

## C-6.0 PUBLIC EDUCATION

### C-6.1 Introduction

A robust public education and outreach program, currently “H<sub>2</sub>OC” has been implemented by the Permittees since 2002 built upon a foundation of cooperative development of programs and materials, implementation at Countywide and city levels, and the validation of its success through the use of opinion surveys and other direct and indirect measures of public knowledge and behavior. The goal of this effort is to promote awareness of the condition of Orange County’s creeks, rivers, streams and coastal waters, and adoption of behaviors that are protective of water quality.

### C-6.2 Program Background

Public Awareness Surveys conducted in 2003, 2005, 2009, 2012 and 2015 (Surveys) indicated incremental positive changes in behavior and awareness. At the same time, however, there was emerging research that suggested that high levels of awareness did not always translate to better behavior (i.e. acceptance of associated “stormwater safe” behaviors by specific respondents). In recognition of this research, the 2012 *Strategic Plan (Exhibit 6.1)*, which is the basis of the current education and outreach approach, concluded that existing outreach efforts needed to be supplemented by targeted outreach to specific audiences using proven Community-Based Social Marketing (CBSM)<sup>1</sup> techniques to create long term engagement.

CBSM involves four basic steps:

1. Identifying barriers and motivators to an activity;
2. Developing a strategy that utilizes tools to leverage those barriers and motivators in order to affect behavior change;
3. Pilot the strategy; and
4. Evaluate the strategy and refine it for future implementation.

Research shows that CBSM works at the community level when the individual or organization interested in effecting behavior change is directly in contact with those people whose behavior requires change (**Exhibit 6.1**). The goal of CBSM techniques is to effect transition residents who are unaware of how their actions could contribute to water pollution to awareness of behaviors to engagement in the issue and ultimately, to participation in behaviors protective of water quality.

Overall, the retooled education program focuses on water quality protection best practices on a broad level – the *foundational campaign* – and specific behaviors on a smaller, more community-based level – *action campaigns*. This two-pronged approach provides the Permittees information on changes in behavior of Orange County residents over time that could help reduce water quality impacts to our creeks, rivers and the Pacific Ocean.

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<sup>1</sup> McKenzie-Mohr, Doug & Smith, William (1999). *Fostering sustainable behavior: An introduction to community-based social marketing*. Gabriola Island, B.C.: New Society. ([www.CBSM.com](http://www.CBSM.com))

### 2017-18 Program Focus:

- Review and make any necessary updates to the *2012 Strategic Plan*

#### C-6.2.1 Foundational Campaign

The *foundational campaign*, branded *H<sub>2</sub>OC*, comprises large-scale and/or general pollution prevention outreach efforts, with the goal of building overall awareness of pollution prevention and runoff reduction BMPs. *Foundational campaign* efforts entail a combination of media and direct outreach methods, including:

- Strategic placement of paid media and tracking of earned media (**Section 6.3.1.1**);
- General community outreach (e.g. speakers' bureau, workshops, events) (**Section 6.3.1.2**);
- Maintenance of the *H<sub>2</sub>OC* website, Facebook page and materials (**Section 6.3.1.3**);
- Outreach to school-aged children (**Section 6.3.1.4**); and
- Permittee support & coordination (**Section 6.3.1.5**).

Effectiveness of *foundational campaign* elements will be assessed over time through continuation of public awareness surveys. Efforts are assessed annually against program goals and objectives; the primary goal is outreaching to 100% of the Orange County audience by achieving a minimum of 10 million impressions through media. Other methods for *foundational campaign* assessment include follow-through from paid media placement, website tracking and pre- and post-quizzes for outreach to school-age children. In addition, *foundational campaign* elements may support *action campaign* elements when needed, and thus be tied into *action campaign* metrics (e.g. obtaining sign-ups for an *action campaign* at an event). These efforts are detailed in **Section 6.3.1**.

#### C-6.2.2 Action Campaigns

*H<sub>2</sub>OC* has produced increases in community awareness around stormwater issues, in addition to small changes in behavior through the use of large-scale information campaigns. This macro-level approach addresses permit requirements to reach 100% of the Orange County population, achieve 10 million impressions, and to document changes in knowledge and behavior in a verifiable and consistent way. Additionally, this approach sought to maximize equity of messaging and resources among both Regional Water Quality Control Board regions – Santa Ana and San Diego – and among 34 cities in 11 watersheds.

In tandem with the *foundational campaign* elements described in **Section C-6.2.1**, the Permittees will develop *action campaigns* that will encourage adoption of specific behaviors associated with a pollutant or pollutants of concern. *Action campaigns* will focus on a single discrete action or set of actions, encouraging residents to adopt behaviors associated with a specific pollutant or suite of pollutants of concern.

As described in **Section C-6.2**, *action campaigns* utilize CBSM techniques to simplify

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messaging, reducing the chance for decision or action paralysis<sup>2</sup> that can arise from inundating residents with too many pollution reduction behaviors to adopt. Through simplification of *H<sub>2</sub>OC* messaging, *action campaigns* focus on one high-impact action. Each *action campaign* focus is determined by assessing the following variables:

- **Identification of key pollutants** – the Permittees examine and prioritize key pollutants based on level of harm they pose to the environment and prevalence in water quality on an annual basis; this process would take the list of pollutants and refine it further to assess whether anthropogenic sources are likely and whether outreach could impact the presence of these pollutants;
- **Determine return on investment (ROI)** – from the list of prioritized pollutants of concern in the first step, the Permittees assess which behaviors would produce the largest ROI, predicted by assessing the number of people performing that action (i.e. prevalence) and the likelihood that those people would change that action. This step balances ease of performing a behavior (participation in which is determined by the Surveys) and the potential environmental impact; and
- **Consideration of external opportunities and needs** – the final step considers opportunities to leverage campaign messages and tactics with existing programs and/or messaging elsewhere in the Orange County Stormwater Program or by other agencies or groups.

Evaluation of each *action campaign* is built into the structure of the campaign itself, allowing the Permittees to conduct status checks and fine-tune efforts during the campaign as well as assess the campaign's overall success upon conclusion of efforts. Implementation of this assessment process is further described in **Section C-6.3.2** as it applies to the *Overwatering action campaign* for 2012-2017.

### OVERWATERING ACTION CAMPAIGN

During 2016-17, the Permittees continued to focus on “overwatering” as the focus of the first *action campaign*. Unlike other activities or behaviors, overwatering can lead to several types of pollution through creation of runoff and mobilization of pollutants. From the 2012 Survey, it was clear that though overwatering is a pervasive issue most residents do not see a connection to their own watering habits. Sixty-seven percent (67%) of residents surveyed use sprinklers; however, few noticed wet pavement or pooling after irrigation. Additionally, almost half of respondents noted that higher water rates or fines would motivate them to adjust their sprinklers, suggesting that barriers to action might include a lack of knowledge concerning irrigation controllers and a lack of financial incentive to change watering habits.

