

*Exhibit 6.1*

*Orange County Stormwater Program  
Public Education & Outreach 5-Year Strategic Plan*

# Orange County Stormwater

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## PUBLIC EDUCATION & OUTREACH

### 5 Year Strategic Plan

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in collaboration with 34 cities

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## 1. PURPOSE

The purpose of this document is to provide a comprehensive description of the Orange County Stormwater Program education component – Project Pollution Prevention (“Education Program”) overall goals, objectives, strategies and specific tactics. This document will also review the reasoning behind key modifications to the program that were made in the Fall of 2012, while also providing a scientific justification validating the need for and effectiveness of the revised program strategies. As a whole, this document will serve as an anchor that can be referenced throughout the life of the Education Program.

## 2. BACKGROUND

The Orange County Stormwater Program addresses the impacts to creeks, rivers, streams and coastal waters (hereinafter referred to as “receiving waters”) that can arise from the imprint of urban development on the landscape. Urbanization creates rooftops, driveways, roads, and parking lots (Schueler and Holland, 2001, use the term “imperviousness” as the unifying theme for understanding the adverse hydrologic impacts of urbanization) which: (1) increase the flow rates and volume of rainfall runoff (compared to pre-development conditions) and (2) provide a source of pollutants that are flushed or leached by rainfall and dry weather runoff into receiving waters. The environmental consequences of these impacts include:

- Water quality degradation from increased loadings of sediment, nutrients, metals, hydrocarbons, pesticides, and bacteria in dry and wet weather;
- Stream channel instability and habitat loss from increased severity and frequency of runoff events;
- Loss of groundwater recharge; and
- Increased water temperatures from solar energy absorption by urban surfaces and elimination of riparian shading.

These impacts, however, do not have to be inevitable consequences of urban development. Indeed, land development practices increasingly require the inclusion of Low Impact Development (LID) approaches. The LID concept stresses onsite retention of runoff by utilizing BMPs and development techniques that intercept, capture and infiltrate rainwater to reduce the amount of water and pollutants leaving an area of land. Similarly, community-based, small scale outreach efforts can be utilized to encourage adoption of simple practices protective of water quality. When used in tandem with large-scale messaging efforts reminding the public of pollutants resultant from everyday activities, community-based outreach focuses on one activity (e.g. reduction of overwatering), in one community. The concepts of LID and community-based outreach align; one encourages onsite retention and infiltration of runoff and the other relies on

providing information on behaviors protective of water quality through members of the community itself, retaining information “onsite” and encouraging infiltration of knowledge.

Adoption of behaviors protective of water quality happen over time, until people see them as a normal part of everyday activity. Likewise, site by site use of LID BMPs (where feasible) over time may collectively reduce the amount of runoff and pollutants entering waterways.

Certainly, increasing awareness and fostering of behavior change to be protective of water quality are requirements of both the San Diego (SDR) and Santa Ana (SAR) Permits<sup>1</sup>. The Education Program has successfully met these requirements for the past ten years; however the incorporation of community-based outreach techniques will provide additional opportunities to increase knowledge, encourage adoption of behaviors protective of water quality and provide tools for assessment of Education Program success.

### **3. ITERATIVE PROGRAM DEVELOPMENT: DOCUMENTING BEHAVIOR CHANGE**

For the past decade, the Education Program has focused on increasing community awareness and changing behavior regarding stormwater issues through large-scale information campaigns. The broad-based awareness achieved by the Education program to date has established an excellent baseline of knowledge across the target audiences within Orange County. The Education Program has also shown behavior change related to stormwater pollution prevention as demonstrated by the program’s biennial phone surveys of Orange County residents (2003, 2005, 2009, and 2012).

The approach taken to date has focused on macro-level general water quality messages in response to outreach needs identified by the cities, seasonal events and pollutant-generating activities and permit requirements (i.e. to reach 100% of Orange County businesses and residents). In conducting the strategic planning effort detailed in this document, the Permittees utilized almost 10 years of data to analyze the Orange County audience over time, changes in willingness to participate in “stormwater safe” behaviors and knowledge gained from outreach efforts.

The *Audience Analysis* in Section II details lessons learned from public awareness survey data and utilizes demographic and community variables to set goals for the next several years of Education Program implementation to have the greatest impact on water quality. Subsequently, the *Strategic Review* in Section III outlines methodology utilized since 2003 to meet requirements with two Regional NPDES Permits over two permit terms and outlines an approach for incorporating community-based outreach moving forward. Where the *Audience Analysis* provides the “who,” the *Strategic Review* supplies the “how” and “why” to Education Program implementation over the long-term.

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<sup>1</sup> The County implements an education and outreach program which meets the requirements of Directive F of the Fourth Term San Diego Region MS4 Permit (Order No. R9-2009-0002). Subsequent sections of A-6 describe and outline outreach procedures in accordance with Section XIII of the Fourth Term Santa Ana Region MS4 Permit (Order No. R8-2009-0030).

## 4. EDUCATION PROGRAM GOALS

The primary goal of the Education Program is to protect water quality by successfully informing and changing the behavior of Orange County residents. Other goals to be achieved are:

- a. Reach 100% of the Orange County population;
- b. Build long term engagement with audiences based on the behavioral analysis; and
- c. Demonstrate that the audience took an action to practice stormwater pollution prevention BMPs.

## 5. EDUCATION PROGRAM OBJECTIVES

The Education Program’s objectives are specific, measurable targets that will collectively help to meet the overarching goals (as described above). These objectives are a measurable manifestation of the goals (for a full definition outlining the distinctions between goals, objectives and tactics, please see *Appendix A*). Education Program objectives include:

- a. Reach 100% of the Orange County population:
  - i. Garner 10 million impressions annually in the SAR Board area
- b. Build long term engagement:
  - i. Identify target and underserved groups to receive outreach
  - ii. Build a following of 2,000 people (people who actively agree to join the program in some way)
- c. Demonstrate the audience took an action to practice a Best Management Practice (BMP):
  - i. Demonstrate that 400 people practiced a BMP

## 6. DOCUMENT STRUCTURE

This document comprises of five key sections. The content and purpose of each section are noted below.

### *Introduction*

Summary of Education Program purpose, program background, iterative program development, goals, and objectives.

### *Audience Analysis*

Informs the selection of specific audiences and campaign messages by utilizing public awareness survey data garnered over 10 years of Education Program implementation.

### *Strategic Review*

Provides an in-depth overview of outreach efforts achieved to date and outlines key changes to the approach going forward.

### *Foundational & Action Campaign Work Plan*

Serve as the Education Program’s tactical implementation plans detailing next steps for the Education Program; these will be assessed on an annual basis, based on data, to prioritize and focus knowledge and behavior change outreach efforts and programming.



*Appendices*

Provides key definitions, an overview of Community Based Social Marketing's (CBSM) principles and theories (this is the framework that will be used to drive behavior change), as well as additional analysis of the target audience's demographics and key characteristics.

## 1. INTRODUCTION

The *Audience Analysis* informs the selection of specific audiences and campaign messages for annual work plan development and Education Program focus. This section will serve as an anchor that can be referenced throughout the life of the Education Program and analyzes and integrates data across a variety of sources, including:

- Data from the Education Program 2003 Survey, 2005 Survey, 2009 Survey, and 2012 Survey;
- US Census data (2010, 2011);
- External studies; and
- Other data from county and municipal sources.

This section will identify and describe the various audience segments that have the ability to influence water quality in Orange County. The *Audience Analysis* will also outline the defining characteristics of Orange County's unique geography and its potential influence on Education Program success. Target behavior and approaches to messaging will be defined for achievement of short-term and long-term program-specific goals.

## 2. TARGET AUDIENCE OVERVIEW

There are three overarching target audience groups for the Education Program: residential, commercial<sup>2</sup>, and municipal<sup>3</sup>. According to the requirements of both permits, commercial and municipal audience groups will receive awareness and education-based outreach to encourage adoption of BMPs. Unlike businesses, residents are not systematically inspected to assess if they are practicing BMPs. This analysis will therefore focus on residents and ways to encourage this audience to take voluntarily action to practice a BMP.

Developing a complete understanding of the target audience is a crucial first step to designing and implementing a successful outreach program. The following analysis summarizes key demographic and geographic characteristics of Orange County's residential audience and details the audience's motivators and barriers to engaging in activities that improve water quality. The

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<sup>2</sup> Commercial audiences include builders, developers, and construction workers, who as an example are required to participate in a training session before the rainy season as per the permit. Other businesses, such as restaurants, automotive services, property owners, and property managers, landscape services and mobile businesses also fall into this category. This audience group is highly heterogeneous, characterized by the inclusion of disparate industries (e.g., ranging from restaurants to construction).

<sup>3</sup> Municipal audiences include city workers such as fire fighters, parks and recreation staff, and others who work for the city. Like commercial audiences, there is a relative paucity of data on municipal audiences.

*Audience Analysis* provides the development of Education Program messages and outreach methods.

## 2.1 Demographic Characteristics

According to the 2010 US Census, an estimated 3,055,745 people reside in Orange County, representing approximately 8% of California’s total population. Compared to California as a whole, Orange County residents have more years of education and households have relatively higher incomes. Additionally, a relatively high percentage of County residents own their homes (over 60%, despite higher than average median home values (Table II.1).

Education Program messages and strategies will reflect these data; for example, due to their higher incomes, OC residents may hire lawncare professionals more often than caring for their lawns themselves. This insight would redirect program messaging to focus on hiring green lawncare companies as opposed to purchasing green lawncare products. Survey data is utilized to support information garnered from external sources; for example, respondents in the 2012 Survey were more likely to outsource pest control (approximately 50%) as opposed to doing it themselves (about 33%).

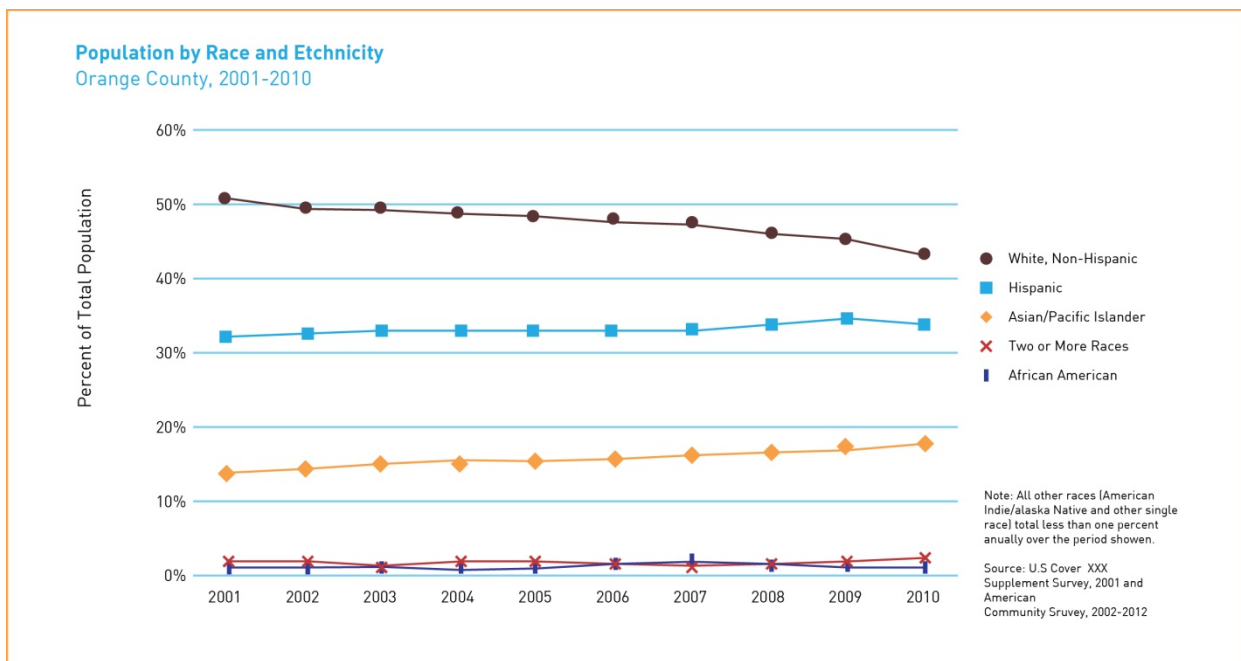
CHARACTERISTIC	
<b>Age</b>	%
Under 18	24.1
Over 65	11.9
<b>Gender (females)</b>	50.5%
<b>Ethnicity</b>	%
Caucasian	43.5
Black	2.1
Asian	18.4
Native American	1.1
Native Hawaiian	0.4
Hispanic/Latino	34.1
Two+ races	3.1
<b>Education</b>	%
High school diploma	83.3
Bachelor’s degree or higher	36.0
<b>Language other than English</b>	%
spoken at home	44.4
Spanish	26.2
Asian/Pacific Islander	13.1
Indo-European	4.1

<b>Housing</b>	
Homeownership rate	60.8%
Median home value	\$607,900
Units in multi-family structures	33.7%
<b>Economic</b>	
Per capita income past year	\$34,017
Median household income	\$74,344
Below poverty level	10.1%

**Table II.1. Demographic Characteristics of Orange County Residents**

Source: 2010 United States Census

Orange County is ethnically diverse, with 44.4% of county residents speaking a language other than English at home (Table II.1); however, it is important to also note that though both English and Spanish surveys were available, the vast majority of the surveys were conducted in English. These data suggest that though diversity of the Orange County population is increasing, most may be bilingual. Additionally, according to the 2012 Orange County Community Indicators Report, the proportion of Asian / Pacific Islanders has increased steadily over time, in contrast to the proportion of White/non-Hispanics (Figure II.1). The proportion of Hispanics has also increased slightly since 2001. Over the past ten years, the proportion of other racial/ethnic groups comprised less than 5% of the population.

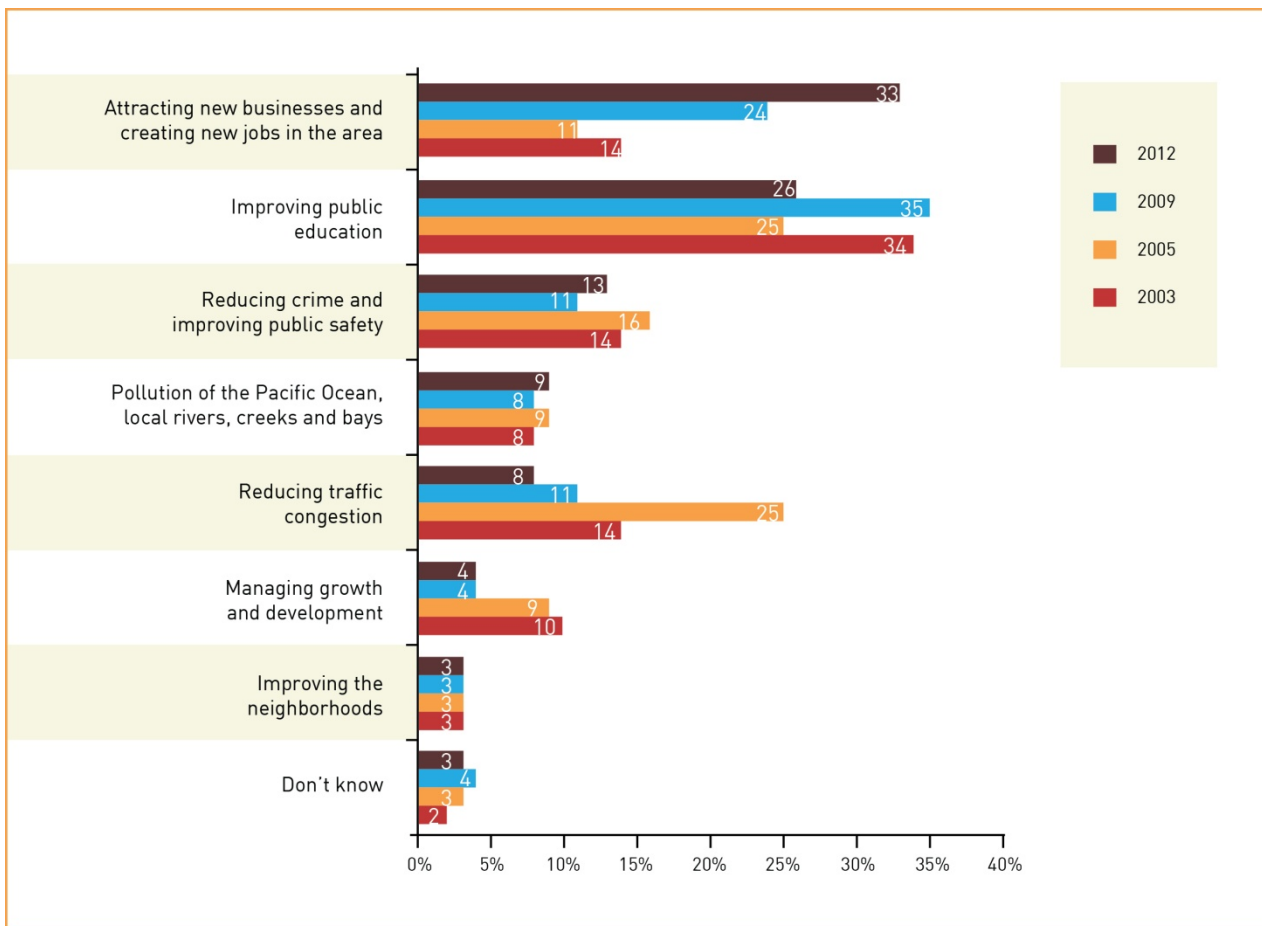


**Figure II.1. Orange County Population by Race and Ethnicity from 2001-2010**

Source: Orange County Community Indicators Report 2012

These demographic trends mean that in some cases, Education Program materials may need to be tailored to meet the language and ethno cultural needs of specific target communities. The need to tailor Education Program materials to Asian and Hispanic populations in content, language, and tone will prove to be an increasingly important as these populations continue to increase at a faster rate than any other population in the county. The Education Program will also establish partnerships with organizations that best speak to the various ethnic minorities that make up Orange County.

