purchase.

MRC will team with the UMD Extension Service to host a series of workshops on lawn fertilizer use. These workshops will educate participants on the science, the law, and the regulations concerning fertilizer use in the state of Maryland. The University of Florida Extension ran a "Florida friendly lawn" campaign in 44 counties. Of the 1200 participants in the workshops, 50 percent have reduced their lawn fertilizer use and remained happy with their lawns (The Chesapeake Club Spring Media, 2004). The University of Maryland Extension service has its own "Be wise, don't over fertilize" campaign and has agreed to collaborate with MRC on these workshops to extend and enhance its own efforts as well as ours. At these workshops MRC will hand out and promote the use of soil sampling kits to determine a lawn's actual fertilizer needs.

Billboards are an effective place in our community to reach our target market. In our research, participants ranked billboards, newspaper articles and social media as the top three preferred methods of disseminating our messages. (See attached Survey Results.) MRC had rented a billboard on US 50 for six months from May to Oct, 2013 for our lawn fertilizer awareness campaign. It received between 3 and 5 millions viewers according to the audit materials for that billboard by Traffic Audit Bureau for Media Measurement. Because billboards ranked so highly among our research participants, MRC will include that same method of reaching our target market for this behavior change campaign.

Participants also said they often kept informed about issues and learned new things from their children, so they liked the idea of MRC incorporating the lawn fertilizer reduction campaign in local school education and outreach programs.

MRC also considered the issue of intercepting consumers prior to the purchase decision, by strategically releasing our lawn fertilizing messages on a seasonal basis. For example, in the spring we will be promoting the message "Once in the Fall is Enough" to discourage spring buying. (see Message #1 on p 7, below.)

Promotion:

MRC will target homeowner's associations, garden clubs, faith communities, existing members and volunteers, other local environmental organizations, and high school clubs and high school environmental science classes to help distribute materials and our behavior change message.

MRC will use its existing avenues to connect with the residents of Talbot and QA's Counties. These include incorporating articles or advertisements into our newsletter as well as sending blast emails out to the 2500 people in our database. MRC shares list serves with other like-minded organizations such as the 19 other Riverkeepers in the Chesapeake Bay watershed and numerous other conservation programs. That list serve will also be a way to share the message beyond the target audience. MRC will capitalize on its existing extensive media relationships to promote the message of the campaign.

MRC has developed specific messages and advertisements that were tested on a focus group and with in-depth interviews and surveys. These messages will be used in ads and newspaper articles. On average, focus groups ranked radio and television ads, billboards, newspaper ads, informational door hangers, and direct mailings among the best ways to influence them. With the exception of the radio ad, all of these methods of message delivery will accommodate the ads that MRC developed over the past year during the Behavior Change Phase I Project Planning grant.

In addition to printed materials, MRC intends to create a series of videos, which will correspond to our three most popular messages. MRC will also produce large vinyl banners promoting the campaign messages. One of these banners will be hung outside of the MRC offices in the downtown historic area of Easton where there is significant foot traffic. The banners will also be displayed during MRC public events. Talbot County has agreed to hang the banner in their public offices. We will also request Queen Anne's County to hang the banner in their public offices.

Throughout a typical year MRC connects with over 1500 people through a number of events including: Tour de Talbot, Wild and Scenic Film Festival, Project Clean Stream, State of the Rivers Spring Party and tabling at local events of other non-profits such as the annual Waterfowl Festival and Plein Air. MRC can promote the lawn fertilizer campaign at all of these events, each of which draws a different crowd.

MRC will also coordinate and host an additional event specific to this campaign, a "Fertilizer Free Garden Tour." The Garden Tour would showcase beautiful properties that do not utilize lawn fertilizer, thus showing that it is possible to have a green lawn without fertilizing. This Tour would be conducted in collaboration with master gardener groups in our two target counties.