The overwatering campaign aims to build residential engagement with *H<sub>2</sub>OC* by encouraging residents to sign up for program messaging (i.e. tips to reduce overwatering). The ultimate goal is for residents to commit to making small changes to their irrigation habits or landscape to reduce runoff. The Permittees seek to demonstrate that the audience took an action to practice BMPs promoted by the *action campaign*. The annual objectives for

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<sup>2</sup> This phenomenon was described in the “Jam Study” – Iyengar and Lepper (2000); this study is referenced and described further in Section 3.2.1 of Exhibit 6.1.

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the campaign are to a) recruit 300 campaign followers through obtaining email information, and b) demonstrate that 100 people practiced a BMP. Assessment of the *Overwatering action campaign* to date is described in **Section C-6.3.2**.

### C-6.3 Accomplishments

*H<sub>2</sub>OC* serves as the umbrella campaign that supports and reinforces local efforts to address their specific needs, issues and requirements. This synergistic approach is designed to ensure that *H<sub>2</sub>OC* presents a consistent, comprehensive and coordinated approach that increases the likelihood of positively influencing public knowledge and behavior. In addition, *H<sub>2</sub>OC* leverages resources to conduct analyses of outreach success as part of the iterative development process. Accomplishments of the *foundational* and *action campaign* elements during the 2016-17 reporting year are detailed below.

#### C-6.3.1 Foundational Campaign

##### C-6.3.1.1 Paid & Earned Media

###### *PAID MEDIA*

Paid media is used to achieve a minimum of 10 million impressions and to provide information to the public more generally on behaviors and/or pollutants of concern, as well as to announce and advertise outreach events. In addition to paid media purchased by the Permittees, *H<sub>2</sub>OC* also successfully leveraged an existing partnership with HCA - Used Oil to include their extensive advertising on proper disposal of used oil and oil filters. For more information on collection of used motor oil and oil filters through HCA, please see **Section C-5.2.3** and **Table C-5.11** of this report.

In addition to HCA advertisements, targeted advertisements were placed in print (OC Register and OC Register weekly papers) and online media outlets to increase visitation to the *Overwatering is Out* website ([www.overwateringisout.org](http://www.overwateringisout.org)) and encourage participation in Cleanup Day 2016, as well as public meetings for the development of the South Orange County Water Quality Improvement Plan. Encouraging volunteer participation in *H<sub>2</sub>OC* program events both increases awareness of pollution and involves the public in BMPs to prevent further pollution.

In order to address residential activities or behaviors associated with bacteria entering water ways, the Permittees also advertised proper pet waste disposal in the program flyer for the Orange County Police Canine Association (OCPCA) event on October 8, 2016. Each year, approximately 7,500 Orange County residents, OCPCA supporters and dog enthusiasts attend from throughout Orange County. The advertisement, "Poollution" encouraged residents in this target audience to pick up pet waste and prevent bacteria from entering our waterways.

Impressions for all paid advertising total **3,846,738** for the 2017-18 reporting period (**Table C-6.1**).

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### EARNED MEDIA

Earned media is generally defined as any unpaid publicity either through mainstream outlets like television, radio, print or social media outlets (e.g. blogs, Facebook, Twitter, and YouTube). In this case, earned media includes any unpaid news stories regarding water pollution prevention issues that appear as content in the various forms of media. A 2012 Study by the Nielsen rating agency<sup>3</sup> determined that ninety-two percent (92%) of consumers worldwide say that they trust earned media above all other forms of advertising and that trust in paid advertising has declined by approximately twenty-five percent (25%) since 1990. If information about water pollution prevention is within the content of the media programming, it is far more likely to be considered by the audience than a paid advertisement. As a result, *H<sub>2</sub>OC* tracked earned media impressions throughout the 2016-17 reporting period; these impressions are reflected in the total impressions garnered by the program (**Table C-6.8**). Impressions for earned media total **8,043,017** for the 2016-17 reporting period (**Table C-6.3**).

Earned media impressions are calculated using similar methodology to impressions garnered through advertising; however earned media impressions are high in quality because they are content driven. The Permittees will continue to dedicate resources to tracking earned media on stormwater, pollution prevention, water quality, pollutants of concern, low impact development, etc. during the 2017-18 reporting period.

### SUMMARY OF *H<sub>2</sub>OC* MEDIA IMPRESSIONS

Based on market research stressing the value of earned media, the Permittees sought to achieve at least 50% of media impressions from earned media during the 2016-17 reporting year. This goal was met with earned media comprising 68% of media impressions directly produced by the Program. Many of these news stories directly supported *Overwatering is Out* campaign messaging, including stories highlighting turf removal, water efficient practices, and low impact development. The Permittees will again seek to achieve at least 50% of media impressions from earned media during the 2017-18 reporting year. **Table C-6.8** and **Figure C-6.1** show that the countywide paid and earned media created **11,889,755 impressions** during the 2016-17 reporting period.

#### 2017-18 Program Focus:

- Continue to achieve at least 50% of impressions through earned media to meet impression benchmarks and record public exposure to messaging in support of Program goals

#### C-6.3.1.2 Community Outreach

Community-based outreach has been a fixture of *H<sub>2</sub>OC* since 2002 and included workshops

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<sup>3</sup> 2012 Nielsen article, "Global Consumers' Trust in 'Earned' Advertising Grows in Importance" based on 2012 Nielsen study of consumer 'trust' in earned and paid media sources (<http://www.nielsen.com/us/en/insights/press-room/2012/nielsen-global-consumers-trust-in-earned-advertising-grows.html>).

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and participation in both youth and general audience events during the reporting period.

*WORKSHOPS*

H<sub>2</sub>OC outreach to the business community and general public included workshops during the reporting period. In coordination with MWDOC and their member agencies, H<sub>2</sub>OC held OCGF during the reporting period.

Workshops for the mobile service industry were more successful and had greater participation when coordinated through a sector-specific organization (e.g. 2010-11 workshop with the Carpet & Fabricare Institute (CFI)). Attempts to coordinate with the Power Washers of North America in 2013 were ultimately unsuccessful, as were further attempts to work again with CFI.

Based on the resource-intensive nature of coordinating workshops, the Permittees focused efforts on utilizing existing partnerships to complete workshops for the remaining public and business sectors as described previously and in the table below, reaching a total of **290 workshop attendees**.