## 2.2 Attitudes and Perceptions and their Impact on General Water Quality Messaging



**Figure II.2. Responses to the question “Which issue is most important for elected officials to address?”**

Source: Orange County Stormwater Public Education Survey, Lake Research Partners 2012

Over the past ten years of the Education Program, an understanding of the target audience’s attitudes, perceptions and beliefs around stormwater pollution has been achieved through a scientific phone survey conducted on a biennial basis (2003, 2005, 2009 and 2012). The primary motivators associated with behaviors that prevent stormwater pollution have been identified and described below. Education Program messages will seek to heighten the motivators associated with performing actions that enhance water quality. A thorough justification for applying this

approach to developing message points is provided in the *Strategic Review* section of this document.

### 2.2.1 Appeal to Economic Concerns

According to the 2012 Survey, economic concerns<sup>4</sup> trumped all others as being the most important issue in the county. Respondents cited attracting new businesses and creating new jobs as the most important issues. Further, there appears to be a correlation between the decline in the economy and the importance of this issue in the eyes of the residents (see Figure II.2). The Education Program will therefore leverage or temper economic-focused messaging depending on the state of the economy.

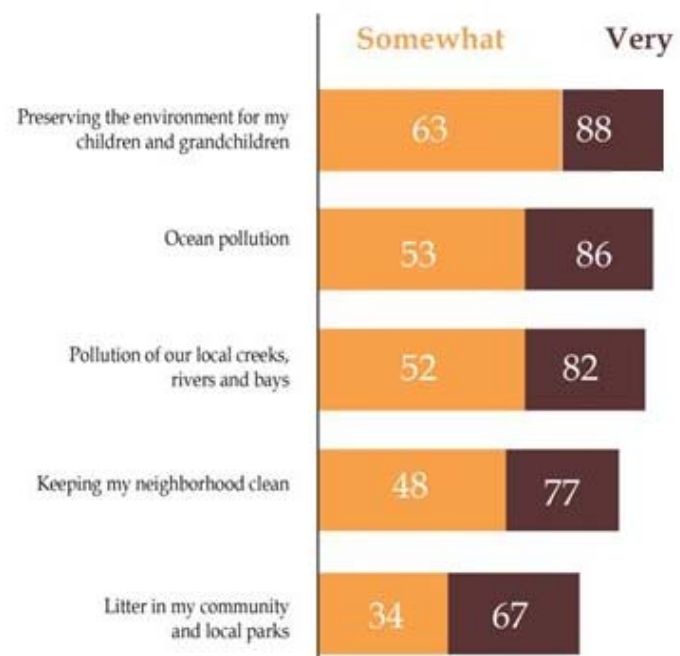
Education Program messaging will leverage this concern for economic growth to enhance stormwater pollution-prevention messages. Education Program messages and materials will make the connection between stormwater pollution and the local economy.

Stormwater pollution contributes to beach quality issues, which hurts local businesses, tourism and Orange County's image as a desirable place to live and work (City of Anaheim, 2012). The recreation and tourism industry is one of the top employers in the nation, and is a particularly valuable part of the Orange County coastal economy. Each year, Americans take more than 1.8 billion trips to water destinations, largely for recreation, spending money and creating jobs in the process (California Environmental Protection Agency, 2012). Activities related to Orange County's tourism industry depend largely on the access and enjoyment of clean waters. If the perception of Orange County's beaches deteriorates, it poses broader implications for the region's financial growth.

### 2.2.2 Emphasize Pollution Effects on Surrounding Environment

Over the past decade, the proportion of survey respondents rating pollution of waterways as the most important issue facing Orange County has remained steady (8-9%). However, when asked specifically about stormwater-related issues, most respondents indicated a high level of concern about the impacts of pollution on future generations, neighborhood cleanliness, parks and recreation areas and local water quality.

Though Orange County residents do not



**Figure II.3. Level of concern regarding stated issues**

Source: Orange County Stormwater Public Education Survey, Lake Research Partners 2012

<sup>4</sup> Economic factors have also shown to be a strong motivator for the commercial audience especially as it relates to avoiding fines or infractions for non compliance with stormwater mandates (Cunningham Environmental Consulting, 2011)

prioritize stormwater as an overall issue, they are concerned about *the effects* of stormwater pollution and pollution of the community in general. Education Program messaging will therefore focus on pollution effects rather than promoting awareness of stormwater issues in general.

### 2.2.3 Connect the Issue to Future Generations

In terms of finding the right language to frame stormwater issues, preserving the environment for future generations appears to be a powerful motivator.

This motivator can be used to communicate *why* a particular issue is important and a supplement to *how* the individual can prevent pollution, the latter of which should always take center stage. In this case, the “why” or purpose of the message would be the need to preserve the environment for future generations and should therefore be the central component of the Education Program’s overarching brand.

### 2.2.4 Use Words that Resonate

Using terminology that resonates with the target audience is another important consideration when developing Education Program messages. Fairbank, Maslin, Maullin & Associates, an opinion research firm specializing in environmental issues, identified specific words to use and avoid when discussing stormwater pollution prevention and effects (Table II.2). The words on the right hand column of the chart below should be used in place of their jargon counterparts on the left to ensure that the overall message resonates with the audience. Throughout the life of the Education Program, the term “water efficiency” will also be used in place of “water conservation, as the 2011 Municipal Water District of Orange County survey found that people, especially men, tend to respond better to the former. These preferred words will be considered across all the different ways that the message is disseminated throughout the life of the Education Program.

Words to Avoid	Words to Use
Environment	Land, air and water
Ecosystems	Natural areas
Biodiversity/endangered species	Fish and wildlife
Regulations	Safeguards/protections
Riparian	Lakes, rivers and streams
Aquifer	Groundwater
Acquisition	Permanent protection
Watershed	Land around rivers lakes and streams
Environmental groups	Conservation groups/organizations protecting land, air, and water
Agricultural land	Farmland
Conservation easements/ purchase of development rights	Voluntary land preservation agreements
Urban sprawl	Poorly planned growth/development

**Table II.2. Words to Use and Avoid When Discussing Stormwater Issues**

Source: Fairbank, Maslin, Maullin & Associates

## 2.3 Trends in Awareness and Behavior Change

For the past ten years, the Education Program has used phone surveys to assess the target audience's awareness and changes in behavior as they relate to stormwater. Survey results have indicated that the Education Program has achieved small but significant increases in awareness around stormwater pollution and prevention. For example, survey results have demonstrated an increase in concern around ocean pollution, a 4% increase from 2003 to 2012 to respondents who reported that they were "very concerned" about the issue. Respondents have also demonstrated an increase in awareness of the Education Program, with a 2% increase in the number of respondents citing that they have seen or heard the Education Program's slogan "the ocean begins at your front door."

Survey results also indicate several positive behavior changes among the target audience in key activities related to stormwater pollution prevention (Table II.3). For example, between 2003 and 2012 there has been an overall increase in the number of respondents reporting that they:

- Have eliminated washing their car at home and instead take it to a car wash (5% increase);
- Properly use lawn and garden fertilizers and pesticides (5% increase); and
- Pick up waste and droppings from their pet (9% increase).

In terms of self-reported behavior change, participation in most of the other BMPs has remained relatively steady for the past 10 years. In order to determine the effect that other, external variables versus Education Program messaging might have on behavior changes observed, the analysis must compare individuals who have been exposed to the Education Program against those who have not. The expectation is that those involved in the Education Program will change in the desirable direction, while those not involved would stay the same. When both populations are grouped together, any positive results achieved by the group exposed to the Education Program are watered down by those not involved (i.e. by those not expected to change). If the group exposed to the Education Program were examined exclusively, we would likely be able to see the campaign's positive effects more clearly.

The biennial surveys have assessed program involvement based on saturation/recognition of the Education Program message "the ocean begins at your front door." Aside from recognition of Education Program branding/messaging, the surveys do not provide feedback on whether if/how a respondent was engaged with the campaign. Knowledge or recognition of a phrase, whether associated with the Education Program or not, does not provide insight into how changes observed across surveys may be related to this recognition. Surveys will continue to serve as a key assessment tool; however, future surveys will seek to separate those respondents who are engaged in the Education Program from those who are not. The ultimate goal of this revision will be to assess whether people exposed to the Education Program messaging made more or greater positive changes compared to those who were not. A further description of strategic changes to Education Program assessment methodology is described in the *Strategic Review*, Section 3.

In summary, the Education Program has achieved small but steady changes in behavior. Evaluation around these behavior changes will help the Education Program determine which BMPs to prioritize. Priority will be given to those behaviors which have remained stagnant (see table below). BMPs that are on the rise will be promoted among "influencers" (see *Audience*



*Analysis*, section 4.3), or individuals who are already performing the desired actions and who have the capacity to influence their peers to do the same.

% “saying have already done”	2012	2009	2005	2003
Picking up waste and droppings from your pet*	84	78	78	75
Keeping yard clippings out of the street by putting them in the trash, leaving them on your lawn or composting	72	68	72	76
Disposing of household chemicals and automobile oil and other fluids properly by ensuring they go to a recycling or hazardous waste collection center	69	70	73	69
Using a broom and trash bag, not a hose, to clean walkways and driveways	66	68	58	63
Properly using lawn and garden fertilizers and pesticides	65	58	57	58
Adjusting sprinklers scheduling to avoid over watering your lawn	63	67	62	64
Eliminating washing your car at home and taking it to a car wash	61	57	47	56

**Table II.3. Changes in Key Behaviors Related to Stormwater Pollution-Prevention**

Source: Orange County Stormwater Public Education Survey, Lake Research Partners 2012

### 3. IDENTIFYING WHICH BEHAVIORS TO TARGET

There are a multitude of activities that can cause stormwater pollution, ranging from home car washing to leaving pet waste on the ground. To date, Education Program messaging has focused on as many pollutant generating behaviors as possible, stressing specific behaviors during times of the year they are most common. For example, bus station advertising promoting proper use of pesticides was utilized during April and May in anticipation of high pesticide use during hot summer months. Though this advertising was focused in nature, it was stand-alone advertising not supported by other program efforts on pesticides. Further, other program efforts during this time also focused on Earth Day, Watershed Awareness Month and other general pollution prevention messaging (i.e. trash, pet waste, etc.).

Research suggests, however, that though messaging focused on a specific behavior can be beneficial, it is essential that residents not be overloaded with multiple, sometimes competing, messaging on several types of pollutants. Behavioral studies have shown that too many choices may lead to decision paralysis. In the case of stormwater, promoting a limited number of behaviors may encourage greater engagement by residents versus attempting to address a

multitude of behaviors over the same period of time. The complete scientific justification for this tendency is discussed at length in *Appendix B*.

### 3.1 Stepwise Approach to Selecting Target Behaviors

In addition to continuing some general awareness outreach, the Education Program will focus on annual assessments to determine which set of pollution-preventing actions should be promoted. Once identified, the Education Program will follow a repeatable, step-wise approach to addressing these behaviors. The steps are as follows:

- *Step One:* examine and prioritize key pollutants in Orange County according to the level of harm they pose to the environment. Pollutants rated medium to high are then analyzed according to their anthropogenic sources (i.e. the human behaviors that lead to the discharge of those pollutants).
- *Step Two:* determine which behaviors will produce the largest return on investment (ROI). ROI is predicted by assessing two factors: (1) the number of people performing that action; and (2) the likelihood that those people would change that action. In determining ROI, it is important however to balance impact vs. ease of adoption. There is a balance between having people do an action that is easy to perform, yet produces minimal impact.
- *Step Three:* potential behaviors will be analyzed against external opportunities and needs. For example, a behavior being actively promoted by an external agency might provide an opportunity to cross-promote that behavior. External needs may include the consideration of “hot button issues” that have come to the forefront as a result of media attention or request from an elected official.

Selecting targeted behaviors according to this process allows the Education Program to maximize resources by focusing on only the most widely performed, potentially high impact actions. Once the targeted behaviors have been identified, they will be promoted by delivering targeted Education Program messages that elevate the motivators and decrease the barriers associated with performing that action. Many of these motivators were outlined in the previous section. Decreasing barriers and increasing motivators is the cornerstone of the Community Based Social Marketing approach, which is explained in detail in *Appendix B*.

### 3.2 Identifying Pollutant Sources

As described above, the first step in determining targeted behaviors is to examine and prioritize key pollutants. For example, Table II.4 displays key pollutants in Orange County and shows that bacteria is a high priority suggesting that addressing behaviors related to this pollutant should be given a higher priority relative to a pollutant such as pH<sup>5</sup>.

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<sup>5</sup> Note that the key pollutants of concern (indicated by high to low prioritization) will for the most part be determined by mandates from the NPDES permits and analysis of annual monitoring results.

Priority	Pollutant	Anthropogenic Sources	Natural Sources
HIGH	Indicator bacteria ( <i>Enterococcus</i> , Total Coliform)	Pet feces, sewer spills, food wastes, manure, decomposing landscape, litter.	Wildlife feces, biofilms, decomposing organic material, sediments
HIGH	MBAS	Anionic surfactants (e.g. soaps)	N/A
MEDIUM	Turbidity	Construction activities	Suspended colloidal matter
MEDIUM	Dissolved Oxygen	Fertilizer runoff, untreated sewage	Excess organic matter, increased water temperatures
MEDIUM	Total Nitrogen	Fertilizers, cleaning products, recycle water	Decomposing organic material, sediments, wildlife feces, groundwater chemistry
MEDIUM	Total Phosphorus	Fertilizers, cleaning products, recycle water	Decomposing organic material, sediments, wildlife feces, groundwater chemistry
MEDIUM	Metals	Atmospheric deposition, automotive byproducts, architectural uses, aging plumbing systems	Lithogenic geology of native soils
MEDIUM	Toxicity	Automotive Byproducts, pesticides	Groundwater chemistry
LOW	pH	Atmospheric acid deposition	Lithogenic geology of native soils

**Table II.4. Examples of Key Pollutants and Sources**

Source: *Orange County Stormwater Program*

### 3.3 Determining Which Behaviors Have the Highest ROI

The next step in determining the Education Program’s targeted behaviors is to analyze the specific actions that influence water quality. Surveys have established whether residents are already performing behaviors protective of water quality or whether they are willing to do so. In addition, the 2009 Survey asked respondents to what extent they perceived each action to be effective in curbing runoff issues.

Research has shown that behaviors for which one is willing to participate and those behaviors perceived to be effective produce the greatest behavior change (Larn, 2006). Prioritization based on willingness to participate, perceived efficacy at preventing pollution and the potential impact of key pollutants has provided a more focused list of behaviors on which the Education Program will focus over the next few years. These behaviors are listed in Table II.5.

Action	Already Doing/ Willing to Do (%)	Targeted Pollutant(s)
Dispose of chemicals properly	69/24	Fertilizer, Pesticide, Paint, Oil
Use broom/trash bag, not hose, to clean sidewalks	66/25	Excess runoff
Adjust sprinklers to avoid overwatering	63/23	Excess runoff
Properly use or minimize use of garden fertilizer	65/20	Nutrients
Properly use or minimize use of outdoor pesticides	65/20	Pesticides
Eliminate car washing at home	61/23	Excess Runoff
Keep yard clippings out of street	72/19	Nutrients
Don't wash paint brushes in the street	N/A	Paint
Pick up pet waste	84/8	Bacteria
Put trash in a trash can	N/A	Litter

**Table II.5. Target Actions by Pollutant**

Source: Based on OCSW 2012 phone survey data

### 3.4 Identifying Barriers and Motivators According to the Target Behaviors

Section II.2 defined the residential audience and described several key motivators associated with actions to maintain or improve water quality. These motivators were captured in subsection 2.3, which described the audience’s attitudes and beliefs regarding stormwater issues according to previous phone survey results.

However, each of the actions listed in Table II.5 are performed in context; each action is affected by unique barriers and motivators that either limit or advance their adoption. For example, a barrier to eliminating overwatering may be a concern that the lawn will become unattractive because of dying grass. That barrier would not exist for other activities, such as a resident picking up after their pet. Identifying the unique barriers and motivators associated with each of the selected target behaviors is critical to developing targeted Education Program messages. See *Audience Analysis*, Section II.5 for a list of specific barriers and motivators related to overwatering.

## 4. METHODS TO REACH THE OVERALL AUDIENCE

In addition to prioritizing Education Program messages, it is also crucial to identify high impact avenues to reach the target audience. Examples of appropriate channels include locations that the audience typically frequents, or information sources that the audience finds particularly credible.

#### 4.1 Outreach to Varied Community Groups May Increase Education Program Reach

Among survey respondents, Churches or other religious groups have the highest participation rate (51%) out of all other organizations. These organizations not traditionally associated with environmental issues, have taken initiatives regarding environmental concerns. For example, the annual interfaith Blessing of the Waves event which takes place draws thousands of people to the beach. In October 2012 alone, the event gathered nearly 3,000 people together to celebrate and appreciate the ocean. Sponsored by the Roman Catholic Diocese of Orange, the interfaith gathering featured representatives from Jewish, Sikh, Christian, Muslim and Zoroastrian communities (OC Register, Garcia, 2012).