Aside from events, MRC works with approximately 500 students through our high school environmental education program. MRC will incorporate the lawn fertilizer use campaign into one of the water quality lessons. In the focus groups people mentioned that educating children indirectly leads to educating their parents and that students can enact change within their own homes. MRC has been invited to work with a middle school environmental club. These students were enthusiastic about working with MRC on an environmental campaign.

In the latter half of the second year, MRC will embark on a robust campaign to recruit other conservation programs to adopt and implement our campaign. MRC has strong ties with 19 other Riverkeeper programs in the bay watershed, as well as excellent relationships with a host of other conservation programs such as Chesapeake Bay Foundation, Eastern Shore Land Conservancy, The Nature Conservancy, Chesapeake Bay Maritime Museum, Choose Clean Water Coalition, and others. MRC will seek to recruit each of these organizations to adopt and participate in the campaign. Near the end of MRC's campaign, we will produce a "Toolkit" with guidelines for other environmental organizations on how to implement a similar lawn fertilizer reduction behavior change campaign for their own target audiences. This Toolkit will be available on MRC's website and will contain copies of all the messages, images, workshop materials, and marketing materials prepared by MRC so that other organizations can adapt them for their own use.

MRC has developed a number of campaign messages based on feedback from our focus groups and interviews. MRC has developed an ad for each of these messages, and one ad that compiles the three messages together. The campaign will stage the rollout of the ads through the year. The ads will be used seasonally depending on the message. (See attached documents for copies of the ads). Each ad carries the overall campaign theme directive: "Reduce lawn fertilizer." MRC will focus on these messages and getting target market attention on the lawn fertilizer issue in the first year of the campaign. Then in the second year we will put more effort into the positive alternatives we are offering: the workshops, soil testing, the pledge to reduce fertilizing—all aimed to appeal to our market's sense of active involvement in their lawn care, their sense of being good stewards of their property, affirming what they value.

Message #1: Reduce lawn fertilizer. Don't be duped. Once in the fall is enough.

The first ad is directed towards the people who said that cost savings could motivate them to change their lawn fertilizing behavior if they can still maintain a healthy lawn. The ad is a picture of lawn fertilizer bags with dollar signs on them. On one side of the picture there are four bags with the "no" symbol over top. This represents people who fertilize their lawn multiple times throughout the year as recommended by major brands such as Scotts 4-step program. The other side has one bag. This ad would be used during the spring seasons each year of the campaign. If people are going to fertilize, then MRC wants to encourage them to do so only once in the fall. A potential video idea for this ad would be to have someone throwing money on their lawn to relate the use of lawn fertilizer to its cost and would include an audio message that excess fertilizing wastes money.

Message #2: Reduce lawn fertilizer. Why expose them to chemicals?

The second ad is directed towards people with pets and families. Many focus group participants indicated that human and pet health concerns could convince them to change their fertilizing habits. MRC created an ad with a child and dog curled up on a lush green lawn. The grass has the toxic skull cross bones image overlaid on it. The message reminds people that fertilizer can contain chemicals and/or pesticides that can be harmful to the health of pets and humans. This ad would be used during the summer seasons when children and pets are most likely to spend time on their lawns.

Message #3: Reduce lawn fertilizer. It pollutes our rivers.

This ad is a very simple message equating fertilizer use to river pollution. It is directed at those people who indicated an environmental sensibility to fertilizer use. It uses the same photo of a beautiful river with the message overlaid that MRC used for our “awareness campaign” for lawn fertilizer reduction. It is the same ad that was produced for Queen Anne’s County billboard and banners that were displayed for 7 months of 2014 on MD Route 50 during the busy beach season. This message would carry over into the Behavior Change Campaign to maintain continuity and take advantage of the familiarity for this message that was built during 2014. This ad would be used during the fall season and for billboards and/or banners (hence the “landscape” layout.)

Message #4: Reduce lawn fertilizer. Fewer chemicals, fatter wallets, cleaner rivers

This is a “compilation” ad that shows the three dominant messages of the campaign at one time. This ad could be used toward the end of the campaign to tie the seasonal messages together. It has the continuity of the same photos used in the seasonal campaigns and a simple version of the same messages. This ad can be used for billboards and banners (“landscape” layout) and toward the end of each year after the seasonal messages have been promoted.