Sector Reached	Workshop	Date
Mobile Service Industry		N/A
Manufacturing Facilities	IGP Compliance Workshop hosted by IGP Comply	February 22, 2017
Residential/Commercial Landscape Construction and Services Industry	University of California-Cooperative Extension Landscape Open House – for Landscapers, Residents, and Landscape Product Manufacturers	September 24, 2016
Residential and Community Activities	University of California-Cooperative Extension Landscape Open House – and for Landscapers, Residents and Landscape Product Manufacturers	September 24, 2016
	OC Garden Friendly events with The Home Depot; water conservation plants and devices, and general stormwater pollution prevention information	February 25, 2017 March 4, 2017 March 18, 2017 April 15, 2017
Residential and Commercial Construction Industry		N/A
Commercial, Distribution and Retail Sales Industry	OC Garden Friendly events with The Home Depot; water conservation plants and devices, and general stormwater pollution prevention information	February 25, 2017 March 4, 2017 March 18, 2017 April 15, 2017

*OUTREACH EVENTS*

The following is a list of outreach events in which the Program participated during the

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2016-17 reporting period supplemental to individual Permittee event participation:

- August 13, 2016: La Pata Gap Connector Ribbon Cutting Ceremony
- September 17, 2016: Cleanup Day 2016
- October 1, 2016: South Orange County Water Expo
- March 29-30, 2017: Children's Water Education Festival
- April 21, 2017: City of Mission Viejo Environmental Fair

Through these events approximately **7,940 event participants** visited the *H<sub>2</sub>OC* booth and/or received stormwater pollution prevention information. Impressions from in-person events, though much lower in quantity than advertising impressions, are of higher quality; booth visitors are able to ask questions, speak to Program representatives and take educational material home to show others.

### *CORPORATE ENVIRONMENTAL MANAGER OUTREACH*

The Permittees conducted outreach to Corporate Environmental Managers during the permit term, building a list of 71 businesses in coordination with the Permittees. Most businesses that were contacted did not have an Environmental Manager or an environmental department within their organization; however, follow-up attempts were made and outreach materials were provided whenever possible.

**Table C-6.4** shows that community outreach and events created **8,230 impressions** in the 2016-17 reporting period.

### *SUMMARY OF COMMUNITY OUTREACH*

Participation in events allows the Permittees to have more direct contact with residents and answer questions regarding behaviors protective of water quality. Outreach at events integrates goals of both the *foundational* and *action campaigns*; events present opportunities to engage residents in *action campaigns*, especially when either targeted audience and messaging overlap or when events are general in nature.

#### **2017-18 Program Focus:**

- Continue to encourage residents and business representatives to sign-up for action campaign communication at events

#### C-6.3.1.3 Outreach Materials, *H<sub>2</sub>OC* Website, & *H<sub>2</sub>OC* Facebook Page

##### *MATERIALS*

The Principal Permittee, in collaboration with and under the direction of the NPDES Public Education Sub-Committee (Sub-Committee) annually review existing and develop, as needed, new countywide public and business education materials that effectively communicate the message of pollution prevention. Though several materials focus on specific pollutants of concern, stormwater topics (e.g. LID) or target specific audiences, at a

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minimum, all of the program materials:

- Explain the difference between the storm drain and sanitary sewer system, and emphasize that water in the storm drain does not receive treatment before entering our waterways;
- Focus on specific pollution-causing behaviors and address them directly to increase the likelihood of changing those behaviors and reducing pollution;
- Emphasize the relevant impact of stormwater pollution to the target audience;
- Include a positive alternative to pollution-causing behaviors;
- Tailor the personality, focus and depth of program messages appropriately for each audience and venue; and
- Include the *H<sub>2</sub>OC* moniker<sup>4</sup>.

*H<sub>2</sub>OC* actively maintains an extensive library of brochures, BMP factsheets, posters, BMP stickers (restaurant and automotive maintenance) and other materials which provides resources for Permittee outreach to target audiences within their jurisdictions. Each year, the Sub-committee determines if new materials are needed to address behaviors based on interactions with the public during inspections or pollution response, and at public counters. During the 2015-16 reporting period, the Public Education Sub-committee conducted a thorough review of existing materials and made recommendations for updates which will be implemented in a prioritized fashion over subsequent reporting periods, in tandem with a concerted effort to strengthen *H<sub>2</sub>OC* branding. Materials are made available to the public through events, city counters, presentations, and online at [www.H2OC.org](http://www.H2OC.org).

As discussed in **Section C-6.2.1**, the program underwent a strategic re-branding of *Project Pollution Prevention* during the 2012-13 reporting year, including changing the program name to *H<sub>2</sub>OC* and the overall look and feel of materials to reflect the new logo graphics and colors. The program website link also changed from [www.ocwatersheds.com/publiced](http://www.ocwatersheds.com/publiced) to [H2OC.org](http://H2OC.org), directly associating the program message with the website.

For a complete list of materials developed by *H<sub>2</sub>OC* available to Permittees and other organizations, please see **Table C-6.5** of this report.

### *H<sub>2</sub>OC WEBSITE*

Residents increasingly seek information regarding pollution prevention from the internet. As a result, the Permittees continue to maintain a website dedicated to public education; the site includes informational pages, a Kids' Corner, brochures, video clips and options to sign up for regular program updates.

The website - [H2OC.org](http://H2OC.org) - garnered a total of **3,527 page views** during the reporting period (**Table C-6.8**).

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<sup>4</sup> Not all materials have been updated since the transition from *Project Pollution Prevention* to *H<sub>2</sub>OC*; some materials still include the *Project Pollution Prevention* logo.

*H<sub>2</sub>OC FACEBOOK PAGE*

The *H<sub>2</sub>OC* Facebook page (“Orange County Stormwater Program”) was launched in January 2013 to support both the *foundational* and *action campaigns*. One of the benefits of using social media as an outreach tool is that there are built-in metrics to determine total number of impressions as well as to assess the message effectiveness. Metrics utilized by Facebook include the following:

- *Page likes* – the number of Facebook members to like a page, which allows select page posts to appear in their feed.
- *Post likes* – the number of Facebook members to like a specific post
- *Post comments* – the number of Facebook members to comment on a specific post
- *Post shares* – the number of Facebook members to share a specific post, which would result in that post appearing in their friends’ feeds
- *Post reach* – the total number of Facebook members to have seen a specific post
- *Page reach* – the total number of exposures to page and/or posts from that page

These metrics are helpful in assessing different aspects of a social media campaign. For example, a large number of *post likes* can indicate that a particular post is of interest to the Facebook audience, a large number of *post comments* might indicate that a particular post has been successful at engaging the Facebook audience, and a large number of *post shares* might indicate that the readers found the post interesting enough to want to share with their Facebook friends. However, as *page reach* represents the total number of exposures to a page’s message (through actual visits to the page or viewing of page posts), it is the best metric to use when determining total impressions. During the 2016-17 reporting year, the *H<sub>2</sub>OC* Facebook had **411,267 page and/or post exposures** (i.e. *page reach*), an increase of 46% over the prior reporting period (**Table C-6.8**).