Though outreach through religious groups may present challenges for public agencies, other, non-environmental groups comprised the list of top five groups to which survey respondents ascribe and will be considered as potential stewards of the Education Program. These included professional, school, recreation and hobby-based groups.

#### 4.2 Kids are Vocal Messengers

The rate of people who report hearing about the water quality message from their children has risen from approximately 25% in 2005 to more than 45% in 2012. These data suggest that kids are learning about water quality issues in school, and/or more kids are talking about water quality issues with their parents.<sup>6</sup>

Additionally, results of the 2012 Survey indicated that people with children were slightly more likely to participate in pro-stormwater behaviors such as picking up after a pet, properly using fertilizers and keeping yard clippings out of the street (between 4-8% more than people without kids). Though survey results can provide a useful snapshot in time, results cannot provide conclusive evidence for *why* this is the case. It is possible that behavior of adults is linked to the aforementioned importance of legacy messaging described in Section 2.2.3 described above. Since parents have indicated a higher likelihood to participate in pro-stormwater behaviors, the Education Program will leverage this by partnering with school or educational organizations such as the Parent Teacher Association (PTA).

#### 4.3 Activate the Influencers

In addition to organizations such as church or school, there are other methods to reach target audiences. One of these channels is through specific people who have the ability to influence a person's behavior when it comes to water quality. In the case of stormwater, there are essentially two types of individuals: influencers and polluters. *Influencers* are those who are not directly contributing to stormwater pollution, but who may influence polluters to change their negative behaviors via indirect or direct social pressure. *Polluters* are individuals who are directly sullyng the water system (e.g., via littering, pouring chemical waste down the drain).

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<sup>6</sup> Although the survey results show that reaching out to children at a young age affects their likelihood of spreading the message to others, there is sparse literature to determine whether or not this leads to long terms affects on the youth's behaviors once they reach adolescence and adulthood.

The Education Program will encourage influencers to act as channels for Education Program messages and tactics, in order to change the behaviors of the *polluters*. Both the *polluters* and *influencers* will be driven by different barriers and motivators for engaging in actions to improve stormwater. The Education Program will apply distinct approaches and tactics to move each group to action. For example, while it may be ineffective to encourage *influencers* to avoid littering (as they are already not littering), it may be worthwhile to promote a beach cleanup day among them. Both *influencers* and *polluters* should be encouraged to get involved with the program in order to foster long term engagement with the target audience. *Influencers* will be part of the Education Program's target audience for the second objective of building interest and engagement in the program while *polluters* will be the primary target audience for the Education Program's third goal of changing behavior.

#### 4.4 The Face of Media Is Changing

The impact of paid media has shifted significantly over the past decade. The Nielsen Global Trust in Advertising Survey conducted in April 2012, found that 92% of consumers worldwide say they trust earned media above all forms of advertising. Earned media is a term used to describe news articles that appear in the media. The trust for paid advertising has dropped since 2009. Over the last three years, worldwide consumer confidence in paid television, magazine and newspaper advertising has declined by 24%, 20% and 25%, respectively.

Survey results conducted by the Education Program over the past 10 years indicate that while Orange County voters are getting less information than ever from the print media, the number of people who get water pollution prevention information online has nearly tripled since 2003. However, it is important to note that more traditional media avenues, such as radio and television, are still cited as important distributors of information by the audience. More specifically, the 2012 Survey found that 26% of Orange County residents get their news from television and radio remains an important source of information for residents (almost three times more than internet, which is still on the rise). For this reason, the Education Program will consider a blended approach to media in the future using both traditional and new media.

## 5. OVERWATERING CAMPAIGN AUDIENCE ASSESSMENT

The *Strategic Review & Work Plans* will introduce and explain the importance of targeting a singular action to compel behavior change as part of the Education Program's "action campaigns." Each *action campaign* will require more specific audience analysis beyond what was gleaned from the Education Program's phone surveys. The purpose of this additional analysis is to appropriately understand the barriers that affect the BMP to encourage people to curb overwatering, since this will be the focus of the Education Program's first action campaign (see *Strategic Review*, Section 3).

### Overwatering Campaign Goal

The target objective for the first *Action Campaign* is irrigation practices to promote on-site water retention. The target behaviors for achieving this objective include controlling outdoor irrigation, adjusting sprinkler time clocks, etc.

## Overwatering Campaign Objectives

The campaign aims to demonstrate that 100 people took an action to practice a BMP and 300 people become engaged with the Education Program.

## Target Audience & Locations

The primary target audience includes single-family home homeowners, particularly those with outdoor sprinkler systems. High concentrations of this target audience within Orange County have been identified based on data from the 2010 US Census.

## Barriers & Motivators

The data related to barriers and motivators was gleaned by conducting a literature review of published reports, including the joint Southwest Florida Water Management District / University of Florida Irrigation Literacy Evaluation (2009), the Irvine Ranch Water District Residential Runoff Reduction Study (2004) and the San Diego County Water Authority Outdoor Water Conservation Program report (2008) amongst others. This research uncovered a number of barriers and motivators to single family homeowners engaging in irrigation practices that contribute to on-site water retention. These include:

- Barriers
  - Financial (e.g., costs money to invest in irrigation control)
  - Technology barrier & low self-efficacy (e.g., low confidence in ability to use technologies that control irrigation systems)
  - Misunderstanding about vegetation moisture needs overall and seasonally
  - Keeping up with the Joneses (concern about lawn looking unkempt)
  - Strict watering rules imposed by HOA that contributes to overwatering
- Motivators
  - Save money
  - Comply with rules/regulations related to water use
  - Overwatering hinders plant growth

## Crafting the Message

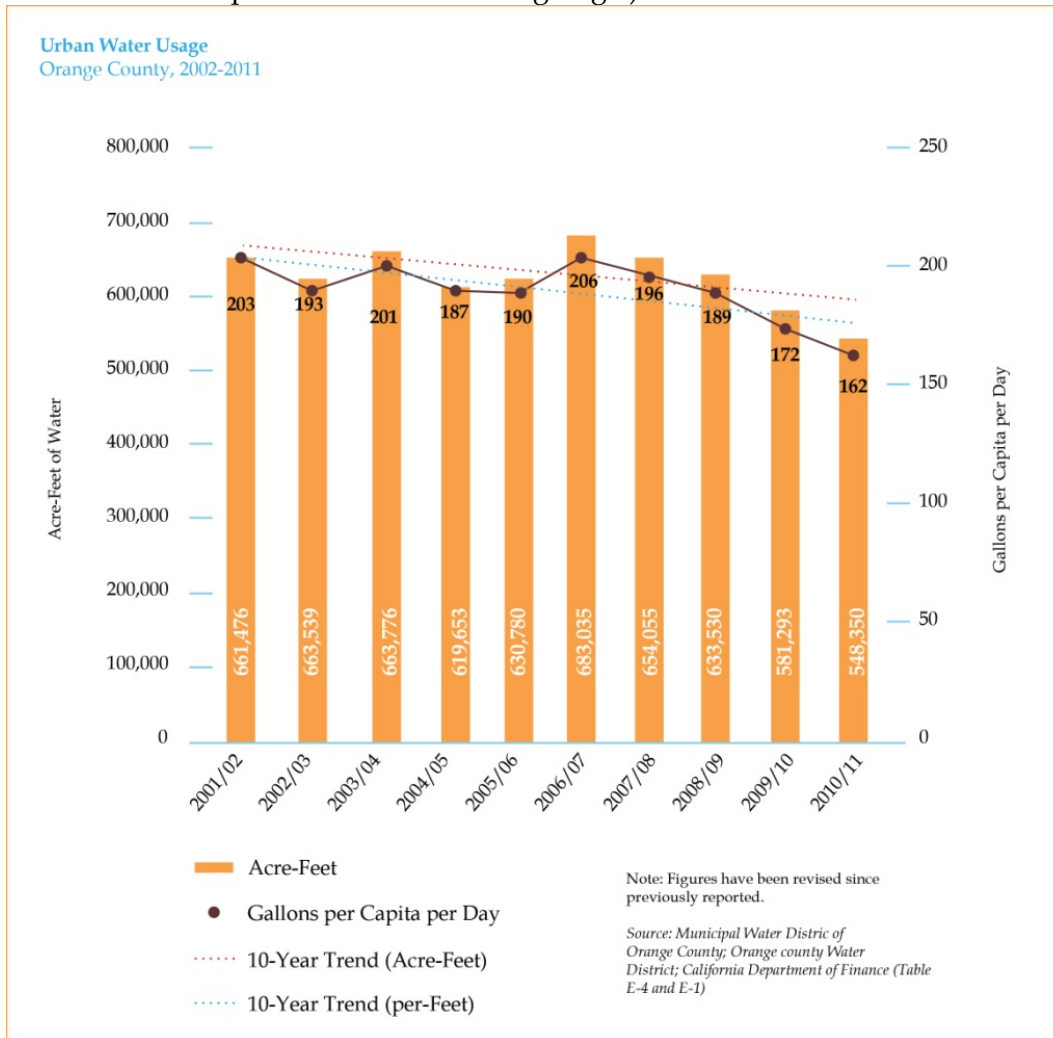
### *Speak to Specific Barriers & Motivators*

These results above suggest that campaign messaging that includes an appeal to economic factors or fines are most likely to strike a chord with the target audience; although, the feasibility of imposing fines is unlikely. On the flip side, it is also important to demonstrate that efficient watering does not equate to a dead lawn since the “keeping up with the Joneses” barrier, when it comes to lawn care, seemed to be reoccurring through many of the studies.

There also appeared to be a negative association with words such as “natives” or “xeriscaping” since they are not equated with a lush or beautiful landscape (SD County Water Authority, 2008). The Education Program will therefore avoid this verbiage when doing outreach.

### Highlight Norm of Downward Trend in Water Usage

As can be seen in Figure II.4 below, per-capita urban water usage (residential and commercial) has declined over the past four years. This data could be leveraged to promote positive social norms (e.g., “Water use has been declining for the past decade in OC. Good job OC! Be part of the movement to keep the downward trend going!”).



**Figure II.4. Urban Water Usage in Orange County from 2002-2011.**

Source: Orange County Community Indicators Report 2012

## 6. AUDIENCE ANALYSIS SUMMARY

By gaining a thorough understanding of the Education Program’s target audience, we can deliver targeted, powerful messages through the most effective mediums to modify key behaviors. The *Audience Analysis* above focused primarily on summarizing the audience’s motivators and barriers to engaging in activities that improve water quality through a detailed analysis of a variety of data (Education Program phone surveys, external studies, etc.). That data was then used to inform how Education Program messages and outreach methods should be developed and implemented. The key findings related to messaging and mediums are summarized below:



### Key Findings Informing Messaging:

- **Appeal to Diverse Audiences:** Orange County is ethnically diverse, with 44.4% of county residents speaking a language other than English at home. These demographic trends mean that in some cases, program materials should be tailored to meet the language and ethno- cultural needs of specific target communities.
- **Appeal to Economic Concerns:** According to the 2012 OCSW Survey, economic concerns trumped all others as being the most important issue in the county. The Education Program messages will therefore make the connection between stormwater pollution and the local economy. However, it is important to note that economic concerns were not a primary issue during the survey collection years when the economy was thriving (2003 and 2005) so it will be necessary to consider the state of the economy when using this motivator.
- **Emphasize Pollution Effects on Surrounding Environment:** According to survey results over time, Orange County residents are more concerned about *the effects* of stormwater pollution and pollution of the community in general, as opposed to stormwater itself as an issue. Education Program messaging will therefore focus on pollution effects rather than promoting awareness of stormwater issues in general.
- **Connect the Issue to Future Generations:** In terms of finding the right language to frame stormwater issues, preserving the environment for future generations is a powerful motivator (2012 Survey).
- **Use Words that Resonate:** Education Program messages will use terminology that resonates with the target audience. For example, the Education Program will use the term “water efficiency” in place of “water conservation”, as the 2011 Municipal Water District of Orange County survey found that people tend to respond better to the former.

### Key Findings Informing Communications Methods & Mediums:

- **Carefully Identify Which Behaviors to Target:** To increase impact and maximize resources, the Education Program will only target those behaviors that are most widely performed, potentially high impact actions. Messages will then be developed around the specific barriers and motivators associated with performing those actions.
- **Outreach to Varied Community Groups:** 2012 Survey results demonstrate the audience’s participation in a number of professional, religious<sup>7</sup>, school, recreation and hobby-based groups. In delivering messages through these groups, the link should be made between protecting water quality and how that goal aligns with values or goals held by social or community-based group.
- **Kids are Vocal Messengers:** The rate of people who report hearing about the water quality message from their children has risen from just shy of 25% in 2005 to more than 45% in 2012. Additionally, parents have indicated a higher likelihood to participate in pro-stormwater behaviors than singles. The Education Program will leverage this by partnering with school or educational organizations such as the Parent Teacher Association (PTA).

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<sup>7</sup> The Education Program’s decision regarding whether or not to reach out to religious groups has not yet been finalized. Further discussion on this matter is needed amongst the 34 cities and the County.

- ***Activate the Influencers:*** Influencers are those who are not directly contributing to stormwater pollution, but who may influence polluters to change their negative behaviors via indirect or direct social pressure. The Education Program will encourage Influencers to act as channels for Education Program messages and tactics, in order to change the behaviors of the *polluters*.
- ***The Face of Media is Changing:*** Media outreach will focus on delivering messages using a blend of traditional and new media.

## 1. INTRODUCTION

Iterative development is the cornerstone of Education Program efforts. Strategy and approach discussed in the *Strategic Review* utilizes trends in behavior and knowledge garnered since 2003 (see *Audience Analysis*) to restructure the Education Program efforts to maximize potential impact, document behavior change and increase public commitment in preserving water resources. Strategy will include modifications to the overall Education Program structure as well as changes that will be made on a tactical level (i.e. website to the Education Program brand) to align all program elements.

## 2. GUIDING PRINCIPLES TO THE STRATEGY MOVING FORWARD

For the past decade, the Education Program has focused on increasing community awareness and behavior change around stormwater issues through large-scale information campaigns targeting a wide range of behaviors and pollutants of concern. The broad-based awareness achieved by the Education Program to date has established a solid baseline of knowledge across the target audiences within Orange County. The Education Program has also noted several indications of behavior change as they relate to stormwater pollution-prevention according to the biennial survey results.

The approach taken to date (a.k.a. “the previous approach”) has focused on macro-level general water quality messages in response to the need of the permit requirements, which include reaching 100% of the County and achieving 10 million impressions through various forms of media. Targeted messaging was utilized within this framework to promote community involvement in specific events, in recognition of specific activities (e.g. Cleanup Day and Earth Day) and to promote specific behaviors protective of water quality on a countywide scale. As the Education Program comprises of 34 cities within 11 watersheds, the previous approach sought to maximize equity of messaging and resources amongst Permittees and Regional Board areas (North and South).

Through this iterative decade-long process of developing, assessing, modifying and implementing, the Permittees have built an Education Program that has exceeded Permit requirements every year. Based on 2012 Survey results and the *Audience Analysis*, the strategic focus will shift to include targeting specific high-impact behaviors on a smaller scale to provide more detailed information about public perception of their impact on water quality. Additionally, a highly targeted strategy will allow the Education Program to produce deeper levels of engagement with the goal of making more complex requests of the audience. These increasingly complex requests will in turn produce increasingly larger impacts in reducing stormwater pollution.

As discussed in the *Audience Analysis*, survey results do not indicate whether “willingness” to participate in behaviors protective of water quality translate to action. Though this is difficult to establish, small-scale, focused Education Program efforts will seek to build a base of residents from which the Education Program can assess whether people follow through on commitments made over time. Also, changes in behaviors will be assessed by tracking target audiences, bolstering biennial survey results with short-term analysis and specific examples.

The Education Program is therefore proposing a two-pronged outreach approach of which the two components are described in detail below.

### 3. TWO-PRONGED APPROACH: FOUNDATIONAL & ACTION CAMPAIGNS

The Education Program has demonstrated increases in community awareness around stormwater issues, in addition to small, yet significant changes in behavior through the use of large-scale information campaigns. Education Program effectiveness for the *foundational campaign* will continue to be tracked through surveys and impressions and will be supplemented with small-scale, focused evaluation of the *action campaign*. The *action campaign* relies heavily on Community Based Social Marketing and social psychology principles to guide the strategy (a thorough literature review describing these principles can be found in *Appendix B*).

As mentioned above, the Education Program’s two-pronged approach will comprise of the traditional *foundational campaign*, and *action campaigns* (see Figure III.1). The *foundational campaign* will take place throughout the duration of the Education Program, maintaining a consistent water quality message for ongoing Education Program components such as overall branding, school and business outreach, social media and the Education Program website. The *action campaigns* will each focus on a specific action that a target audience should perform with the end-goal of reducing stormwater pollution. Throughout the five year Education Program, there will be three *action campaigns*, see Table III.1, each focusing on a single discrete action (i.e. behavior). Operating parallel to one another, both types of campaigns will continue to meet Permit compliance for achieving impressions and outreaching to all residents and businesses as well as track specific track behavior change over time.