Message #5: Reduce lawn fertilizer. It’s not just agriculture. Lawn fertilizer pollutes.

This ad responds to research participants’ desire to see “the facts” behind the messages. The focus group participants repeatedly told MRC that they want scientific facts to convince them to reduce their lawn fertilizer usage. This ad uses a graph showing the relationship among acres of watered “crops.” It shows that lawns represent the largest source of irrigated land compared to corn, alfalfa, soybeans, and other crops. This ad also responds to participants’ positive reaction to the message that traditional agriculture is not the only contributor to fertilizer pollution. In the two counties of Maryland we are targeting, agricultural pollution is a controversial issue and those sympathetic to farmers responded well to the message that agriculture should not bear all the responsibility for fertilizer pollution. This ad is an alternate that could be used during any season or if another message proves unsuccessful. It could also be used during the second year of the campaign to add a fresh message.

The seasonal changes in the campaign will capitalize on MRC’s event schedule. MRC’s spring events include the State of the Rivers presentation and Project Clean Stream. During those events we will highlight the “Once in the fall is enough” ad. We will also use this messaging during the spring semester of MRC’s high school environmental education program and with the school environmental clubs.

Tabling of events is predominantly in summer. During that season, MRC will focus on the “Why expose them to chemicals?” message. Finally the “It pollutes our rivers” ad will be featured during the fall at the Wild and Scenic Film Festival, the River Caucus, and the Waterfowl Festival. It will also be used in the fall semester of our environmental education program, along with the compilation ad showing all three reasons to reduce lawn fertilizer.

The cost associated with *product*-related strategies is the cost of the reward for taking the pledge. There will be no costs associated with *price*-related strategies, and *place*-related strategies. The *promotion*-related strategies are staff-time, video editing software, printed materials, services of

a graphic designer, travel, and supplies. The *evaluation*-related costs will be the cost of the survey tool (such as Survey Monkey subscription) and staff time. If the costs exceed available funds, MRC can potentially turn to its supporters for additional funding.

8. Evaluation Plan:

To pilot test the campaign, MRC will begin with a limited rollout in the geographic area of Easton, MD, for the spring season, 2015. We will design and hang one banner in downtown Easton and produce one promotional video for the spring season to be distributed through YouTube, at MRC and public events, and through partnerships with HOAs, faith-based groups, gardening groups, and other environmental non-profit organizations. We will begin local newspaper articles, emails, social media contacts, and promote the campaign at local spring events. Then in early summer of 2015 we will collect data from at least 50 residents to determine the effectiveness of the messaging at changing behavior. The survey will address pre- and post-campaign fertilizing behavior. Summer interns and volunteers will target HOAs and neighborhoods with lawns to assess residents' intent to change lawn fertilizer behavior. Homeowners who have been exposed to campaign materials or messages will continue with a survey that will address pre- and post-campaign fertilizing behavior. Based on the evaluation of the pilot test, we will adjust our messaging and methods of delivery as necessary before proceeding with the remainder of the campaign.

During the pilot test and throughout the campaign, MRC will conduct ongoing evaluation using an online pledge system on MRC's website. MRC will post a pledge and then ask people who intend to change their behavior to sign the pledge. MRC will have a method to sign the pledge at all of our events. Accompanying the pledge will be a two or three question survey that will give insight into the specific part of the campaign that elicited the behavior change, how the person pledging will reduce his or her lawn fertilizer use and by how much. This information will help MRC adjust the ads if necessary or change our strategy. The number of people who sign the pledge will help determine whether or not we are reaching our goals. In order to encourage people to actually take the pledge, MRC will provide a small incentive. This incentive might be a small native plant, a bumper sticker, a reusable tote bag, or an "environmental incentive card" entitling the bearer to a discount on products from environmentally friendly businesses in our target area, depending on which is more popular. The pledge will be posted throughout the campaign and will keep a running record of lawn fertilizer use reduction.