*SUMMARY OF OUTREACH MATERIALS, H<sub>2</sub>OC WEBSITE & H<sub>2</sub>OC FACEBOOK PAGE*

Development and provision of educational materials is an important but static part of the program; however, maintaining an informative website and Facebook page that encourage participation in BMPs protective of water quality has become increasingly important.

**2017-18 Program Focus:**

- Continue to increase engagement with *H<sub>2</sub>OC* Facebook audience
- Update select outreach materials per Public Education Sub-committee review

C-6.3.1.4 Outreach to School-age Children

Educating school children about stormwater and urban runoff pollution is critical to the long-term success of the Orange County Stormwater Program. Information provided to students in school is often brought into the home and shared with parents and other relatives. The 2012 Survey indicated that forty-six percent (46%) of adults with school-aged children at home received information about water pollution prevention.

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Children are also excellent watchdogs when it comes to their parents' activities, and they are likely to try to correct a parent's polluting behavior. In the 2012 Survey, parents of students who provided them with water pollution prevention information were more likely than those without kids to engage in the seven "stormwater safe" behaviors. *H<sub>2</sub>OC* continued to implement a school outreach program throughout the 2016-17 reporting year; the programs implemented and/or supported by *H<sub>2</sub>OC* are detailed below and in **Table C-6.6**.

### *DISCOVERY SCIENCE CENTER / MWDOC*

In 2016-17, the Program provided **13,024 fifth grade students** a workbook produced in coordination between *H<sub>2</sub>OC* and the Discovery Science Center in 2009. The workbook meets California Science Content Standards and focuses on water pollution prevention. The workbooks were provided to students in support of the MWDOC's program at Discovery Science Center to both outreach to students and bolster the existing relationship with MWDOC.

In addition to the workbooks, the Orange County Stormwater Program has an interactive water pollution prevention game on its website in the "Kid's Corner" section. The website is promoted to the school children and teachers on the workbook provided at the Discovery Science Center.

### *PACIFIC MARINE MAMMAL CENTER (PMMC)*

The PMMC initiated the Pinniped Pollution Project program in 2009<sup>5</sup>, focused on watershed education and pollution prevention. The curriculum includes pollutant transport and the effects of trash and other pollutants on the marine environment and its inhabitants. The program was initially developed in partnership with *H<sub>2</sub>OC*, including curriculum content and the provision of maps and other materials.

The PMMC is located in Laguna Beach, but serves students from throughout the County. During the 2016-17 reporting year, the Pinniped Pollution Project program was presented to **3,567 Orange County students**. Additionally, *H<sub>2</sub>OC* worked with Orange County 4-H to provide workbooks for each of the students involved with the program, and have lent two *H<sub>2</sub>OC* and one Orange County 4-H Enviroscape models to the Pacific Marine Mammal Center for use in their education program.

### *CHAPMAN UNIVERSITY OC WATERSHED EDUCATION AMBASSADOR PROGRAM (OC WEAP)*

In 2012, the Program partnered with Chapman University to develop and implement OC WEAP, which provides water pollution prevention and watershed outreach to fifth grade elementary school students. Through this pilot program, Principal Permittee staff developed a curriculum incorporating the California Science Content Standards for fifth grade and trained Chapman University students on presenting this information in a fun

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<sup>5</sup> Impressions garnered through the PMMC Pinniped Pollution Project were not included in the 2009-10 and 2010-11 reporting years. The 2011-12 report corrected this oversight.

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and informative way. During the reporting period, the Chapman University students presented the watershed curriculum to **147 fifth grade students** at various elementary schools.

Additionally, children participating in the program are asked to take a short quiz both before and after the watershed curriculum is presented by the Chapman University students (pre- and post-surveys). During the reporting period, the average pre-test score was 68%, while the average post-survey score was 81% (a 19.67% increase in correct responses), indicating successful implementation of the program.

**Table C-6.6** shows that outreach to school-age children created 16,738 impressions for the 2016-17 reporting year.

### *SUMMARY OF OUTREACH TO SCHOOL-AGE CHILDREN*

It is the goal of *H<sub>2</sub>OC* and the Public Education Sub-committee to continue to increase support of watershed education and pollution-prevention school programs in Orange County. Support comes in two primary forms – through collaboration with an organization to design and implement a school program or by supporting existing school programs that meet necessary standards and permit requirements (e.g. outreach about pollution prevention BMPs). Existing programs may have metrics for tracking student learning or they may track participation only; the Permittees will work through existing partnerships to build metrics into school outreach programs wherever possible (e.g. pre-/post-tests).

#### **2017-18 Program Focus:**

- Expand OC WEAP to other colleges and universities within the County.
- Pursue grant opportunities to support funding of additional youth outreach activities.

#### C-6.3.1.5 Permittee Support & Coordination

*H<sub>2</sub>OC* is annually revised per permit requirements and assessment results under the aegis of the Sub-committee. The Sub-Committee comprises Permittees and educational groups in Orange County and provides direction and oversight on plan development and implementation. The goal of the Sub-Committee is to provide regional consistency and oversight for the stormwater public education efforts. The Sub-Committee met monthly during the 2016-17 reporting period.

Please reference **Section C-2.3.1 – Management Framework** for a detailed discussion of the Committee structure.

#### *POLLUTION HOTLINE*

The County as Principal Permittee also manages the countywide 24-hour bilingual water

pollution reporting hotline number, 1-877-89SPILL, which handles water pollution complaints as well as inquiries about stormwater and public education materials. During the reporting period the hotline received 168 water pollution calls. See **Section C-10.2** of this report) for a summary of pollution response activities.

### Summary of Public Education Program Impressions

Permittee impressions individually total 74,671,481 during the 2016-17 reporting period (see **Table C-6.7**).

#### C-6.3.2 Action Campaign

As described in **Section C-6.2.2** the Permittees began development and implementation of the first *action campaign* focused on curbing overwatering during the 2012-13 reporting period (year 1) and have continued these efforts in subsequent reporting periods. *Overwatering action campaign* efforts are focused on engaging residents in the campaign and demonstrating that the audience started taking actions to practice BMPs. During the reporting period, these efforts have included:

- Collaboration with other agencies (**Section C-6.3.2.1**);
- Maintenance of the [overwateringisout.org](http://overwateringisout.org) website (**Section C-6.3.2.2**);
- Encouraging engagement and tracking sign-ups (**Section C-6.3.2.3**); and
- Tracking behavior change occurring as a result of the *Overwatering action campaign* (**Section 6.3.2.4**).