# HOW THE PROGRAM PIECES FIT TOGETHER



**Figure III.1. The Education Program: Foundational Campaign & Action Campaigns**

The illustration above demonstrates how the Education Program’s two-pronged approach works in practice. The objectives and tactics are intended to show where resources should be allocated to gain the maximum benefit. For example, it is recommended that stakeholder tracking remain an ongoing component of the program through the Foundational Campaign rather than an element that is in practice to primarily support the Action Campaigns.

## 3.1 The Foundational Campaign

The purpose of the *foundational campaign* is to capture all Education Program elements that will remain relatively steady throughout the five year period, and to fulfill a major component of the Education Program, which is to continue to achieve 10 million yearly impressions. For example, stakeholder tracking (i.e. recording all stakeholder interactions in a central database) will take place consistently throughout the duration of the Education Program for the next five years. The *foundational campaign* will also track engagement in online media platforms (e.g. newsletter, Facebook) and create a database to track all program stakeholders. The purpose of these platforms is to develop a comprehensive list of all stakeholders who have interacted with the program for the purpose of asking them to do more and more at incremental steps. This process will help to funnel stakeholders into the *action campaigns*.

Elements that fall under the *foundational campaign* can be characterized by one or all of the following:

- Using general water quality motivators & barriers to disseminate messages (e.g. legacy messaging discussed in the *Audience Analysis*)
- Platforms that need to remain relatively steady over time (e.g. the Education Program’s Facebook page cannot change its name from year to year, but rather, needs to stay consistent over the life of the Education Program)
- Tactics that focus on promoting general water quality (e.g. participate in coastal cleanup day ads)
- Tactics that rely solely on the biennial phone survey, and not any other customized evaluation plans, to track success

It is important to note that a tactic in and of itself does not determine if it is considered *foundational* or *action* specific. For example, an advertisement may be considered either depending on how it is used within the context of a campaign. An advertisement placed to highlight the importance of protecting the Pacific Ocean would be considered *foundational* since the message it is spreading is more general in nature. Whereas an advertisement that directs a viewer to visit a website page to take a survey about overwatering would be considered *action* because the focus of the ad is to help promote the specific BMP that the *action campaign* is focused on. Details about how an individual BMP is selected are described below.

## 3.2 The Action Campaigns

The second component of the Education Program is the *action campaigns*. Throughout the five year program, there will be three *action campaigns*, which will each focus on a specific stormwater pollution-preventing action that the target audience will be asked to perform. This approach allows for a targeted focus on a specific behavior, which in turn increases the likeliness that the target audience will adopt the promoted behavior. The Education Program’s outreach tactics such as advertising and outreach events should be focused on promoting the specific BMP that is the focus for the *action campaign*.

### 3.2.1 The Science Behind Keeping it Simple

To document sustainable behavior change, it is crucial to hone in on one message (i.e. one behavior) at a time. For Orange County residents there are a variety of actions a resident can take to help protect water quality; these include picking up after their dog, properly disposing of pool water, reporting illegal dumping, etc. The options are numerous, and frankly, overwhelming to the average resident. Studies have shown that people easily become overwhelmed when presented with multiple options, leading to inaction.

This phenomenon of decision/action-paralysis is most famously depicted in the well-known “Jam Study” (Iyengar and Lepper 2000). In this study, a professor and her research assistants set up a booth of samples of Wilkin & Sons jams in a California supermarket. Every few hours, they switched from offering a selection of 24 jams to a group of six jams. On average, customers tasted two jams, regardless of the size of the assortment, and each one received a coupon good for \$1 off one Wilkin & Sons jam.

Sixty percent of customers were drawn to the large assortment, while only 40 percent stopped by the small one; however, 30 percent of the people who had sampled from the small assortment decided to buy jam, while only 3 percent of those confronted with the two dozen jams purchased a jar. This study indicates that the presence of choice might be appealing as a theory, but in reality, people might find more and more choice to be debilitating.

The findings from the “Jam Study” are supported by similar studies of actions ranging from consumer behavior (Iyengar et. al., 2000) to public health campaigns (American Diabetes Association, 1995; Reger, Booth-Butterfield and Smith, 1998) to environmental interventions (Jonick, Anderson, Lin, Bruni, Schultz, Groner, Orrala, 2010). Consumer research has demonstrated that community members feel confused by the number of environmental behavior change messages to which they are exposed (Jonick and Anderson et. al., 2010). As these studies have tested and hypothesized, community members are typically more willing to take on one behavior change at a time as opposed to undertaking a comprehensive lifestyle change (Regger et. al, 1998).

By simplifying campaign messaging and requests the Education Program will seek to remove the uncertainty caused by offering an array of various stormwater pollution-preventing behaviors, in favor of one single high-impact action.

### ***3.2.2 Method for Determining Action Campaign Focus***

The following variables will be considered in identifying each of the three Education Program foci to complement the *foundational campaign*:

#### **STEP 1: Identify Key Pollutants**

The first step in determining target behaviors is to examine and prioritize key pollutants according to the level of harm they pose to the environment and prevalence in water quality monitoring results. Education Program efforts have encouraged BMPs regarding pollutants of concern from priorities set by Permittees and other stormwater program components; however, the strategic focus for identifying key pollutants for outreach purposes will include a more thorough annual review of water quality monitoring results on the Countywide scale (reported in Section 11 of the Unified Annual Report). This review, conducted in tandem with the Water Quality Monitoring and Science Task Force on an annual basis will provide guidance for the Public Education Sub-committee to prioritize pollutants based on prevalence in the system (i.e. is this a Countywide issue? Watershed issue?), potential impact to the environment, anthropogenic sources and whether education could impact the presence of these pollutants. The latter will require examination of pollutants sources from a land use and activity/behavior-based perspective to determine if residents are a significant source that can be prevented by individuals participating in simple behaviors. For example, legacy contaminants such as Selenium in the Newport Bay Watershed are a major issue, but there are no simple BMPs that residents could adopt that would affect reductions in Selenium.

Additionally, annual results of illegal discharge/illicit connection responses will be considered for targeted outreach above jurisdictional responses if trends in complaints and discharges arise from annual reporting data. These outreach efforts will likely supplement the action campaigns.

### **STEP 2: Determine Return on Investment (ROI)**

The next step is to determine which behaviors will produce the largest return on investment (ROI). ROI<sup>8</sup> is predicted by assessing two factors: (1) the number of people performing that action; and (2) the likelihood that those people would change that action. In determining ROI, it is important however to balance impact vs. ease of adoption. There is a balance between ease of performing a certain behavior and the potential environmental impact. Considering these factors, the Education Program examined past phone survey results to identify those behaviors in which most people are (or not) engaging.

*An example of this step in action:* 2012 Survey results indicate that the majority of the population is participating in a pro-water behavior (i.e. each behavior ranges between 43% -72% in the people's willingness to do something scale). The issue that ranked the lowest at 43% is picking up after pets, however this ranking is likely artificially low as the analysis includes non-pet owners. This assumption is validated in an earlier part of the 2012 survey where 97% of pet owners claimed to pick up after their pets.

Moving up the scale, the next issue in which most 2012 Survey respondents were engaging was washing the car (at 61%), yet only 18% of the total respondents cited washing their car at home. The next activity was overwatering the lawn (63%), however 85% of respondents claimed to not see water pooling in the gutter or street after watering. Properly using pesticides and fertilizers was cited as being engaged in by 65% of the respondents. The 2012 Survey also revealed that 84% are using pesticides while only 29% of people are using fertilizers. Although this issue demonstrates high levels of engagement, the number of people performing the behavior themselves are quite low, with only 33% of respondents taking care of their own pest control.

### **STEP 3: Consider External Opportunities and Needs**

The final step in the process is to consider external opportunities and needs. To complete this step, an environmental scan should be conducted, looking for opportunities to leverage campaign messages and tactics.

*An example of this step in action:* In conducting an environmental scan related to overwatering, a key opportunity was identified that further elevated the appropriateness of irrigation as a focus. The Water Districts have launched a "control your controller" campaign, which also focuses on reducing overwatering. The presence of this external parallel campaign provides existing momentum to push this potential "overwatering-focused" *action campaign* forward.

Second, Permittee input was also considered. A survey of the NPDES Public Education Subcommittee, comprising representatives of cities and other agencies, showed overwhelming support for controlling excessive runoff from properties, which again, further pushed forward the selection of this action. For example, 85% of committee respondents rated controlling outdoor irrigation as the #1 action that should be targeted.

Proposed actions for the duration of the Education Program are outlined in the table below. However, not all components of the three step methodology have been done for *action campaign #2* and *action campaign #3* since external opportunities and needs are time sensitive. For this

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<sup>8</sup> ROI, in this case, is used as an analogy to convey the importance of assessing which behaviors will allow the Education Program to have the biggest bang for its buck. The ROI described in this section is not an actual calculation, but rather, a qualitative measure.



reason, the three step process will be done each time the Education Program is going to select a new *action campaign* focus.

Year	Action	Pollutant	Audience	Difficulty
Action Campaign #1	Cut down watering by one day a week <sup>9</sup>	Excess runoff	<i>Primary:</i> Homeowners <i>Secondary:</i> Landscape professionals, other related partners	Easy
Action Campaign #2	Hire an eco pest control operator	Pesticides	<i>Primary:</i> Homeowners and landlords who outsource pest control <i>Secondary:</i> Pest control companies, other related partners	Medium
Action Campaign #3	Install a rain barrel	Excess runoff	<i>Primary:</i> Homeowners who participated in the first and second action campaign. <i>Secondary:</i> New homeowners, related partners	Hard

**Table III.1 Education Program’s Proposed Action Campaigns**

### 3.3 Evaluating Education Program Impact

Evaluation is a critical component of any outreach program and supports iterative development of the Education Program to ensure both Permit compliance and maximization of outreach efficiency. The outreach campaign design will integrate assessment techniques into the structure of the campaign itself, so that the campaign and the measure of its success are intertwined.

#### 3.3.2 *Outputs vs. Outcomes*

An outcome quantifies actual performance; whereas outputs are the specific deliverables and actions that have occurred on the road to achieving that outcome. An output is typically tangible, while an outcome speaks to the Education Program goals and results achieved. For example, 100 homeowners signing a pledge card would be an example of an output. An outcome would be: of those homeowners who signed the pledge card 40% were more likely to install a rain barrel relative to homeowners who did not sign a pledge card.

#### 3.3.3 *Impressions*

<sup>9</sup> This is an example of a proposed action. The final selected action will need to be vetted and then selected in collaboration with utility agencies and the UCCE

The SAR Permit mandates that the program achieve 10 million impressions through various forms of media as a measure of Education Program success. To meet Permit compliance and to provide a base for overall assessment of city and County outreach efforts, impressions will continue to be an assessment metric. Impressions are not direct indicators of behavior in most circumstances; however, they do provide a valuable measure of message dissemination county-wide. The Permittees recognize that supplementing traditional outreach efforts with CBSM techniques and community-based outreach will more readily link to behavior change in the short-term.

### ***3.3.4 Regional (Phone) Surveys***

Surveys can provide both outputs and outcomes. The 2003, 2005, 2009 and 2012 Surveys yielded useful macro-level information on metrics such as county-wide participation in BMPs, message saturation, and county-wide awareness of stormwater issues. In these surveys, message saturation represented an output and participation in BMPs and awareness represented Education Program outcomes.

Regional surveys (most commonly conducted by phone) are high-level and show knowledge gains and behavior change over long periods of time. Further, unless questions are tailored to seek responses on specific outputs or outcomes, making a connection to specific behavior change can be challenging. Prior to each future biennial survey, the Permittees will consider what information is necessary to assess specific outcomes to most effectively report on Education Program impacts.

### ***3.3.5 Moving ahead: Annual Evaluation***

In addition to biennial surveys tailored to capture output and outcome-oriented information, the Education Program will also set specific annual objectives (i.e. specific milestones leading to the Education Program's overall end goals). Accordingly, the Education Program will establish baseline measures and follow-up assessments annually; outcomes reported will capture adoption of specific BMPs in the short term.

## **4. NEXT STEPS FOR TACTICS**

This next section will review the overarching tactical approach, which can also be described as the specific outreach interventions that will take place to meet the Education Program objectives. Specific information about how the tactics will be carried out can be found in the *Work Plan* (see *Appendix A* for an explanation of the difference between goals, objectives and tactics).

### **4.1 Grassroots Outreach**

Grassroots outreach is usually characterized by its face-to-face nature and takes place "on the ground" as opposed to mass media which is large scale and reaches many people at once. To date, the Education Program has done grassroots outreach through outreach events such as, a speakers' bureau, building partnerships, multi-ethnic outreach, and school programs. Moving forward, the Education Program will approach outreach in the following way:

#### **4.1.1 School Outreach**

Continue to leverage partnerships as a way of reaching the most students possible. This has been an effective strategy in the past because the Education Program has been able to get its messages into schools without having to bear the brunt of all of the costs (e.g. contacting teachers, creating curriculum) associated with such an endeavor. This focus on making inroads with other organizations such as the Discovery Science Center, the Department of Education and the Municipal Water Districts of Orange County; to name a few; will continue as a key component of the Education Program moving forward.

#### **4.1.2 Partnership Building**

Sustaining and creating new partners will continue to be part of the Education Program's secret sauce in reaching as many people as possible by leveraging messages across various organizations. This approach will be used not only for school outreach but for many other aspects of the Education Program, including spreading the word about the *action campaign*, lending and repurposing materials that are created, speaker's bureau opportunities, etc.

Moving forward the Education Program will continue to focus on creating additional opportunities for partners to help spread the message about our Education Program and its resources. Some examples may include sharing newsletter articles and asking partners to include it in their own newsletters or providing materials for partners to distribute when they will be at an event where the Education Program will not be present.

#### **4.1.3 Event Outreach**

Moving forward the Education Program will continue to attend and give out information at events. The purpose of staffing events will not only be to give out information, but also to ask people to join the *action campaigns* as a way of building up our list of stakeholders. The latter of these actions produces more sustainable behavior change and a longer lasting relationship with our audience and should therefore be given top priority. Collecting contact information and, where appropriate, pledges and survey from event participants will therefore be markers of an event's success.

### **4.2 Media Outreach (Traditional & New Media)**

In the past, the Education Program's traditional media outreach has been done through an intensive paid media campaign that included paid advertising on radio, television, in movie theatres, gas pump tops, online and in print media. This paid media campaign has been effective in raising awareness and has made modest movement toward behavior change.

On an annual basis, the media plan will be revised based on outreach needs and will include elements to meet Permit compliance; namely, achievement of 10 million impressions and outreach to 100% of Orange County. The Education Program plans to leverage its resources by building and utilizing partnerships with other County and water agencies to: a) ensure consistent

messaging and b) more thoroughly integrate efforts and impressions. For example, the County of Orange Health Care Agency (OC HCA) - Used Oil Program conducts media outreach on proper disposal of used oil and filters. A key component to used oil outreach is promotion of water quality protection; through a partnership with OC HCA, the Education Program will be able to collaborate on messaging, include impressions achieved through these media efforts and maximize reach regarding an identified pollutant of concern.

Further, earned media, or publicity for a product, program or concept embedded within the content of the media news story, article or program, will become a key component of the Education Program's outreach and will be supplemented by paid media. The Education Program will use both earned media and paid media to promote *foundational campaign* elements when needed (e.g. Coastal Clean Up Day), but a special emphasis will be placed to use these powerful media tools to promote the *action campaigns* specific BMPs. In this way, all Education Program components from media to grassroots outreach are working to encourage the audience to adopt a singular action.

The media plan will also include a social media campaign of Facebook, Twitter, Blogs, YouTube and other online media applications to complement the Education Program's well established track record with more traditional media.

### **4.3 Stakeholder Tracking**

Previously, stakeholders were not systematically tracked. Moving forward, the Education Program will track all individuals in order to continually engage them throughout the life of the campaign. Doing so will provide the means to deliver feedback, increase commitments and build norms around pollution-preventing behaviors within the community. As a best practice, special attention will be paid to respecting the privacy of the individuals who provide the Education Program with their contact information.

### **4.4 Design & Branding**

A brand is recognized by its ability to establish a visual, cohesive identity and assessed by both recognition and the emotional reaction it elicits from the target audience. A brand therefore sets the stage not only for the visual components but also the tone and personality of the Education Program. Keeping in mind that one of the goals of the Education Program is to build long term engagement with the audience, the presence of a solid brand is critical to encouraging audience involvement and continued engagement over the long-term

#### **4.4.1 Current Visual Elements**

Over the past ten years, the Education Program has built a library of materials and artwork that utilizes certain visual elements. The three main visual elements can be seen in the graphic below.



**Figure III.2. Branded Elements of the Education Program's Current Designs**

#### 4.4.1a The Ocean Begins at Your Front Door

This phrase "The Ocean Begins at Your Front Door" is intended to focus on the importance of the interconnectedness of the watershed by reminding the target audience that their actions have an impact on the ocean. It's inclusion in Education Program materials includes a couple versions such as "Remember the ocean begins at your front door" and simply "The ocean begins at your front door." The slogans have been used in two different ways. The first is as a driver for the message/ad itself. In Figure III.3 "The Ocean Begins" concept of the storm drains leading directly to the ocean is the focal point of the "Connect the Drops" ad. The second is as a message to be placed at the bottom of Education Program materials, as a reference to the Education Program. While in the automobile maintenance handout, the "Ocean Begins" message is included as a reminder.