A second method of evaluating the effectiveness of the campaign will be conducted near the end of the two-year campaign. MRC will conduct a survey of at least 400 residents of our targeted geographic area using an on line tool as well as paper surveys passed out at public events. The survey results will then be evaluated to determine the percentage of people who have changed their behavior as compared to the baseline data collected during Phase I of this project. The survey will achieve a 90% confidence in accuracy of the data with a +/- 4% error calculation, based on the Survey Random Sample Calculator tool.

9. and 10. Project Planning and Implementation Summary:

See spreadsheet below for a breakdown of tasks and labor hours devoted to each.

Sources

Changing Bangor Area Lawn Behavior. Results from the Evaluation Survey. University of Maine Cooperative Extension. Plymouth State University Center for the Environment.

“Yard Care: Chesapeake Yard” The Chesapeake Club. 2014. Web.

<http://www.chesapeakeclub.org/yard.shtml>

Behavior Change II Implementation Summary & Project Labor Hours	Dates of Activities	Proj Dir	Outreach Dir	Education & Outreach Coord	Volunteer & Outreach Coord	Writer
Project Start Up	Mar-Apr, 2015					
Initial start up meetings		2	2	2	2	2
Initial recruit & coordination with volunteers					4	
Initial coordination with HOAs					2	
Initial coordination with faith groups			2			
Initial coordination with gardening groups					2	
Initial coordination with UMD Ext Service				2		
Set up on line pledge system with survey attached				2		
Design/select/order incentives for pilot test				2		
Design and order one banner for pilot test				3		
Produce first video		3		30		5
Pilot Test	Apr-Jun, 2015					
Set up social media for campaign					2	
Collaborate with Opinion Works		2				
Coordinate with local volunteers					8	
Coordinate with local HOAs		2			4	
Coordinate with local faith groups			4			
Coordinate with local garden groups					6	
Coordinate with local environmental groups		4			4	4
Distribute/market video in pilot area				4		
Hang one banner				1		
Write newspaper articles						4
Write and distribute press releases for pilot area				2		
Write and distribute mass emails in pilot area				2		
Conduct public speaking engagements in pilot area						4
Monitor pledge system					3	
Manage social media for pilot test		2			36	
Manage distribution of incentives		2			10	
Collect data & feedback from 50 people					26	
Analyze data collected		2	2	2	2	2
Adapt materials & messaging based on pilot test		2	2			2

Full Campaign Implementation	July, '14-Jan, '16					
Collaborate with Opinion Works		2				
Order incentives for the campaign			2			
Order 2 banners			1			
Produce second & third videos		6		60		10
Coordinate with all volunteers					20	
Coordinate with HOAs in target area					10	
Coordinate with faith groups in target area			4			
Coordinate with garden groups in target area					10	
Coordinate with all environmental groups		8				8
Distribute/market two videos				8		4
Hang two banners			4			
Write newspaper articles		4				16
Write and distribute press releases		4	10			2
Conduct public speaking engagements						10
Write and distribute mass emails		8	8			
Monitor pledge system						8
Manage distribution of incentives		4				28
Organize workshops with UMD Ext Service		4				8
Write curriculum for educational workshops						8
Promote and schedule workshops						12
Conduct workshops						16
Manage social media for campaign		8	8	20		80
Design and print materials for Toolkit		4		10		2
Prepare Toolkit for website			8			
Distribute & market Toolkit		8	8			8
Design and print materials for door hangers		2		8		
Distribute door hangers				4		
Plan and organize Fertilizer Free Garden Tours						10
Conduct Fertilizer Free Garden Tours						10
Write curriculum for high school ed program			10	10		
Conduct high school ed program				20	20	
Evaluation	Feb, 2016					
Write & post survey for final evaluation				4		
Promote surveys & collect data from 400 people				20	20	
Analyze surveys		4	4	4	4	
Prepare final report		16	4			4
total		103	93	210	375	87