##### C-6.3.2.1 Collaboration with Other Agencies

Overwatering is a topic of interest from both water quality and water use efficiency perspectives. Throughout development of the *Overwatering action campaign*, the Permittees have engaged the MWDOC and their member agencies to develop messaging, provide a central location for information about runoff reduction, proper irrigation techniques and rebates ([overwatering.org](http://overwatering.org)), and to partner in spreading awareness of the program.

During the FY 2016-17 reporting period, the Permittees continued to partner with MWDOC and their member agencies, as well as the UCCE, in implementing the OC Garden Friendly program (OCGF), which supports the *Overwatering action campaign* by encouraging Orange County residents to install climate-appropriate and low-water-use plants in outdoor spaces and gardens. In implementing OCGF, the following actions were taken during the reporting period:

- Held four highly advertised OCGF events in partnership with The Home Depot in the cities of Costa Mesa, Huntington Beach, and Lake Forest;
- Promoted OCGF events in the OC Register, on the *H<sub>2</sub>OC* Facebook page, and on [overwateringisout.org](http://overwateringisout.org);
- Worked with Home Depot to place materials that identify rebatable water efficient products and plants in select stores;
- Utilized a photo prop standee of program mascot, Gnorman the Gnome, to increase

- booth visitation and engagement (**Figure C-6.2**);
- Distributed the “Orange County Garden Friendly Planning & Plant Guide” at OCGF events (**Figure C-6.4**).

The Permittees will evaluate continued implementation of the OCGF Program in tandem with a review of the Overwatering is Out campaign during the 2017-18 reporting period.

### C-6.3.2.2 Overwatering Website

In addition to reformatting the public education program website to be both reflective of the change in program name and graphics, the Permittees built a microsite specifically for the *Overwatering action campaign* – [overwateringisout.org](http://overwateringisout.org). This website serves three main purposes: (1) it is a platform for residents to sign-up to receive program messages and tips; (2) it serves as a “one stop shop” for both water use efficiency and runoff reduction information, with biweekly blog posts covering a wide range of related topics; and, (3) it operates as a forum for residents to provide feedback and see residents who have already implemented BMPs successfully.

Incentives are important to draw people to the website. During the 2014-15 reporting period, the Permittees developed and produced “Gnorman Approved” yard signs and “Water Champion” stickers that were distributed for free to residents that took actions to reduce their water use, thereby limiting or altogether eliminating the runoff leaving their property (**Figure C-6.3**). In order to obtain a yard sign and/or sticker, a resident must select the action they took from a list of preapproved activities on the website (with photographic evidence required in some instances) and opt-in to receive additional tips from the biweekly campaign emails. Thus, the yard signs and stickers provide the program with a way to track behavior change, one of the primary program evaluation metrics (**Section C-6.3.2.4**). Additionally, the website landing page includes an action map that allows residents to share what they have done to help stop overwatering in their neighborhood (**Figure C-6.6**). During the reporting year, the [www.overwateringisout.org](http://www.overwateringisout.org) website garnered a total of **39,262 page views**.

### C-6.3.2.3 Encouraging Engagement & Tracking Sign-ups

Through tracking software, *H<sub>2</sub>OC* is able to track sign-ups through the *Overwatering action campaign* and *H<sub>2</sub>OC* websites and from events. Additionally, *H<sub>2</sub>OC* built in tracking of residents over time to provide the Permittees the ability to follow up with individuals on adoption of BMPs.

An extensive email distribution system has been developed to distribute tailored correspondence based on reported watering efficiency; residents who report high levels of efficiency will be encouraged to adopt more intensive BMPs versus a resident who has reported not being efficient. Email correspondences are distributed to residents as they “opt-in” to the program and on a regular basis to those already signed-up through the website and events. Email opt-ins are tracked by zip code so that targeted outreach can be undertaken in areas with low opt-in numbers; as of June 30, 2017, **3,918 Orange County residents** had opted in to receive *Overwatering action campaign* emails (see **Figure C-6.5**).

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During the reporting period, Orange County residents received **4,126 emails** as a result of opting in to the *Overwatering action campaign*.

During the 2015-16 reporting period, H<sub>2</sub>OC launched a *Drought, Camera, Action* photo contest to increase program visibility and engagement and to provide an arena for residents to share what they have done to save water and reduce runoff in their homes. The contest was repeated during the 2016-17 reporting period and renamed, *Plants, Camera, Action* due to the heavy rains improving drought conditions (**Figure C-6.7**). The contest ran from, which ran from March to May, garnered **137 photo submissions** (over three times more than the prior reporting period), **645 photo contest votes**, and **53 comments**. At the conclusion of the contest, three winners were selected (for People’s Choice, Most Beautiful Photo of a California-Friendly Plant, and Most Beautiful Photo of a California-Friendly Landscape awards) and their photos were published in the OC Register.

### C-6.3.2.4 Tracking Behavior Change

The ultimate goal of the *Overwatering action campaign* is to encourage residents to adopt behaviors associated with outdoor water use consumption to both conserve water and minimize runoff. The Permittees had previously tracked this behavior change by recording the number of smart sprinklers and rain barrels purchased at OCGF events; however, this information is not always made available by the venue partner. Instead, behavior change is now tracked through information obtained by the “Gnorman Approved” yard sign and “Water Champion” sticker program. During the reporting period, a total of **160 runoff-reducing behaviors** were adopted by Orange County residents, for a total of 817 runoff-reducing behaviors adopted to date.

#### SUMMARY OF OVERWATERING ACTION CAMPAIGN

The *Overwatering action campaign* has metrics built into the fabric of the campaign that have allowed the Permittees to evaluate the campaign’s success based on the following two annual objectives: (1) recruit 300 campaign followers through obtaining email information, and (2) demonstrate that 100 people practiced a BMP. The Permittees have exceeded both objectives during the reporting period, with an increase of 1,258 email opt-ins received and 160 people identified as having adopted a runoff-reducing behavior.

#### 2017-18 Program Focus:

- Conduct evaluation of the *Overwatering action campaign*
- Begin to develop action campaign focused on trash reduction

### C-6.4 Assessment

The principal means of both evaluating the effectiveness of H<sub>2</sub>OC and informing the ongoing development of the campaign is the use of scientific telephone public opinion surveys. The Program conducted a fifth public opinion survey (2015 Survey) in September 2015, detailed results of which were summarized in **Section C-6.4.1** of the 2015-16 Unified Annual Report.