**Figure III.3. Examples of How the “Ocean Begins” Messaging is Used on Materials**

According to the 2012 Survey results, the motivator that resonates most with Orange County residents is that of leaving behind an environmental legacy for their children and grandchildren (see *Audience Analysis*, Section 2.2). In addition, awareness about the connection between the storm drains and the ocean will be less of a focus in the upcoming program compared to building a movement of followers and getting people to take a specific action (see the Education Program’s goals & objectives in the *Introduction*). For this reason, the Education Program will update the overall brand with messaging that more closely ties in with the legacy motivator and the goal of building a following and that de-emphasizes messaging associated with general pollution prevention awareness.

#### **4.4.1b Project Pollution Prevention Logo & Brand**

The Project Pollution Prevention logo was originally developed by the Los Angeles County stormwater program and was adopted by the Education Program as a way of leveraging stormwater messaging across regions in the hopes of producing more substantial impact. The logo can be found on virtually all of the Education Program’s materials and serves as the public facing logo. This has done an effective job of preventing the “logo soup syndrome” which can become prevalent in projects that have more than one agency providing input. The Education Program will continue to use the Project Pollution Prevention logo as the singular logo for all

Education Program materials; however, the logo will now be used in tandem with a message and brand that more closely aligns with the legacy motivator described in the section above.

Moving forward, the Education Program will develop a brand that will: a) establish consistent design elements, b) a personality that speaks to the audience & builds engagement; and c) replace “The Ocean Begins at Your Front Door” messaging. The branding will be included on all communication media (e.g. social media accounts, ads, website, etc) allowing for a consistent look and feel and making the Education Program recognizable and reputable to stakeholders throughout Orange County. The Education Program will utilize revised branding on all public facing correspondences over the next five years but will not revise all previously created material.

#### **4.4.1c Sea Turtle**

The sea turtle illustration is primarily used on materials that are geared towards children, but on rare occasions has been used for a more general audience (i.e. Coastal Clean Up day newspaper ads). This design has been popular with younger audiences (anecdotal observation based on outreach and school events/activities) and will continue to be used as part of school outreach efforts. Additionally, elementary-aged students learn about the impacts of pollution on marine life; recognition of a sea turtle as one of the marine animals most affected promotes the connection between land-based trash and ocean pollution. Moving forward, the Education Program will continue to use the sea turtle for correspondences and materials directed at children (K-8).

### **4.5 Website**

#### **4.5.1 *www.ocwatersheds.com Website***

The [www.ocwatersheds.com](http://www.ocwatersheds.com) website will undergo a transition in late 2012/early 2013 to include a uniform look to other County of Orange managed sites and a content management system. Though this limits the design capabilities of the site, this process will likely streamline Principal Permittee administration of site content. The Education Program website (a sub-site to the parent [www.ocwatersheds.com](http://www.ocwatersheds.com) website) is geared to be more user-friendly for the general public than the parent site and has interactive games for kids, downloadable resources and program information broken up into categories for residents, businesses and schools. These elements will be maintained through the website transition.

#### **4.5.2 *Action Campaign's Micro Sites***

The [ocwatersheds.com](http://ocwatersheds.com) website will continue to be the hub for all of the program materials; however, because the program will be launching *action campaigns* (see *Strategic Review*, Section 3.2) focused around specific BMPs, it is preferable that small micro sites be created to support these campaigns. The microsites will allow the program to build in features that may not be supported through the *Civica* Content Management System (e.g. enter a pledge, photo submissions, Facebook feed) but that will be valuable parts of the *action campaigns*. The microsites may range anywhere from 1-5 pages depending on the size and duration of the *action campaign*. All of the microsites will link back to the [ocwatersheds.com](http://ocwatersheds.com) website. At this point, because the

Civica transition is still in progress, whether or not the Education Program will definitively be able to create these micro sites is pending.

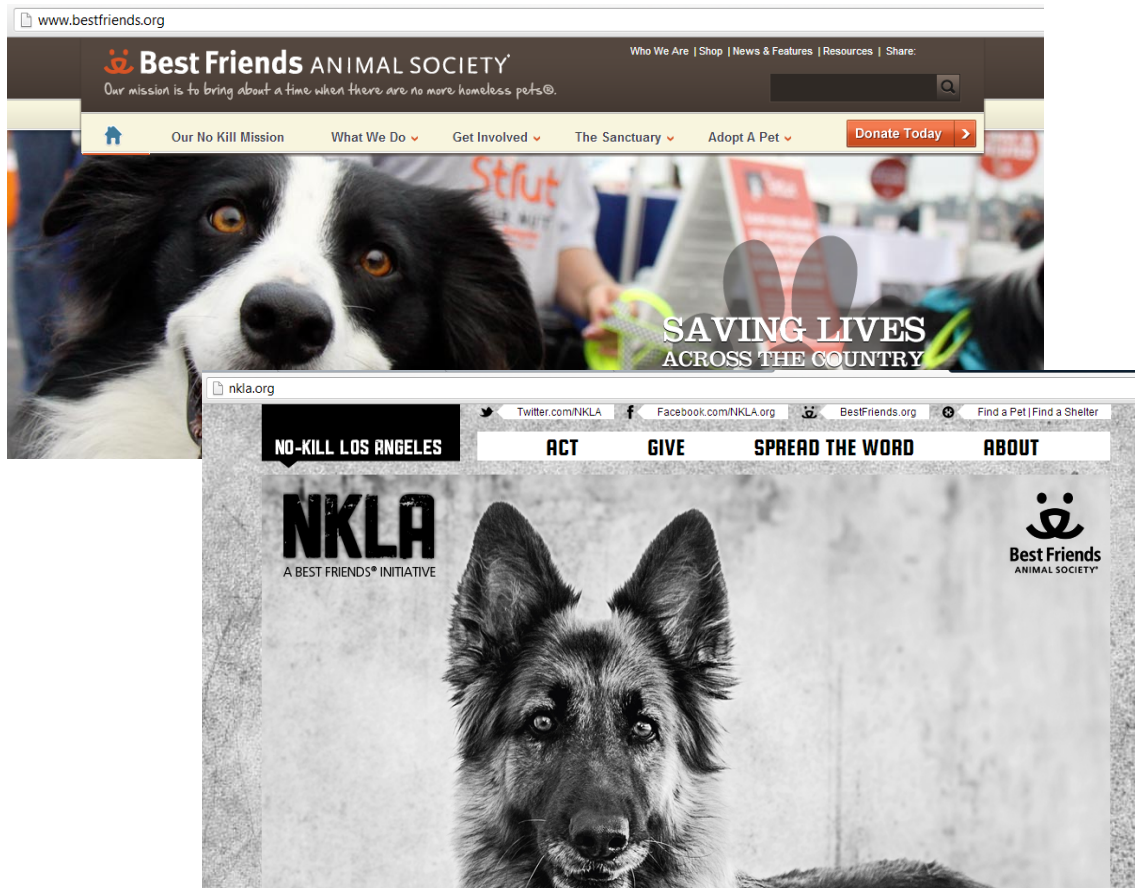


Figure III.4. Two Website Screenshots Demonstrating How a Main Campaign Website (bestfriendsanimalsociety.com) and a Microsite (nkla.org) Work Together

## 5. STRATEGIC REVIEW SUMMARY

In summary, the Education Program will apply a two-pronged outreach approach that includes both traditional mass media and large scale information campaigns as well as targeted grassroots interventions, both approaches will work symbiotically to achieve the Education Program goals.

The *foundational campaign* will take place throughout the duration of the Education Program, maintaining a consistent water quality message for ongoing Education Program components such as overall branding, school and business outreach, and the Education Program website. The *action campaigns* will each focus on a specific action that a target audience should perform with the end-goal of reducing stormwater pollution and tactics that include direct outreach or promotion, such as advertisements and events will focus on promoting the *action campaigns*. Throughout the five year Education Program, there will be three *action campaigns*, each focusing on a single discrete action.

Running parallel to one another, both campaigns will continue to meet Permit compliance for achieving impressions and outreaching to all of Orange County. Education Program effectiveness



for the *foundational campaign* will continue to be tracked through surveys & impressions and will be supplemented with small scale, focused evaluation for the *action campaign*.

The tactical elements of the Education Program include a comprehensive yet targeted suite of outreach and marketing tools. These tactics and key next steps for each one include:

<p><b>Grassroots Outreach</b></p>	<ul style="list-style-type: none"> <li>• Align certain outreach tactics to promote specific behaviors under the <i>action campaign</i></li> <li>• Continue to build upon well-established partnerships as a way of leveraging the Education Program’s messages</li> </ul>
<p><b>Media Outreach (Traditional)</b></p>	<ul style="list-style-type: none"> <li>• Focus media outreach on earned media and pro bono advertising opportunities instead of paid media, which will be minimized and used primarily to promote the <i>action campaign</i>.</li> </ul>
<p><b>Media Outreach (Social)</b></p>	<ul style="list-style-type: none"> <li>• Launch a social media campaign that will include Facebook, Twitter, eNewsletter and YouTube Channel</li> </ul>
<p><b>Stakeholder Tracking</b></p>	<ul style="list-style-type: none"> <li>• Track all stakeholders, both residents and partners, throughout the life of the program</li> </ul>
<p><b>Branding</b></p>	<ul style="list-style-type: none"> <li>• Develop a consistent and cohesive brand identity (i.e. design elements of the brand) by updating “the ocean begins” messaging</li> <li>• Create and maintain a consistent brand strategy</li> </ul>
<p><b>Website</b></p>	<ul style="list-style-type: none"> <li>• Make small changes to ocwatersheds.com that fit within the Civica framework</li> <li>• Create micro sites for <i>action campaigns</i></li> </ul>
<p><b>Evaluation</b></p>	<ul style="list-style-type: none"> <li>• Evaluation will work to support campaign’s numeric objectives (see <i>Introduction</i>)</li> <li>• Additional audience specific research (as a supplement to the phone survey data) will need to be done to uncover barriers and motivators for each of the action campaigns</li> <li>• Customized evaluation plans will be developed for each action campaign as a supplement to the large scale phone surveys</li> <li>• Outcome related numbers will be given priority, while output related numbers will be accomplished in the most efficient means possible</li> </ul>

## 1. INTRODUCTION

As described in the *Strategic Review*, the Education Program will supplement traditional media outreach with targeted, community based outreach moving forward. These two components of the Education Program (media & community based) will work together symbiotically to implement programs throughout the County that get results. In the *Strategic Review* (see Figure III.1) the Education Program introduced the two tiered approach of the *foundational campaign* and *action campaign* that set the stage for the Education Program approach. The Foundational component includes tactics that will remain relatively steady and unchanging through the next five years, while the Action campaign component will involve a more iterative approach focused around single, measurable actions that will be determined in concert with the NPDES Public Education Sub-committee. Both the *foundational campaign* and *action campaign* will work together to meet the Education Program's stated goals & objectives.

### 1.2 Where Are We Going? A Look at the Education Program Goals

The end goal of the Education Program is to protect water quality by complying with the education sections of the San Diego and Santa Ana NPDES permits. The Education Program accomplishes this goal by increasing awareness and changing the target audience's behaviors as they relate to stormwater pollution. The Education Program's goals are as follows:

1. Reach out to 100% of the audience in Orange County
2. Build long term engagement with the audience
3. Demonstrate the audience took an action to practice BMPs

### 1.3 How Will We Know We've Arrived? Setting the Education Program Objectives

The Education Program's objectives are specific, measurable targets that will act as assessment tools for outreach efforts conducted throughout the reporting period. Objectives are intended to set the numerics that will help the Education Program determine if we have been successful in achieving the big picture goals (listed above).

1. Reach out to 100% of the audience in Orange County
  - a. Achieve 10 million impressions per year:
2. Build long term engagement with the audience:
  - a. Build a following of 2,000 people (people who actively agree to join the program in some way)

3. Demonstrate the audience took an action to practice a Best Management Practice (BMP):
  - a. Demonstrate that 400 people practiced a BMP

### 1.3.1 Year 1 Objectives

The first year will focus on laying the groundwork for many of the *foundational campaign* elements (e.g. design, website, etc), building our base of supporters and launching the first *action campaign*. These objectives are therefore a step on the way to achieving the Education Program’s overarching objectives (listed above).

Objectives:

- Achieve 10 million impressions
- Recruit 300 campaign followers
- Demonstrate that 100 people practiced a BMP

## 1.4 How Are We Going to Get There? Laying Out the Tactics

The following sections provide a roadmap of tactics to most effectively accomplish both the program’s overall and first year objectives. The tactics are separated by what will take place under the *foundational campaign* and the *action campaign*. In some cases there will be similar tactics that are performed under each type of campaign (e.g. both *foundational* and *action* have “evaluation” that will be conducted to specifically measure success under each initiative).

## 2. FOUNDATIONAL CAMPAIGN

### 2.1. Staying Accountable with Evaluation

The purpose of evaluation will always be to speak directly to the Education Program goals by allowing the Education Program to assess if it is on track to meeting the numeric objectives. The Education Program has a total of three objectives, the first two of which correspond with the *foundational campaign* and are listed below.

#### 2.1.2. Measuring Objective #1: Achieve 10 million yearly impressions within the SAR

One of the permitting requirements is to achieve 10 million impressions annually within the SAR. While the Education Program has traditionally achieved these impressions through paid advertising, the impressions will now also be achieved through earned media opportunities (i.e. media that comes from articles rather than information that is paid to be displayed such as advertisements). Impressions will be counted according to industry standards for each respective mass media platform (e.g. billboard counts differ from newspaper counts).

#### 2.1.3. Measuring Objective #2: Building Engagement

The Education Program will seek to convert, at least, 2,000 of the 10 million impressions mentioned above as people who become engaged in the program. Engagement is defined as an action showing involvement from the audience. Impressions track one way communication (i.e. how many eyeballs saw our materials) and engagement tracks two-way communication (i.e. how many people were we able to get to visit our website, join us on Facebook, stop at our event booth, etc.). A full list of outcome related engagement opportunities are listed in the table below.

Tool	Output Numbers	Outcome Numbers
<b>ONLINE MEDIA</b>		
<b>Facebook</b>	<ul style="list-style-type: none"> <li>• Wall posts</li> </ul>	<ul style="list-style-type: none"> <li>• Fans</li> <li>• Likes</li> <li>• Shares</li> <li>• Page views</li> </ul>
<b>eNewsletter</b>	<ul style="list-style-type: none"> <li>• Emails sent</li> </ul>	<ul style="list-style-type: none"> <li>• Subscribers</li> <li>• Open rates</li> <li>• Click through rates</li> <li>• Shares</li> </ul>
<b>Website</b>	<ul style="list-style-type: none"> <li>• Pages created</li> </ul>	<ul style="list-style-type: none"> <li>• Page views</li> <li>• Shares</li> </ul>
<b>GRASSROOTS</b>		
<b>Event Outreach</b>	<ul style="list-style-type: none"> <li>• Events participated in</li> </ul>	<ul style="list-style-type: none"> <li>• Materials distributed</li> <li>• eNewsletter sign-ups received</li> </ul>
<b>School Outreach</b>	<ul style="list-style-type: none"> <li>• Materials developed</li> </ul>	<ul style="list-style-type: none"> <li>• Kids educated</li> </ul>
<b>Partnerships</b>	<ul style="list-style-type: none"> <li>• List of partners</li> <li>• Partners solicited</li> </ul>	<ul style="list-style-type: none"> <li>• Cross promoting opportunities</li> <li>• Participants generated from partners</li> </ul>
<b>Stakeholder Tracking</b>	<ul style="list-style-type: none"> <li>• Partners entered into database (contact information is publicly available)</li> </ul>	<ul style="list-style-type: none"> <li>• Stakeholder entered into database (needs to be voluntary)</li> </ul>
<b>MULTI-CULTURAL OUTREACH</b>	<ul style="list-style-type: none"> <li>• Stakeholder meetings</li> <li>• Multicultural Community Organizations</li> <li>• Multicultural Business Organizations</li> </ul>	<ul style="list-style-type: none"> <li>• Distribution of materials</li> <li>• Presentations to groups</li> <li>• Voluntary sign ups of support</li> </ul>

These “outcome numbers” in the table above will be tracked collectively over the life of the Education Program to reach the objective of 2,000 points of engagement over the next five years. While the program acknowledges that engagement alone is not enough to change behavior, it has nonetheless been shown to be a powerful tool on the road to changing behavior (see *Appendix B*).

The program will also continue to conduct the countywide regional surveys as a way of assessing engagement with the Education Program and also to determine if people who interacted with the Education Program's campaigns were more likely to change their behavior.

#### ***2.1.4 Year 1 Foundational Campaign Evaluation Tactics***

##### *Overarching Education Program Results Tracking*

Create a framework that will allow the Program to track our progress in reaching the stated objectives for the next five years. The framework will take into account how all of the Education Program's various tactics are working to help achieve the objectives as well as the results from the survey data.

## **2.2 Getting Personal with Face-to-Face Outreach**

Face-to-face, also commonly referred to as grassroots outreach, is an integral part of making sure the Education Program is connecting in a meaningful way to the target audience. This outreach will be done in tandem with online efforts and mass media campaigns to achieve the maximum impact.

### ***2.2.1 Kid Stuff***

Previously, the Education Program partnered with the Orange County Department of Education (OCDE) in order to reach out to educators throughout the school district. The efforts included:

- Updating the Teachers' Brochure to include information about water pollution prevention programs and opportunities available for the teachers. Programs in the brochure included:
  - Project WET (Water Education for Teachers)
  - Inside the Outdoors
  - Outdoor Science School
  - The Drip-Drop Traveling Scientist
  - MiOcean / Ocean Institute Water Education Program
  - Discovery Science Center Water Education Assemblies
- Coordinating with the OCDE to ensure the brochure is delivered as a pdf to as many teachers throughout the county as is feasible.
- Reaching out to National Honor Society (NHS) students and Key Club members (youth Kiwanis organization) to provide action-oriented activities.
- Coordinating a Project WET workshop in coordination with the Irvine Ranch Water District (IRWD), Cal State Fullerton (CSUF) and the Municipal Water District of Orange County (MWDOC). Project WET is an all-day water education forum designed to provide teachers and student-teachers the tools necessary to teach about water pollution prevention and other water-related topics in an entertaining and interactive way.

- Assisting the Discovery Science Center (DSC) with the development and production of workbooks for the students who take part in the water pollution prevention event at DSC.

During the initial phase of the outreach, the Education Program will continue to assist DSC and its program partnership with MWDOC to help produce the water pollution prevention workbooks for the thousands of Orange County students who visit the DSC. The Education Program also remains active in coordinating the annual Project WET workshop along with IRWD, CSUF and MWDOC.

We anticipate expanding school outreach by developing an active speakers' bureau program that complies with all state educational standards and working closely with both the OCDE as well as private schools to reach out and offer in room presentations in order to educate both the next generation and by extension – according to our polling – their parents, about important water pollution prevention best management practices.

### ***2.2.2 Making Friends Through Partnerships***

Partnerships that relate to the overall programs include water districts, non-profit organizations, environmental groups, etc.

A list of recommended potential partners will be included in the supplemental partners and stakeholder tracking database. The partners for the *foundational campaign* will range from:

- Water quality related – partners that will apply to any of the OC Stormwater Program's overarching goal to protect water quality and that will be a consistent presence over the next five years (e.g. non-profits, cities)
- Audience driven – partners that are based on the type of preferences and club affiliations the OC audience indicated in the public opinion survey.

To effectively reach and influence the Education Program's audiences, the *foundational campaign* will seek input and assistance from partners across a number of key objectives, including:

Leveraging their own networks to distribute messages: Reciprocity will be the key ingredient for the Education Program's approach to partnerships. Partnerships will be harnessed as a way of cross pollinating program messages. The Education Program will make it a point to promote campaigns that are being hosted by our partners in our own channels (e.g. newsletter, social media, website, etc) in the hopes that these partners will also promote OC Stormwater campaigns. Possible avenues of that the Education Program can tap into, from external partners, to help promote our campaigns include:

- Allowing the Education Program to be a speaker at a meeting or gathering
- Placing an article from the Education Program in their newsletter (print or online)
- Banner, button or link about the Education Program on the partner's website
- Hosting information about the Education Program at their event booth through one of OC Stormwater's "booth in a box" kits (e.g. newsletter sign up forms, brochures, etc.)
- Promoting Education Program campaigns on social media channels such as Facebook, Twitter, etc.

- Promoting Education Program messages through any means that may be unique to that partner (e.g. utilities placing bill inserts, business owners placing a poster or campaign materials at their place of business)

Building the credibility of the message: Involving partners is also a way of lending any of the OC Stormwater Program's messages credibility. Since one of the Education Program's guiding principles is to set a normative behavior, every effort will be made to see that people see other people like them encouraging them to participate in a behavior. This will help to ensure that all of the Education Program messaging is not coming top down (i.e. OC Stormwater wants you to do this); but rather, that organizations and individuals are passing along Education Program messages to their networks and friends, respectively.

Some examples of this include a neighborhood association President encouraging members to take a pledge a dog trainer asking new dog owners to pick up after their pets or a business asking their customers to bring their reusable bag. The goal should be for the distribution of messages to be varied by engaging partners (i.e. messengers) to help spread the word laterally from peer to peer.

### **2.2.3. Business Outreach**

In order to affect behavior change that makes a difference and maintain permit compliance, the Education Program will reach out to several key business sectors such as mobile businesses, auto care facilities, food service facilities, pet care businesses, pest control operators and landscape service companies.

Because the Education Program recently reached out to auto care facilities and pet care businesses, it is recommended that we initially focus on mobile businesses and landscape service companies. Outreach to gardeners/landscape service companies (to address the "business" nexus in regards to controlling (or managing) sprinkler runoff) will be a priority.

In addition to targeting industry-specific businesses, it is important to reach out to the business community at large to emphasize the importance clean water has on the overall economy. The 2012 public opinion survey clearly shows that jobs remain the top issue with the public. Because tourism remains such a strong component of Orange County's overall economy, clean water is critical to attracting visitors from abroad, which translates into local jobs.

We plan to reach out to organizations such as the Orange County Business Council, the Orange County Taxpayers Association, the South Orange County Economic Coalition, the North Orange County Partnership and the Orange County Workforce Investment Board.

Often code-enforcement in each of the cities and the county are the "boots on the ground" when it comes to enforcing stormwater regulations. We will continue to work with these code enforcement officers to provide the educational materials needed to ensure businesses are aware of the dynamic regulations regarding water pollution prevention.

### **2.2.4 Keeping Tabs on the Audience - Stakeholder Database**

The Education Program will have a database that will, at minimum, allow us to keep track of all of the people who have interacted or agreed to join the program. The database will include current and potential partners as well as individual residents who have become involved with the program either by providing us with their contact information or participating in an Education Program sponsored event. The database will also be a key way of tracking success with Objective #2- Build Engagement. All people who are part of the database will only be included if they voluntarily offer their information (as opposed to the Education Program buying lists) and each person will have the option to opt-out of receiving correspondences from the Education Program at any time.

### ***2.2.5 Multi-Cultural Outreach***

The 2012 survey results clearly show that multicultural outreach will be an important part of the Education Program moving forward. The demographic analysis shows that many in our target audiences such as those who change the fluids on their cars at home or those who maintain their own lawns or paint their own homes are Hispanic and Asian respectively.

Our outreach efforts to these multicultural groups will begin with outreach to key community stakeholders and community leaders including multicultural business groups, multicultural elected officials, and multicultural social organizations to determine the best method to reach these communities.

Based on an ascertainment study with these individuals and group leaders, we will move forward with an outreach program using these leaders and organizations as the communications conduit that will provide credibility for our messages. For example, after meeting with stakeholders, it may be determined that a good way to reach out to Hispanic men ages 40-64 who work on their own cars is through the Knights of Columbus organization within the Catholic Church. If that's the case, we'll coordinate through the Church and offer a presentation to Knights of Columbus groups in targeted parishes that have strong Hispanic demographics.

In the past, we've endeavored to raise awareness through paid advertising in Spanish-language and Vietnamese-language media. In an effort to target behavior change in certain groups, our outreach efforts will be more refined and targeted.

### ***2.2.6 Year 1 Foundational Campaign Grassroots Tactics***

*Tracking Database:* Create a database that will allow OCSW to track groups and individuals who have interacted or have the potential to interact with the Education Program in the future. This will range from individual residents to other municipal departments to businesses and non-profit organizations. The database will allow the Education Program to keep track of all program partners in one cohesive place and will be leveraged as a tool to track ongoing stakeholder engagement.

The database will be created in such a way that, at minimum, it will:

1. Be able to be accessed and updated by approved users remotely
2. Store contact information for businesses, individuals and organizations
3. Allow the user to log manual notes of correspondence with contacts



## 2.3 Branding Our Way to Success

### 2.3.1 *Beyond Logos - Defining the Brand*

The brand will set not only the visual look, but also the tone of all of the Education Program’s public facing perception and materials. The Education Program will continue to use the Project Pollution Prevention logo and the sea turtle character, but will seek to replace “The Ocean Begins at Your Front Door” messaging with a message that is more in line with the motivators that the Orange County audience identified in the most recent phone survey (see *Audience Analysis*, Section 2.2.3).

The Education Program will develop an ad that replaces the “Connect the Drops” ad (see *Strategic Review*, Section 2.4) and establishes the messaging, tone and look for the Education Program moving forward. All of these components will be synthesized in a branding guide that will then serve as a tool for the Permittees to reference when creating materials. The branding guide will include standards related to items such as fonts, messaging, tone, etc.

### 2.3.2 *Weaving the Brand into the Education Program*

Once the branding guide is developed, the standards established will influence most all aspects of the Education Program. Below is a list of some concrete ways the defined brand will affect the Education Program:

- Materials will have consistent design elements unless otherwise noted
- Website address and social media portals will be named according to the new Education Program messaging
- The tone/personality will be consistent in all pieces (e.g. press release, brochure, social media posts, etc) developed by the Education Program, unless otherwise noted
- *Action campaign* materials will find ways to tie into the overarching brand

The Education Program recommends that all new materials adhere to the branding guidelines. However, the Education Program will *not* systematically update all previously created materials to fit within the new brand. This is not a cost effective use of resources except in the case of materials that are still in frequent use today and would benefit from being folded into the updated Education Program brand.

### 2.3.3 *Year 1 Branding & Design Recommendations*

*Brand Guidelines* : Develop a branding guide that will provide us with direction on moving forward related to aesthetics and tone. The guide will ensure that everyone is on the same page regarding how we want to be perceived by our audience.

*Update Messaging*: Develop an ad to replace “connect the drops” and that will be used to set the tone for the updated Education Program messaging, style and personality  
*BMP Factsheets*: Create a flyer template (includes 2 rounds of revisions) and do the layouts for 9 factsheets to create a professional, consistent look across all of these handouts.

## 2.4 Building Recognition with Paid Advertising

Paid advertising continues to play a role in the *foundational campaign*, albeit at a reduced level. At the committee's discretion, newspaper advertisements will be purchased to increase public awareness and participation in key events, such as Inner-Coastal Cleanup Day and Earth Day. The Education Program will also make increased use of pay-per-click advertising more directly targeted toward those predisposed to attend the events or carry the Stormwater message to others.

Pro-bono advertising will also be placed in newspapers, as well as radio and television where possible. At least four pieces of pro bono advertising will be placed throughout the contract period. Finally, OC Stormwater will continue to capitalize on media partnerships with other agencies whose message furthers the goals and effort of OC Stormwater, such as the Orange County Health Care Agency's used-oil disposal program as a way of maximizing impressions.

#### **2.4.1 Partnership Impressions**

OC Stormwater has determined that partnerships with other agencies can be counted toward the SARWCQB impression requirements. Orange County's Used-Oil program, for example, paid for bus advertisements and billboards that urged proper disposal of motor oil. As putting the oil in storm drains or landfills can ultimately pollute the ocean and inner-coastal waterways, those advertisements also serve OC Stormwater's goals. This component consists of:

- Identifying various programs at County and local-agency level that conduct advertising that include messaging of OC Stormwater.
- Tracking impressions of various programs, as well as explore programs that could be adapted for OC Stormwater.

#### **2.4.2 Year 1 Foundational Campaign Advertising Tactics**

We anticipate leveraging the paid advertising campaign that is underway by the County used-oil recycling program in our *foundational campaign* advertising program. Additionally, where appropriate, we will incorporate our library of foundational campaign advertisements to bolster the *action campaign* that is in place at the time.

### **2.5 Gaining Credibility with Earned Media**

Earned media is an essential component of the Education Program's media campaign. The Education Program will focus closely on earned media outreach and work with reporters and journalists throughout the County to promote messages related to water pollution prevention. The Education Program will work closely with key reporters such as Pat Brennan (OC Register), David Nazar (KOCE-TV), Norberto Santana (Voice of OC) and other influential journalists.

The Orange County media landscape has changed dramatically over the years, as the Los Angeles Times has largely withdrawn from the Orange County market and Freedom Communications, which owned The Orange County Register, entered bankruptcy. The media chain was ultimately broken up and the once-dominant OC Register landed in the hands of a first-time media owner.

The Register continues to publish weekly papers in most county cities, and a number of independent papers are thriving throughout Orange County as well.

In the television market, Orange County is served by Los Angeles-based affiliates of ABC, NBC and CBS, as well as Los Angeles-based KTTV, KCAL, KCOP and KTLA. Although it does not produce a local news show, OC-based KDOC is also available to viewers in Orange County. The previously OC-based KOCE has also undergone changes and is now Southern California PBS, with a reduced emphasis on county news and events.

The situation is similar in the radio market, in which Orange County is primarily served by Los Angeles stations. KNX and KFVB remain dominant news stations. In South Orange County, Saddleback College in Mission Viejo broadcasts KSBR, which reaches from Oceanside to Tustin. Changes have even impacted Cox Communications, which previously produced a community-issues talk show broadcast to cable subscribers. That show remains in limbo as management decides a new direction.

Even with the changes, budget and staffing cuts create opportunities for earned media, as newsroom managers and reporters are asked to produce more content than ever with fewer resources. Rather than being scorned upon as in years past, professionally pitched stories are now welcomed additions to news and feature lineups.

Using earned media for the Education Program’s *foundational campaign* will only be done on an as needed basis (the emphasis for earned media will be on promoting the *action campaigns*). Examples of how earned media could be applied to the *foundational campaign* are listed below:

- In April, Earth Day offers events;
- In May, Heal the Bay releases its Healthy Beaches Report Card, and the month also hosts National Public Works Day;
- In June, school is out and crowds return to Orange County’s parks, campgrounds and beaches, providing opportunities to publicize clean up opportunities or programs;
- In September, Coastal Cleanup Day is celebrated;
- In October, rains bring the “First Flush” and an opportunity to showcase efforts to clean storm drains before first rain; impacts of first rain on water quality, etc.

## 2.6 Spreading the Word with Social Media

Social Media is the term tossed about to frequently encompass everything from websites like Facebook to information-sharing services such as Twitter to publicly driven sites such as reddit. Essentially, if traditional media such as newspapers were a one-way street, social media creates not only a two-way street, but huge interchanges of information where virtually anyone can “broadcast” information, and anyone else can respond to it or share it with others.

A vigorous use of social media is crucial to efforts such as OC Stormwater to amplify the group’s various messages, as well as encouraging readers to make their first-level commitment to the Education Program, as noted above, by “liking” an OC Stormwater Facebook page or “following” OC Stormwater on Twitter.

Finally, as social psychology notes, the holy grail of behavior change is to set a norm so pro-normative messaging and peer-to-peer sharing is emphasized and incorporated (see *Appendix B*). Social media is the birthplace of such communication. Some potential forays into social media include:

### **2.6.1 Facebook**

OC Stormwater should have a fan page similar to OC Parks and LA Stormwater. These pages would not only generate “followers” – other Facebook users who actively like the page – but also serve as a place to advertise events, campaigns and share Stormwater-related articles or broadcasts from other forms of media. Once on the Stormwater Facebook page, those stories would be found by Google searches or through other Facebook users who would place them on their pages – exposing Stormwater to entirely new audiences.

### **2.6.2 Twitter**

After discovering Stormwater’s Twitter account, followers could receive notices of Stormwater tips (It’s raining, turn off your sprinklers!), events (Earth Day), programs (free smart irrigation timers) and new regulations (ordinances for overwatering), etc. That information could also all be posted on the Stormwater Facebook page to drive traffic back-and-forth.

### **2.6.3 You Tube**

PSAs and video information from events could be posted on YOUTUBE, where it would be picked up by other views who recommend them. When a critical mass sees a video, it has gone “viral.” Again, Facebook and Twitter work with YouTube as a part of a coordinated strategy.

### **2.6.4 e-Newsletter**

An e-newsletter would be OC Stormwater’s “push” vehicle, sent to elected officials, other agencies and NGOs to spread information about events, projects and programs. The e-newsletter would provide links to the other Stormwater social media sites, driving traffic to those platforms.

## **2.7 Getting Plugged in with Websites**

### **2.7.1 OCwatersheds.com Website**

The Education Program website is the public face of the department and will continue to be maintained in a way that speaks to all of the Education Program’s audiences and issues. The website will therefore continue to serve as the hub housing all of the Education Program’s materials and tips for stormwater related BMPs. The website specifically fits into the following elements of the plan:

- Help in partnership building through cross linking
- Will include information related to all of the Education Program’s audiences including businesses, school and multi-cultural
- Promote and connect visitors to the Education Program’s social media channels
- Will be updated to reflect the Education Program’s new brand, including a new URL

The website is currently undergoing a transition into the Content Management System *Civica*. Once the transition is complete, the following changes may be made to the homepage:

1. The photos within the rotating slideshow should be maintained by a schedule to keep the content fresh. Specific actions featured under the *action campaigns*, and any other timely information, should also be featured here.
2. Past web statistics should be analyzed to determine popular pages/content. These popular pages should then be listed in the popular links section of the homepage.
3. More points of entry should be included to the internal pages via the mini banners.
4. The designs and images on the site should speak to creating action. The photos will be updated to feature more “real people” participating in the promoted pollution-preventing behaviors in the community (ideally, in Orange County) rather than images that “represent” those actions. These visuals will better resonate with Orange County community members by allowing them help to “see themselves” in the images presented, thereby reinforcing the behaviors promoted.
5. Once the Education Program establishes social media channels and an updated brand, these elements should also be included in the website through links and an updated URL address.

### 3. ACTION CAMPAIGN

The Education Program’s *action campaigns* will focus around single, specific BMPs that the audience is being encouraged to take to protect water quality. Each campaign, of which there will be up to 3 in the next five years, will revolve around promoting, assessing and conducting outreach around a specific action (for more background on the *action campaign* approach, see the *Strategic Review*).

The first year action campaign will revolve around an extreme makeover type promotion for a new landscape (with plants adapted to the local climate). The premise will be that in order to win the new landscape the participant needs to join the campaign by simply taking a pledge (e.g. “I agree to limit my sprinkler run time to 20 minutes a week”) and provide their contact info (email address or mailing address).