Annual analyses of outreach efforts for both the foundational and action campaigns are detailed in each sub-section of this report and summarized below.

### C-6.4.1 Public Awareness Surveys

It was determined during the 2002-03 reporting period that the development of a specific methodology for future Orange County public awareness surveys was paramount to ensuring the scientific defensibility of results in identifying changes in public knowledge and behavior. The resultant study, designed by a leading expert in the field with oversight from the Principal Permittee and Public Education Sub-Committee was conducted in May 2003 (2003 Survey). This initial survey established the baseline knowledge level and willingness of residents to participate in pollution preventative behaviors.

Mid-way through the Third Term permit cycle, a subsequent (and almost identical) survey was conducted in November of 2005 (2005 Survey). The 2005 Survey served as an assessment of improvements in public knowledge of stormwater issues and whether or not Orange County residents made any behavioral changes as a result of the outreach campaign. Results from the 2005 Survey showed an increase in awareness of stormwater issues for the majority of questions asked, indicating that the public information campaign on stormwater and urban runoff had increased awareness.

To assess the progress of Project Pollution Prevention (predecessor to H<sub>2</sub>OC) at the start of the Fourth Term Permits and assist with future program planning, a third survey was conducted in late 2009 (2009 Survey). Responses on the 2009 Survey indicated incremental and statistically significant changes in behavior and increases in awareness since the 2005 Survey.

In May 2012, the Program conducted a fourth public opinion survey (2012 Survey) utilizing some questions from across the previous three surveys to show patterns in knowledge and behavior over time, and introducing new questions to target specific behaviors, potential motivators or barriers to those behaviors and involvement of residents within their community. Responses on the 2012 Survey showed that the number of respondents who have participated in “stormwater safe” activities increased to the highest percentage of total respondents to date, with parents of students who provided them water pollution prevention information being most likely to engage in those activities.

In September 2015, the Program conducted a fifth public opinion survey (2015 Survey), again utilizing some questions from across the previous four surveys to show patterns in knowledge and behavior over time. As with the previous four surveys, the 2015 Survey demonstrated increases in both knowledge and awareness. Of particular significance, for the first time since implementation of the public opinion surveys in 2003, survey respondents reported water issues / the drought as the number one issue facing their community, higher even than public safety or jobs and the economy. Furthermore, 43.3% reported that drought conditions were the greatest motivator for reducing the amount of time they use their sprinklers.

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### C-6.4.2 Foundational Campaign

In addition to general pollution-prevention outreach and messaging, *H<sub>2</sub>OC* advertising during the reporting period focused on increasing engagement in the *Overwatering action campaign*. Of the total 87,010,037 impressions created by the Program during the reporting period, 981,574 directly supported the *Overwatering action campaign*.

### C-6.4.3 Action Campaign

During the reporting period, the Permittees continued implementation of the *Overwatering action campaign* for the fifth year. Engagement in the campaign slowed during the latter half of the reporting period, likely related to the heavy storms and abatement of drought conditions. As the drought was identified as a significant motivator for action in the 2015 Survey, the Permittees will evaluate the *Overwatering action campaign* in the 2017-18 reporting period to determine next steps. The Permittees will also begin to develop a second action campaign that will target trash.

### C-6.4.4 Program Impressions

**Table C-6.8** shows that all impressions created by both the countywide public education program and jurisdictional programs total **87,010,037** during the 2016-17 reporting period.

**Headline Indicator – Number of Impressions:** The public education program created 87,010,037 million impressions during the 2016-17 reporting period. One of the goals of the public education program is to target 100% of the residents of Orange County. Orange County has a population of approximately 3 million people. The total impressions earned greatly exceed the program goal. Additionally, 981,574 of those impressions directly supported the *Overwatering action campaign*, which during the reporting period was able to effect behavior change in the form of BMP adoption by 160 Orange County residents.

### C-6.4.5 Program Awards

During the reporting period, *H<sub>2</sub>OC* was recognized for its achievements and in particular for its *Overwatering is Out action campaign* through receipt of the following award:

- *2016 Excellence in Communications* – National Association of Flood and Stormwater Management Agencies (NAFSMA)

## **C-6.5 Summary**

*H<sub>2</sub>OC* successfully achieved and exceeded the goal of 12 million impressions (4 times the Orange County population) and met compliance with the Santa Ana Region requirement to achieve a minimum of 10 million impressions through media. These impressions were delivered in a variety of formats, including print media, online media, social media, and in-person events, and supported efforts to grow the *Overwatering is Out action campaign*.

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During its fifth year of implementation, the *Overwatering is Out* action campaign was recognized for its achievements, garnering a prominent award from NAFSMA which lauded the campaign for its novel use of automated marketing tools to deliver personalized content. H<sub>2</sub>OC will continue to implement the countywide effort, will evaluate appropriate next steps for the *Overwatering action campaign* in light of the improved drought conditions, and will begin to develop a new action campaign that will aim to reduce trash.

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**Table C-6.1: Paid Media Advertising**

Media Type	Media Outlet	Advertisement Topic	Run Date(s)	Impressions	
				SAR	SDR
Print	OC Register	Encourage Participation in Events for Cleanup Day 2016	September 2016	186,368	46,592
Print	OC Register Weekly Papers	Encourage Participation in WQIP Public Meeting	September 2016	0	658,434
Print	OCPCA Event Program	Proper Disposal of Pet Waste	October 8, 2016	6,000	1,500
Print	OC Register	Encourage Participation in Spring OC Garden Friendly Events	February - March, 2017	61,782	15,446
Print	OC Register	Advertise and Encourage Participation in Overwatering is Out Photo Contest	April - May, 2017	411,906	102,977
Print	OC Register	Drive Traffic to <a href="http://overwateringisout.org">overwateringisout.org</a> and Increase Awareness of Yard Sign Program	June 2017	103,120	25,780
Online	Google Adwords	Drive Traffic to <a href="http://overwateringisout.org">overwateringisout.org</a> and Increase Awareness of Yard Sign Program	June 2017	201,219	50,305
<b>TOTAL</b>				<b>970,395</b>	<b>901,034</b>
<p>Impressions for print media are based on factors such as attendance numbers, readership, and newsstand numbers provided by the suppliers of advertising based on scientific market research. The newspaper industry standard for determining readership is generally 2.5 to 3.5 times circulation; based on the theory that more than one person reads an individual issue. When specific readership numbers are not provided, a conservative estimate of 2.5 times circulation has been used. Impressions for the OCPCA event program did not include a multiplier as all family members were likely in attendance and would receive their own. For online and regional advertising division between regions is divided between regions by 80% Santa Ana Region and 20% San Diego Region based on population. Impressions for billboards located on major commuter freeways (i.e. the San Diego Freeway (405) and the Artesia Freeway (91)) were divided similar to online media with 80% allocated to the Santa Ana Region and 20% to the San Diego Region. All other billboard impressions were attributed to the specific region in which they were placed.</p>					