The campaign will focus around getting as many people as possible to take this pledge through ads, media, bill inserts, etc. Once the Education Program has people’s contact information, the participants will then receive an email every few months that focuses on *one* thing they are being asked to do (e.g. turn off your sprinklers in time for rain, how to check if your lawn is getting too much water, install an ET unit, etc). Each correspondence the participant receives will provide an incentive (through mini giveaways) to send in proof of their progress for a chance to win, thereby giving the Education Program a chance to track engagement and action.

Below are the lists of tactics the Education Program will use to implement each of the *action campaigns*. Although the specific actions/messages will change through the life of the Education Program, the type of tactics used will primarily be drawn from the list below.

#### 3.1 Staying Accountable with Evaluation

As mentioned previously, evaluation will be the cornerstone of assessing if the Education Program is on track to meet its stated objectives. The Education Program has a total of three objectives, the third objective corresponds with the *action campaign* and is listed below.

### **3.1.1 Measuring Objective #3: Demonstrate the Audience Took an Action to Practice a BMP**

Evaluation plans will be created and custom tailored depending on the nature of the individual *action campaigns*. For example, a campaign aimed at reducing overwatering and a campaign geared towards encouraging dog owners to pick up will both have different types of surveys and markers of success. These survey tools, while different in specifics, will all be working towards the ultimate goal of demonstrating that the audience took an action to practice a BMP. See Section 3.3 of the *Strategic Review* for more information on the context behind this evaluation approach. In general, however, the evaluation methodology listed below should be used as the standard for all of the *action campaigns*, unless otherwise noted.

#### *Recruiting Participants*

Initial campaign recruitment efforts should always be conducted to reach as broad an audience as possible. Recruitment should make an effort to minimize sample bias that can occur by attracting individuals who are not necessarily interested in particular issues that would influence outcomes (e.g., stormwater, pollution, environmental issues).

#### *Data Collection*

Data collection methods to demonstrate residential BMP implementation will use one or more of:

- Self-report surveys (executed using one or more of the below)
  - In person
  - Online
  - Phone
  - Mail
- Proof of action (e.g. resident submits proof of doing the BMP)
- Actual usage data (e.g. water use rates from water agencies)

While this may vary from action campaign to action campaign, depending on the specifics of the individual campaign, the default method of assessing a change in behavior will include the following elements:

- Pre/baseline data collection
- Post data collection
- Comparison (control group) to provide a comparison showing the behavioral differences of people who were not exposed to our campaigns.

The third program objective, which will be tracked over the next five years, aims to demonstrate that 400 people have practiced a specific BMP during a five year period. The evaluation framework described above will allow the campaign to show whether or not a specific *action campaign* led to behavior change and also keep tabs on how many people took an action.

### **3.1.2 Year 1 Action Campaign Evaluation Recommendations**

#### *Pre-Online Survey Tool*

An online survey will be created to obtain background (e.g., demographic) information and current BMPs relevant to overwatering habits. A pledge related to curbing overwatering will follow the survey. In addition to the pledge, the campaign will request resident's email addresses as a means of following up for a post survey once the campaign has ended.

#### Recruit Pre-Survey Participants

Many of the campaign tactics (e.g., social media, website, printed materials), will be leveraged to direct OC residents to the pledge/survey. Therefore, recruiting OC residents to take the survey need not be a separate effort. Recruiting control respondents (i.e. people who have not been exposed to the campaign) can be done through online means (i.e., Craigslist) to keep the survey modes consistent as well as keep costs down.

#### Post- Online Survey Tool

Upon the conclusion of the first *action campaign*, a follow-up survey will be disseminated to individuals who participated in the baseline survey. The follow-up survey will assess participation in the overwatering BMP that is being targeted by the campaign. This will enable the campaign to demonstrate change over time in particular BMPs among the target group. It will furthermore tell us specifically about the pledge as a tactic in changing behavior.

#### Recruit Post-Survey Participants

The baseline survey/pledge will collect email addresses. Upon the conclusion of year 1, the Education Program will email individuals who participated in the baseline survey, and request their participation in the follow-up survey. They will be entered into a raffle (e.g., to win a gift card) for participating in the follow-up survey.

#### Survey Analysis & Report

The analysis will examine the extent to which the campaign was associated with participation in BMPs related to on-site water retention, as well as awareness of stormwater issues. We will also be able to speak to change over time associated with the campaign. E.g., the campaign contributed to a 5% increase in smart sprinkler installations. The report will also provide a concise synopsis of the Education Program overall, including all of the tactics, and can serve as a handy reference piece to share with stakeholders and for future Education Program planning.

## **3.2 Getting Personal with Face-to-Face Outreach**

### **3.2.1 Making Friends Through Partnerships**

In addition to the partners that the Education Program builds as part of the *foundational campaign*, it will also build partners that relate to the specific *action campaigns*. These partners may not be water quality related, but rather, are specific to the audiences the Education Program intends to reach related to a specific action. For example, with the curb overwatering campaign, associations that work with gardeners and HOAs as well as businesses that sell lawn care products will be engaged as a way of specifically targeting the audience that the Education Program intends to reach- those who maintain a residential lawn.

Partners are an excellent way of building credibility for the Education Program's *action campaigns* by allowing the message to spread to their members. This may take the form of allowing the Education Program to make a presentation to a group of members to posting an announcement about one of the Education Program's call to action on a social media profile.

In addition to allowing the Education Program to more widely publicize our campaigns, partners are also key players in helping to refine messaging and approach. Since the Education Program will consist of a variety of *action campaigns*, new partners will be engaged each year that will help to best reach the target audience. In some cases, key partners and stakeholders will need to be "invited to the table" early on in the development of the campaign as a way of gaining buy in and solidifying support. These partners are identified because either they have keen insight into whatever the issue is that the Education Program wants to target or they have a robust and established network of stakeholders. A key example of this would be engaging the Municipal Water District of Orange County in the Education Program's curb overwatering campaign since people from this organization have a wealth of knowledge about campaigns related to saving water.

### ***3.2.2 Booths & Tablings & Events - Oh My!***

An ongoing component of grassroots outreach will include community event staffing. Events that are attended by the Education Program as well as by partners and individual cities are an excellent opportunity to talk to the audience face-to-face and encourage them to join the *action campaigns*.

Events will be selected based on several key factors including:

- Geographic equity throughout the County;
- The mission of the event (e.g. a "Green Expo" will rank as a higher priority than the "Orange International Street Fair" because it is more likely that participants at a Green Expo will join an action-oriented campaign). Additionally, events that target the audience of our *action campaigns* will be given preference. For example, a "Home Expo" type event, while not eco in nature, would be the perfect avenue to reach the homeowners we need to engage as part of the curb overwatering campaign.
- The size of the event, since the more people we can reach at a single event, the more efficient use of resources this segment of the Education Program is.

Event support will also be available via "booth in a box" event materials where the Permittees are given materials that are relevant to the event topic (e.g. eNewsletter sign up forms, brochures, etc) to distribute on their own.

### ***3.2.3 Year 1 Action Campaign Grassroots Tactics***



Engage Partners : Populate the stakeholder database with, at least, 20 partners that are relevant to the curb over watering campaign. These partners will be comprised of water utilities, HOAs, community leaders/influencers, environmental groups, etc.

Key planning partners will be engaged in the initial stages to help plan the campaign. All of the partners will be asked to become promotional partners by helping the Education Program spread the word about the campaign. The goal will be to leverage the partners existing promotional channels in order to get OC residents to participate in the OCSW campaign (i.e. take the survey and enter the contest). Possible avenues of cross promotional collaboration include social media pages, website pages, newsletters, bill inserts, word of mouth, etc.

The Education Program will reach out to other county departments that conduct similar community outreach with relevant messaging such as Orange County Waste and Recycling's Household Hazardous Waste outreach program and the Orange County Health Care Agency's Environmental Health Division Used Oil Recycling Program. We will also work closely with HCA's Fats, Oils and Grease (FOG) program as part of our outreach to food service facilities. These partnerships will not only enhance our ability to communicate our message effectively, but it will prevent redundancy or confusion from the residents or businesses receiving the message and ensure a program that is both effective and efficient.

Solicit Donations: The curb over watering campaign plans to use incentives as a way of capturing the attention of an audience that may otherwise be uninterested in environmental issues. The "right" incentives will be those that are of most interest to the audience and, when possible, help to get across the Education Program's message. Incentives may include a free lawn makeover, a free smart sprinkler, free movie tickets, etc. This task includes soliciting donations of these prizes from organizations and businesses.

Speakers' Bureau: A speakers' bureau can be one of the most crucial parts of any public education plan. While the breadth of the outreach is limited (most presentations are to groups that have between 25-50 people), the depth and the engagement with individuals who are often key stakeholders in the community make it well worthwhile.

The speakers' bureau facilitates further Permittee information sharing with residents and businesses about on site water retention, proper gardening techniques and low impact development. The purpose of the presentations for the first year of the campaign will be to spread the word about getting involved in the curb overwatering campaign raffle and pledge and also to engage partners in helping the Education Program to spread the word to a broader audience.

Booth in a Box: Coordinate with cities and partnering organizations to set up booth in a box opportunities as a way of getting visitors to events folded into and interested in the overwatering campaign.

### **3.3 Building Recognition with Paid Advertising**

As mentioned in the advertising section of the *foundational campaign*, paid advertising will be used in a targeted fashion and primarily to promote the Education Program's *action campaigns*.

For example, if our *action campaign* is designed to reduce the amount of water runoff from private property, we will implement an “Overwatering?” advertisement to support that effort.

### 3.3.1 Year 1 Action Campaign Advertising Tactics

Develop Overwatering Campaign Ads: The curb over watering campaign will fall under the umbrella of the Education Program’s overarching brand, but will need to focus on including elements that are unique to this BMP and this target audience. The campaign design will be used on elements such as the campaign microsite, email marketing and online and offline ads.

Place Overwatering Ads: Place advertisements in media that most appeal to the target audience of Orange County homeowners. The purpose of the ads is to highlight the *action campaign* and encourage residents to visit the site to take the overwatering survey and pledge.

## 3.4 Gaining Credibility with Earned Media

A more robust use of earned media will allow the Education Program to ensure its messages and goals are transmitted to Orange County residents, particularly in promoting and encouraging the audience to get involved in the *action campaigns*.

In keeping with the single issue focus of the *action campaign*, the pitches for the first year of the campaign would focus on encouraging residents to participate in curbing overwatering. This may include stories that highlight cost savings from lower water bills, the beauty of yards that rely on native plantings, as well as sprinkler-timer replacement programs, etc. The stories pitched can be as subtle as feature pieces on landscape architects who specialize in California-friendly yards.

In keeping with the action oriented nature of the campaigns, the stories will also include links to websites or other ways for readers to make their initial commitment to changing their behavior, such as by “liking” OC Stormwater on Facebook, signing up for an E-Newsletter or attending an event or seminar. In the case of the overwatering campaign this would mean directing the reader online where they could take the overwatering survey and pledge.

Below is a list of the general media approach the Education Program will use to reach out to reporters and to determine which outlets to target.

### 3.4.1 The Keys to Successful Pitches

- Building a good, timely “hook” to the potential story that ties in with a larger element of the news, a special day or event;
- Offer to supply photographs and follow-up text even if the reporter is not warm to attending or writing about your event in advance. Even a brief mention of your story or event can be a success;
- Reaching out to media contacts appropriate to your pitch. Not every story is for everybody, and even the same story pitch might need to be packaged differently for different media. It helps to be aware of the recent work that your targets have done;

- Being flexible and open, even if the answer is “no.” Your pitch might fit into a future project, and you’ll more than likely be pitching the same reporter again on another idea, so don’t burn bridges. It’s often about building relationships.

### **3.4.2 Recommended Outlets to Target:**

#### *3.4.2a Newspapers*

Newspapers are valuable vehicles to carry the Stormwater message, as readership – impressions – is greater than straight circulation. Readership is the newspaper's total circulation multiplied by the average number of people who read each copy. For example, various members of a household may eventually read the same copy of a newspaper or a publication might be passed around from person to person in an office. This "pass-along" rate is generally thought to be about 2.5 readers. The OC Register remains dominate in the county, although the ownership turbulence and expanding reach of the Internet dampened The Register’s influence in Orange County.

The paper still remains committed to Orange County, however, and opportunities remain for earned newspaper impressions. Nationally, readership in non-daily community newspapers remains relatively strong. The National Newspaper Association reports that 86 percent of those who live in non-metropolitan areas of the United States say they read a community newspaper at least once a week. Local government news, such as stories that would pitched on behalf of OC Stormwater, are the most-read stories in community papers.

The Orange County Register publishes a community newspaper in nearly every Orange County city, and several independent papers exist throughout the county. Earned media efforts will include reaching out to regional papers as well as the local City publications. Some of which include the Register’s weekly papers: Aliso Viejo/Laguna Niguel, Anaheim, Anaheim Hills, Brea/La Habra, San Juan Capistrano, Costa Mesa, Dana Point, Fountain Valley, Fullerton, Huntington Beach, Irvine, Ladera, Laguna Beach, Laguna Woods, Lake Forest/Laguna Hills, Mission Viejo, Newport Beach, Orange, Placentia, Rancho Santa Margarita, San Clemente, Laguna Woods, Tustin and Yorba Linda.

Orange County Register Communications' 22 community publications are received by households subscribing to the Orange County Register as well as non-subscribing households, reaching more than 314,000 households on Thursday and 165,000 on Friday.

The Los Angeles Times also publishes well read community newspapers in Costa Mesa/Newport Beach (The Daily Pilot), Huntington Beach (The Independent) and Laguna Beach (The Coastline Pilot.) Further south, the independent Picket Fence Media publishes the weekly Dana Point Times and San Clemente Times, as well as the twice-monthly Capistrano Dispatch.

Additionally, independent papers are published in Anaheim/Buena Park, Coto de Caza, Cypress, Garden Grove, Huntington Harbour, Mission Viejo, Seal Beach and Westminster. Orange County is also home to newspapers published in Vietnamese, Korean and Spanish. The Orange County Business Journal and Orange Coast Magazine provide other opportunities for earned media placements.

Making the Pitch

The success rate of pitching stories to community newspapers is much higher than in other media because their staffs are typically hungry for local news and smaller, so they need to supplement their work with news releases and photographs.

Focusing on the community papers provides another advantage to OC Stormwater. Because the Education Program approach calls for creating new behaviors through social pressures, stories modeling positive behavior for runoff prevention will have an amplified impact in the more narrowly focused community papers. A story about smart sprinkler controllers in The Orange County Register will generate more total impressions, but any associated changes in behavior will be spread countywide. The same story in the Capistrano Valley News, however, will have a greater likelihood of being seen by those in similar communities – neighborhoods, churches and sports organizations, for example – thereby increasing the likelihood that changes in readers’ behaviors can create a wildfire or viral effect.

The combination of coverage in the daily papers and weekly papers will generate well over the 10 million impressions required by the SARWQCB permit.

The OC Register has a reporter, Pat Brennan, dedicated to science issues. His charge, however, is to cover trends and issues countywide, so he typically is not responsive to localized event stories. He does often assemble pieces such as an “Earth Day Calendar” that can include Stormwater events.

### **3.4.2b Television and Radio**

Television and radio stories are harder to successfully pitch for earned coverage. Those mediums are regional, therefore Stormwater stories would be competing for finite air time against stories from throughout Southern California.

Most of the television and radio stations covering Orange County rely on daily newspapers or City News Service – a regional wire service – to generate their story ideas. Each also has an Orange County “bureau chief” or correspondent responsible for covering the county, and opportunities for relationship-building exist with those individuals.

Two of Los Angeles’ dominant news stations, KNX and KFWB also have reporters who specialize in Orange County, again providing opportunities to build relationships. Other radio outlets, such as KPCC, may also be explored for opportunities. City News Service, which has offices in Los Angeles, Santa Ana, San Diego and Riverside County, prepares a “daily budget” and a “weekend budget” that are electronically transmitted to assignment editors at television and radio stations. Those budgets typically consist of just a paragraph about each event, along with contact information. Writing a clear, concise pitch to the CNS Santa Ana office is key to making the daily or weekend budget, increasing your chances of getting coverage.

### **3.4.2c OC Blogs & Niche Websites**

Blogs, a “web log,” and niche websites have proliferated Orange County, with everything from moms posting tips for daycare to hardcore political opinion sites to postings and calls to action by environmental groups. Like other forms of electronic media, blogs can be key to the success of

the *action campaigns* because of the ease in which readers can make their first-level commitment to change: By simply clicking a link, readers can sign up to “follow” OC Stormwater or receive an e-newsletter. One objective of the Education Program’s tactics for reducing run-off is building a network of followers, a task simplified through a robust online presence.

However, political blogs will be avoided in the outreach effort. They are most often very polarized and references to any Stormwater projects there would likely be used to further political agendas. Additionally, the County, and likely many local agencies, prohibit participation on them.

Other blogs, however, can be helpful. The environmental groups Surfrider, Coastkeeper and MiOcean also have blogs and websites that can get your message out to groups with a high likelihood of participating in Inner-Coastal Cleanup Day, Earth Day events and similar activities. The home page of MiOcean ([www.MiOcean.org](http://www.MiOcean.org)) even addresses urban runoff.