**Table C-6.2: OC HCA Used Oil Advertising**

Type of Advertisement	Impressions	
	SAR	SDR
DMV Advertisements	1,200,000	300,000

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Google Adwords	380,247	95,062
<b>TOTAL</b>	<b>1,580,247</b>	<b>395,062</b>

**Table C-6.3: Earned Media Advertising**

<b>Region</b>	<b>Impressions</b>
SAR	6,434,414
SDR	1,608,603
<b>TOTAL</b>	<b>8,043,017</b>

**Table C-6.4: Impressions Created by Community Outreach**

<b>Program</b>	<b>Type of Program</b>	<b>Estimated Number of Impressions</b>
Workshops	Business & Residential	<b>290</b>
H <sub>2</sub> OC Events	Outreach Events	<b>7,940</b>
<b>TOTAL</b>		<b>8,230</b>

Table C-6.5: Countywide Educational Materials

Public Education Item	Pollutant(s) Addressed	Activities Addressed
<b>Brochures</b>		
"Orange County Garden Friendly Planning & Plant Guide"	Overwatering	Water conservation, California-friendly landscaping
"Tips to Prevent Overwatering"	Overwatering, pesticides/fertilizer	Water conservation, use of IPM techniques and California-friendly landscaping
"The Ocean Begins At Your Front Door" - English, Spanish, Vietnamese	Household hazardous waste, trash, motor oil, chlorine, overwatering, green waste, dirt, pesticides/fertilizer, pet waste	Household maintenance and activities (i.e. hosing driveway), automotive maintenance and washing, pool maintenance, landscape and gardening, trash disposal, pet care
Homeowners Guide for Sustainable Water Use Pamphlet	Household hazardous waste, trash, motor oil, chlorine, overwatering, green waste, dirt, pesticides/fertilizer, pet waste	Preventing urban runoff through low impact development in residential properties, water conservation, use of IPM techniques and California-friendly landscaping, general water pollution prevention methods
"Help Prevent Ocean Pollution: Your Local Used Oil Collection Center" (North, South & Central) - English, Spanish, Vietnamese	Motor Oil	Automotive Maintenance, Disposal of Used Motor Oil
"Help Prevent Ocean Pollution: Tips for Pool Maintenance" - English, Spanish	Chlorine, runoff	Pool Drainage/Maintenance
"Help Prevent Ocean Pollution: Tips for Landscape and Gardening" - English, Spanish	Fertilizer, pesticide, dirt, overwatering, green waste	Landscape maintenance, pesticide/fertilizer application, proper disposal of household hazardous waste and green waste
"Help Prevent Ocean Pollution: Tips for Pet Care" - English, Spanish	Surfactants, chemicals, pet waste	Proper disposal of pet waste, proper pet bathing techniques
"Help Prevent Ocean Pollution: Household Tips" - English, Spanish	Household hazardous waste, pet waste, pesticides/fertilizers, overwatering, green waste, surfactants, motor oil, trash	Household maintenance and activities (i.e. hosing driveway), automotive maintenance and washing, pool maintenance, landscape and gardening, trash disposal, pet care
"Help Prevent Ocean Pollution: Tips for Horse Care" - English, Spanish	Bacteria, sediment	Large animal care and maintenance

**Table C-6.5: Countywide Educational Materials (continued)**

“Help Prevent Ocean Pollution: Proper Disposal of Household Hazardous Materials” - English, Spanish, Vietnamese	Household hazardous wastes	Proper identification and disposal of household hazardous wastes
“Help Prevent Ocean Pollution: Maintenance Practices for Your Business” - English, Spanish	Fertilizer, pesticides, green waste, overwatering, trash, toxic substances	Landscape maintenance, proper application of pesticides and fertilizers, trash management, proper storage of materials
“Help Prevent Ocean Pollution: Tips for Using Concrete and Mortar” - English, Spanish	Concrete and mortar, slurry	Proper preparation, use, clean up and disposal of concrete and mortar
“Sewage Spill Reference Guide”	Sewage spills from overflows, grease buildup, structure problems and/or infiltration and inflow	Proper prevention of and identification and response to sewage spills
“Responsible Pest Control”	Pesticides	Proper identification of pests, selection of least toxic chemical, proper pesticide application, spill prevention and proper storage and disposal of pesticides (use of Integrated Pest Management (IPM) techniques)
“Help Prevent Ocean Pollution: Residential Pool, Landscape and Hardscape Drains” - English, Spanish	Chlorine, chemicals, pet waste, green waste, overwatering, motor oil and vehicle fluids	Pool maintenance, spill prevention, proper disposal of household hazardous waste, proper disposal of pet waste, proper use of pesticides and fertilizers, proper vehicle maintenance
“Help Prevent Ocean Pollution: Proper Use and Disposal of Paint” - English, Spanish	Paint, chemicals	Proper use, storage and disposal of paint
“Help Prevent Ocean Pollution: Tips for Home Improvement Projects” - English, Spanish	Construction debris, concrete, paint, household hazardous waste, sediment	Proper storage of construction materials, recycling of construction materials, proper disposal of household hazardous waste, proper erosion and spill control
“Help Prevent Ocean Pollution: Children’s Coloring & Activity Book”	Trash, pet waste, motor oil, green waste	Litter control, proper disposal of pet waste, proper spill clean up (e.g. use of cat litter)
“Help Prevent Ocean Pollution: Tips for Carwash Fundraisers”	Surfactants, metals, motor oil, toxic substances	Proper BMPs for carwashing activities (i.e. containment and encouragement of infiltration)

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**Table C-6.5: Countywide Educational Materials (continued)**