While the Stormwater countywide survey found membership in these groups can be a small percentage of the population, the fact that residents have taken time to sign up as members would indicate that they are a good target to reach as part of the “influencer” audience (see *Audience Analysis*, Section 4.3). Additionally, these members live in our communities, sending their children to school, etc., and are likely to be involved in other groups, so they can be ambassadors for our Stormwater efforts.

Finally, these groups often have grants that can help toward local projects. Again, MiOcean has partnered with agencies on ozone treatment plants and other major efforts to improve ocean-water quality.

#### **3.4.2d Pro-Bono Public Service Announcements**

With the shrinking media landscape outlined earlier, Public Service Announcements (PSAs) are more difficult to secure than in years past, yet they remain a requirement of broadcast licenses – much like impressions are part of the SARWQCB NPDES permit. A typical PSA protocol is for an agency to buy one advertisement and receive another free, as a PSA. With limited budget resources, however, OC Stormwater will continue to seek free PSAs.

OC Stormwater has high-quality public service messages available for television, print and radio and has secured multiple airings on KSBR FM 88.5 out of Saddleback College. KOCE, where PSA selection is made by a committee, is also considering PSA from the Education Program.

### **3.5 Spreading the Word with Social Media**

As noted in the *foundational campaign’s* social media plan, social media platforms are natural tools for an action-oriented campaign. One can use social media to promote events, use calendar reminders and post photos and videos promoting important key actions that will protect water quality. Social media is also an organic way to encourage action (e.g. obtain a free packet of seeds for a California-Friendly plant if you share a particular Facebook status on your page) and as such will be a key component of promoting the various *action campaigns*.

### **3.6 Getting Plugged in with Websites**

### ***3.6.1 Action Campaign Microsites***

While the OCwatersheds.org website will focus on giving out information and serving as a resource, the action campaign micro sites are intended to spark more two-way communication with the audience by enabling functions such as gathering pledges, live social media feeds, etc. The microsites will be short lived and will revolve around the specific action campaign that the Education Program is implementing at any given moment (see *Strategic Review*, Section 4.5). Once the Action Campaign concludes then any relevant content from the microsite will be folded into the main OCwatersheds.org site.

### ***3.6.2 Year 1 Action Campaign Website Tactics***

*Campaign Microsite:* The curb overwatering campaign will be hosted on a microsite that will function as the hub for all campaign-related activities. The site will incorporate established Education Program and campaign branding elements. It will house all online interaction including an online pledge, Facebook feed, photo submission form and tip section. The hope is that the site will display pledges and photos streaming in real time, thus creating a social norm around the campaign related action.

## APPENDIX A: Definition of Goals, Strategy, Objectives & Tactics

<p><b>Goals</b></p>	<p>Goals are required to set the program’s big picture view. Goals are usually characterized by the following:</p> <ul style="list-style-type: none"> <li>• Lofty</li> <li>• Difficult to measure</li> <li>• Nebulous</li> </ul> <p><i>Ex 1: I want to be a better basketball player</i></p> <p><i>Ex 2: Change behavior &amp; reach 100% of the Orange County population</i></p>
<p><b>Strategy</b></p>	<p>Strategy is the general approach that will be used in order to help the program reach its goals.</p> <p><i>Ex 1: I’m going to cut back the time I spend playing on all other sports and focus solely on sharpening my basketball skills.</i></p> <p><i>Ex 2: Use a combination of traditional mass media and community based outreach.</i></p>
<p><b>Objectives</b></p>	<p>Objectives are necessary in order to see if the Education Program has come any closer to reaching the goals. Whereas goals are hard to pin down, objectives should be very specific. Objectives are usually characterized by the following:</p> <ul style="list-style-type: none"> <li>• Numerics driven</li> <li>• Specific and measurable</li> </ul> <p><i>Ex 1: I’m going to improve my free throw percentage by 20%</i></p> <p><i>Ex 2: Achieve 10 million yearly impressions and demonstrate that 400 people adopted a BMP.</i></p>
<p><b>Tactics</b></p>	<p>Tactics are where the rubber meets the road. Tactics are the specific interventions that a program will do in order to help reach the objective. Tactics are usually characterized by the following:</p> <ul style="list-style-type: none"> <li>• Tools to get to the objectives</li> </ul> <p><i>Ex 1: I’m going to watch lots of basketball games to see the techniques that professional players use to make free throws.</i></p> <p><i>Ex 2: Place ads, conduct presentations, social media, etc.</i></p>

## APPENDIX B: Community Based Social Marketing And Social Psychology Principles

### What is Community Based Social Marketing?

Community-based social marketing is based upon research in the social sciences that demonstrates that behavior change is most effectively achieved through initiatives delivered at the community level which focus on removing barriers to an activity while simultaneously enhancing the activities' benefits (McKenzie-Mohr and Smith, 1999; Alcalay and Bell, 2001; Neiger, Thackery, Merrill, Miner, Larsen and Chalkey, 2001; Walsh, Rudd, Moeykens and Moloney, 1993). In contrast to large information-driven campaigns, CBSM aims to promote changes in behavior within a target population by focusing outreach efforts on specific behaviors through direct contact with the individuals (Schultz, 2002; Schultz and Tabanico, 2008).

CBSM is used to assess message effectiveness before implementing a larger campaign across a community by utilizing audience analysis within a target population for the purposes of message distribution (Walsh, Rudd, Moeykens and Moloney, 1993). As a result, CBSM principles are especially well adapted for translating complex scientific messages and behavior change strategies, such as the case for stormwater pollution prevention, into effective outreach programs and communication campaigns (Lefebvre and Flora, 1988).

The model first identifies benefits and barriers to a particular behavior. Behaviors are determined using qualitative and quantitative information. For example, quantitative information is found through literature reviews and samples taken from community surveys, and qualitative information is gained through observational studies and focus groups. Throughout this process benefits and barriers to the identified behavior are recorded.

The next step in the model is to organize the public into groups that have common characteristics, as well as perceived benefits and barriers to the identified behavior, in order to determine a "target audience." At this point a program is created using behavior change principles such as commitment, feedback and social norms. Then, the strategy is tested for effectiveness before launching the program across the target audience. Finally, an evaluation of the program's impacts on a community-wide scale is completed. A graphic display of the model is shown in Figure 1.





**Figure 1. Community-Based Social Marketing Model**

***CBSM Step 1- Identify Target Barriers and Motivators to Target Behavior***

Central to the development of a CBSM program are three questions: 1) What behaviors should be promoted? 2) Who should the program address or target? and 3) What conditions will an individual face in deciding to adopt a new behavior (McKenzie-Mohr and Smith, 1999)? These questions provide the framework for the crucial first step in the CBSM process: developing a complete understanding of the target audience.

Over the past ten years of the Education Program, a robust understanding of the target audience has been achieved through comprehensive surveying on a biennial basis (2003, 2005, 2009 and 2012). Utilizing these and other studies, the primary barriers and motivators associated with those behaviors that promote and prevent stormwater pollution by members of the Orange County community have been identified, as described in the **Section II** of this document. In addition, BMP specific barriers and motivators will also need to be uncovered contingent on the specific actions that the program wants the audience to take.

***CBSM Step 2- Develop a Campaign Based on CBSM Tools***

**Barriers & Motivators: A Case Study**

An effective social marketing strategy removes barriers to the behavior to be promoted. For example, in fostering the purchase of products with recycled content, the King County Commission in Washington State first identified barriers to their purchase and then systematically removed them (Herrick, 1995).

Survey and focus group research indicated the existence of five barriers to the purchase of these products. The commission felt that little could be done with respect to two of these barriers: the perception that these products cost more and were of inferior quality. The three other barriers, low awareness of which products had recycled content, suspicion regarding environmental claims of manufacturers, and the difficulty of quickly identifying these products while shopping, could, however, be overcome.

Although this program utilized traditional media and in-store advertising, it relied primarily upon a shelf prompt that advertised that a product had recycled content. The results from this social marketing strategy demonstrate the importance of first identifying barriers and then systematically removing them.

Analysis of electronic inventories of participating retail stores indicated that purchases of recycled-content products rose 27% as a consequence of this social marketing strategy. This successful program has now been adopted by a number of cities throughout the United States.

The next step in the process is to develop a strategy that incorporates the use of certain principles or tools that have proven successful in changing behavior. The social science field has identified numerous tools to change behavior. The community-based social marketing model applies five of these tools. They are: commitment, prompts, norms, communication, and incentives. A brief definition and description of each tools is described in Table 1.

The OCSW strategy uses all five tools in its behavior change program, but focuses on the following three: 1) obtain and build commitment, 2) providing incentives through positive feedback (i.e. social approval) and 3) establishing positive social norms. These three tools and their application within the OCSW behavior change program are described in further detail below.

THE FIVE TOOLS OF COMMUNITY-BASED SOCIAL MARKETING	
PRINCIPLE	DESCRIPTION
<b>Commitment</b>	The commitment tool is utilized by asking a person to make a commitment to change using a verbal or written agreement. The argument behind using this tool for behavior change is that once a person commits to a certain idea or action a subtle shift occurs in their attitude toward it. This shift in attitude causes that person to act with consistency.
<b>Prompts</b>	Prompts are visual or auditory aids that remind a person to carry out an activity that they might otherwise forget. Prompts are useful in community-based social marketing campaigns because they can be used to target specific behavior and don't need to be costly additions to the program. Sometimes, a person simply forgets to act, so by hearing or seeing a prompt they are reminded.
<b>Norms</b>	Norms guide how a person behaves because they look around for clues on how to respond. Behavioral norms influence change through techniques such as "modeling" desired behavior.
<b>Communication</b>	Communication is used to effectively persuade, educate, and communicate desired behavior changes in a community based social marketing campaign. Without creating or "framing" a message, new ideas and attitudes could not diffuse through a community.
<b>Incentives</b>	Incentives are a tool used to motivate a person to continue performing a desired behavior, or to change from an undesirable to a desirable one. Some common incentives include user fees, refunds, variable rates, preferential treatment, and social approval.

**Table 1. Source: McKenzie-Mohr and Smith, 1999**

### Obtain and Build Commitment

The Education Program will encourage action within the target community by focusing on obtaining and building the community's commitment to performing a set of pollution preventative behaviors. Primarily, this "foot in the door" approach provides a small and easily attainable request that creates a sense of involvement on the part of members of the target audience. In a wide variety of settings, people who have initially agreed to a small request have subsequently been found to be far more likely to agree to a larger request.

The Education program will use this “foot in the door” strategy to engage with stakeholders through in-person and online outreach efforts. Stakeholders will be encouraged to become involved through a step-wise approach, beginning with actions that are relatively easy (e.g. like us on Facebook), moving up to actions that are more complex (e.g. install permeable pavement at your home), building greater commitment through these “requests” over time. The *action campaign* approach outlines the overall strategy and tactics that will be used to build commitment over time.

Why does seeking commitment to an initial small request work? There are likely two reasons. First, when people go along with an initial request, it often alters the way they perceive themselves. That is, they come to see themselves, referencing the recycled products case study, as the type of person who believes it is important to purchase products that have recycled content. Second, people have a strong desire to be seen by others as consistent with outwardly-made commitments (Katzew and Wang, 1994). Indeed, society emphasizes consistency and people who are inconsistent are often viewed negatively. For example, if a person agrees to wear a button supporting the purchase of recycled-content products, it would be inconsistent not to purchase these products when shopping.

For the Education Program, stakeholders will be encouraged to commit to increasingly more complex pollution-prevention behaviors using the same incremental approach. For example, participants will first be asked to engage in actions that are relatively easy (e.g. like us on Facebook), building up to actions that are more involved (e.g. install permeable pavement at your home). The Education Program will track all stakeholders and subsequent interactions to allow for this stepwise approach to obtaining and increasing stakeholder commitment. The Education Program will build long term engagement by tracking engagement in online media platforms (e.g. newsletter, Facebook) as well as creating a database to track all program stakeholders. The purpose of these platforms will be to get a running total of all people who have interacted with the Education Program, for the purpose of asking them to do more and more in incremental steps.



**Figure 2. The Behavior Change-Commitment Continuum**

With increased levels of commitment, comes increased levels of behavior change

Another important tactic of the Education Program will be obtaining written commitments from stakeholders. Written commitments appear to be more effective than verbal commitments. In a study investigating the impact of verbal versus written commitments, households were assigned to one of three groups. In the first group, homes simply received a pamphlet underscoring the importance of recycling newspaper. In the second group, households made a verbal pledge to

recycle newsprint. In the third group, households signed a statement in which they committed themselves to recycle newsprint. Initially, the households that made either a verbal or written commitment recycled more newsprint than households that received only a pamphlet. However, only the households that committed themselves by signing the statement were still recycling when a follow-up was conducted (McKenzie-Mohr and Smith, 1999).

The Education Program will also focus on obtaining public commitments. In a study comparing private commitments versus public commitments (for which names were published in a local newspaper) those who agreed to a public commitment saved significantly more energy than did householders who did so privately. Even after the researchers informed the participants who had

### Providing Feedback: A Case Study

Since residential water use is quite high in Melbourne, Australia, a pilot program was designed and implemented in 1994 by the local city government to lower consumption (Aitken, McMahon, Wearing, and Finlayson, 1994).

First, a literature review was conducted to identify behavior change tools effective in reducing water use. Based on this review, the practitioners used feedback as their primary tool in the pilot program.

Households were initially contacted through a mailed questionnaire. Then, experimenters hand delivered cards which reminded the recipients of the completion of the questionnaire and their agreement with conservation responsibility statements. In addition, feedback was given on these cards as well. The feedback gave the average consumption of the participant's household. Data was collected through water meter readings, providing an accurate and quantifiable measure of behavior change.

Although households who already exhibit low water use did not reduce consumption substantially, feedback did have a positive effect on high consumption households. These households reduced their water use by 4.3%.

agreed to a public commitment that their names would not be published, they continued to save energy. While the names were never publicized, simply asking for this permission brought about a 15% reduction in natural gas and a 20% reduction in electricity use. Importantly, these reductions were still observable 12 months later. Public commitments are likely more effective because of people's desire to be consistent (McKenzie-Mohr and Smith, 1999). In short, the more public a commitment, the more likely people are to honor it (Lokhorst, van Dijk, Staats, van Dijk and de Snoo, 2010).

### *Provide Incentives: Positive Feedback*

To maintain and strengthen the commitment built within the community, the Education Program will also regularly provide feedback to the community<sup>10</sup> about their progress in reaching the goals of the Education Program. Providing feedback about a program's success reinforces the behavioral changes that people have made (Peterson, Shunturov, Janda, Platt and Weinberger, 2007; Wood and Newborough, 2007). This is particularly important when the behavioral change is repetitive and

<sup>10</sup> Feedback can be provided to a community where all members have already made a commitment, or where only a subset of that community has made a commitment to change their behavior. By making the feedback public, even those community members who have not made the commitment will benefit from the feedback as this public recognition will help to set a social norm that reinforces the behavior promoted by the commitment.

when meaningful impact can only be obtained when numerous people engage in the action, which is certainly the case for a problem as large and complex as stormwater pollution (Mckenzie-Mohr and Smith, 1999).

Feedback to the public can be provided through a number of channels, from individualized e-blast notifications, to community-wide “progress reports” published on the program’s website or in the local newspaper. This principle will be applied throughout the Education Program. For example, residents will be encouraged to notify Education Program administrators when they have implemented a BMP (e.g. cut down on automatic sprinkler watering days during rainy season) by incentivizing them with prizes to talk about their experience. To do this, they will be encouraged to post feedback directly onto the Education Program’s social media channels (Facebook, Twitter). This input will then be shared with others across these same channels (e.g. Amanda from Irvine just installed a smart sprinkler, you can too!).

### *Establish Social Norms*

Individuals tend to mold their behavior to social norms by not only doing what is socially acceptable, but what is popular (i.e., the norm) within their group/community. Groups internalize norms by accepting them as reasonable and proper standards for behavior within the group. Once firmly established, a norm becomes a social fact, and thus, a part of the group's operational structure (Cialdini, 2003; Gardner and Abraham, 2010; Kennedy, 2010). By incorporating CBSM techniques into the Education Program, the Permittees seek to establish positive behaviors promoted by the campaign as concrete and widespread norms throughout Orange County.

One of the most impactful strategies for establishing a social norm within a community is to make the norm visible. For norms to influence the behavior of others, those community members not participating in the target behavior must be aware of the norm (Cialdini, 2003; McKenzie-Mohr and Smith, 1999). To make the target audience aware of participants’ adherence to the promoted behavior, the Education Program will consistently publicize these actions through several channels (e.g. Education Program website and Facebook page).

Publicizing the positive actions that others are taking through community feedback will serve as the cornerstone of CBSM efforts for the Education Program to reinforce the social norm. Campaign messaging will therefore feed into the perception of wider-based community involvement in stormwater pollution prevention. Depictions of negative norms, as true to reality as they may seem, could serve to be counter-productive because they reinforce a negative social norm. For example, telling people that they should not litter because littering is rampant could actually encourage littering behaviors since it is being depicted as the norm. Instead, messages should reinforce positive norms by expressing that “everyone else is keeping the community clean, and so should you,” whether or not that is truly the case (Cialdini 2003; McKenzie-Mohr and Smith 1999).

### *Evaluation*

Community-based social marketing stresses evaluation of implemented programs prior to broad-scale implementation. In addition to biennial survey assessments, data will be collected to

broad-scale implementation. In addition to biennial survey assessments, data will be collected to ascertain the impact of outreach efforts at more frequent intervals in order to assess whether the behavioral change strategy is having a long-term impact.

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