“Help Prevent Ocean Pollution: Tips for Maintaining a Septic Tank System	Grease, trash, pesticides	Proper maintenance of septic tanks
“Help Prevent Ocean Pollution: Tips for the Automotive Industry” – English, Spanish	Motor oil, metals, surfactants, toxic substances, dirt	Proper maintenance and washing practices for automobiles, proper storage and disposal of automotive liquids and materials
“Help Prevent Ocean Pollution: Tips for the Automotive Industry”	Motor oil, metals, surfactants, toxic substances	Proper maintenance and washing practices for automobiles and automotive detailing materials, proper storage and disposal of automotive liquids and materials
“Help Prevent Ocean Pollution: Tips for the Home Mechanic”	Motor oil, metals, surfactants, toxic substances	Proper maintenance and washing practices for automobiles and automotive detailing materials, proper storage and disposal of automotive liquids and materials, use of used oil collection centers
“Compliance Best Management Practices for Mobile Businesses”	Surfactants, toxic substances, dirt, metals	Mobile car washing and detailing, proper high pressure cleaning, proper storage and disposal of washwater from mobile automotive detailing, washing and carpet and fabric cleaning
“Educational Program Opportunities for Teachers and Students”	General	Programming available to Orange County teachers
“Help Prevent Ocean Pollution: A Guide for Food Service Facilities” – English, Spanish, Vietnamese	Grease, food waste, trash	Proper food waste disposal, proper grease and oil disposal, proper procedures for spill cleanup, proper maintenance of trash dumpsters, proper floor mat cleaning, proper wastewater disposal
“Help Prevent Ocean Pollution: A Guide to Prevent Overwatering” - English	General	Proper landscape irrigation techniques to prevent overwatering, potential for pollutant transport in runoff from properties; encourage the use of California-friendly plant palates to reduce water demand

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**Table C-6.5: Countywide Educational Materials (continued)**

<b>Posters</b>		
"Help Prevent Ocean Pollution: A Guide for Food Service Facilities" BMP Poster - English, Spanish	Grease, food waste, trash	Proper food waste disposal, proper grease and oil disposal, proper procedures for spill cleanup, proper maintenance of trash dumpsters, proper floor mat cleaning, proper wastewater disposal
Auto Repair BMP Poster - English, Spanish	Motor oil, metals, surfactants, toxic substances	Proper maintenance practices for automobiles and automotive detailing materials, proper storage and disposal of automotive liquids and materials
Gas Stations BMP Poster - English, Spanish	Motor oil, metals, gasoline, surfactants, toxic substances	Proper maintenance of gas stations and BMPs for washing of gas station areas, proper disposal of toxic substances
<b>Other Materials</b>		
"Help Prevent Ocean Pollution: A Guide for Food Service Facilities" CD-Rom	Grease, food waste, trash	Proper food waste disposal, proper grease and oil disposal, proper procedures for spill cleanup, proper maintenance of trash dumpsters, proper floor mat cleaning, proper wastewater disposal
"Help Prevent Ocean Pollution: A Guide for Food Service Facilities" Floor mat sticker	Grease, food waste, trash	Proper floor mat cleaning
"Help Prevent Ocean Pollution: A Guide for Food Service Facilities" Dumpster sticker	Grease, food waste, trash	Proper maintenance of trash dumpsters
"Help Prevent Ocean Pollution: A Guide for Food Service Facilities" Outdoor maintenance sticker	Grease, food waste, trash	Proper maintenance of trash dumpster, proper wastewater disposal
"Help Prevent Ocean Pollution: A Guide for Food Service Facilities" Oil & grease disposal sticker	Grease, food waste, trash	Proper food waste disposal, proper grease and oil disposal, proper procedures for spill cleanup

Note: Other materials not included in this table are available and distributed through H<sub>2</sub>OC. These materials are general outreach in nature and advertise the County website [www.ocwatersheds.com](http://www.ocwatersheds.com). Most materials also include the 24-hr hotline reporting number as well.

**Table C-6.6: Impressions Created by School Outreach**

<b>Program</b>	<b>Type of Program</b>	<b>Estimated Number of Student Impressions</b>
<b>Discovery Science Center / Municipal Water District of Orange County Partnership</b>	Student workbooks	13,024
<b>Pacific Marine Mammal Center</b>	Pinniped Pollution Prevention/Watershed Education	3,567
<b>OC Watershed Education Ambassador Program</b>	Water Cycle/Watershed Education/Pollution Prevention	147
<b>TOTAL</b>		<b>16,738</b>

Table C-6.7: Impressions Created by Each Permittee

Permittees	Estimated Number of Impressions
Aliso Viejo	300,600
Anaheim	1,785,000
Brea	255,120
Buena Park	15,994,298
Costa Mesa	213,215
Cypress	1,800,000
Dana Point	682,729
Fountain Valley	89,055
Fullerton	130,000
Garden Grove	659,995
Huntington Beach	396,988
Irvine	771,094
La Habra	92,000
La Palma	1,412,842
Laguna Beach	220,023
Laguna Hills	113,395
Laguna Niguel	364,517
Laguna Woods	26,976
Lake Forest	672,800
Los Alamitos	285,040
Mission Viejo	5,000,000
Newport Beach	850,255
Orange	36,000,000
Placentia	52,000
Rancho Santa Margarita	316,500
San Clemente	3,684,502
San Juan Capistrano	358,569
Santa Ana	765,320
Seal Beach	62,145
Stanton	35,000
Tustin	332,151
Villa Park	3,500
Westminster	298,632
Yorba Linda	79,000
County of Orange/OCFCD	568,220
<b>Total</b>	<b>74,671,481</b>

Table C-6.8: Total Impressions Created by Public Education Program

<b>Impressions Created</b>	<b>Estimated Number of Impressions</b>
<b>Countywide Paid and Earned Media Impressions</b>	<b>11,889,755</b>
<b>Community Outreach</b>	<b>8,230</b>
<b>School Programs</b>	<b>16,738</b>
<b>Website Impressions</b>	<b>3,527</b>
<b>Facebook Impressions</b>	<b>411,267</b>
<b>Total Permittee Impressions</b>	<b>74,671,481</b>
<i>Overwatering action campaign Impressions*</i>	<b>9,039</b>
<b>Grand Total</b>	<b>87,010,037</b>

\*This total represents impressions in addition to those *foundational campaign* impressions that supported the *Overwatering action campaign*.

**Table C-6.9: Current and Potential Outcome Levels (Public Education)**

Public Education Program	Effectiveness Assessment Outcome Levels					
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
	Document Stormwater Program Activities	Raise Awareness	Change Behavior	Load Reduction	Runoff Quality	Receiving Water Quality
Creating Impressions	✓ Number of impressions	✓ Surveys show change in knowledge of pollution preventative activities	✓ Surveys show change in willingness to participate in pollution preventative activities	✓ Household hazardous waste collected		
		✓ Number of website page views		✓ Runoff-reducing BMPs implemented		
Public Participation	✓ Number of workshops	✓ Surveys show change in knowledge of pollution preventative activities	✓ Surveys show change in willingness to participate in pollution preventative activities			
	✓ Conduct Events	✓ Surveys show change in knowledge of pollution preventative activities	✓ Participation in events	✓ Trash and debris recovered		
<p><b>Key:</b>                      ✓ = Currently Achieved Outcome Level                      P = Potentially Achievable Outcome Level</p>						

Figure C-6.1: Paid and Earned Media Impressions

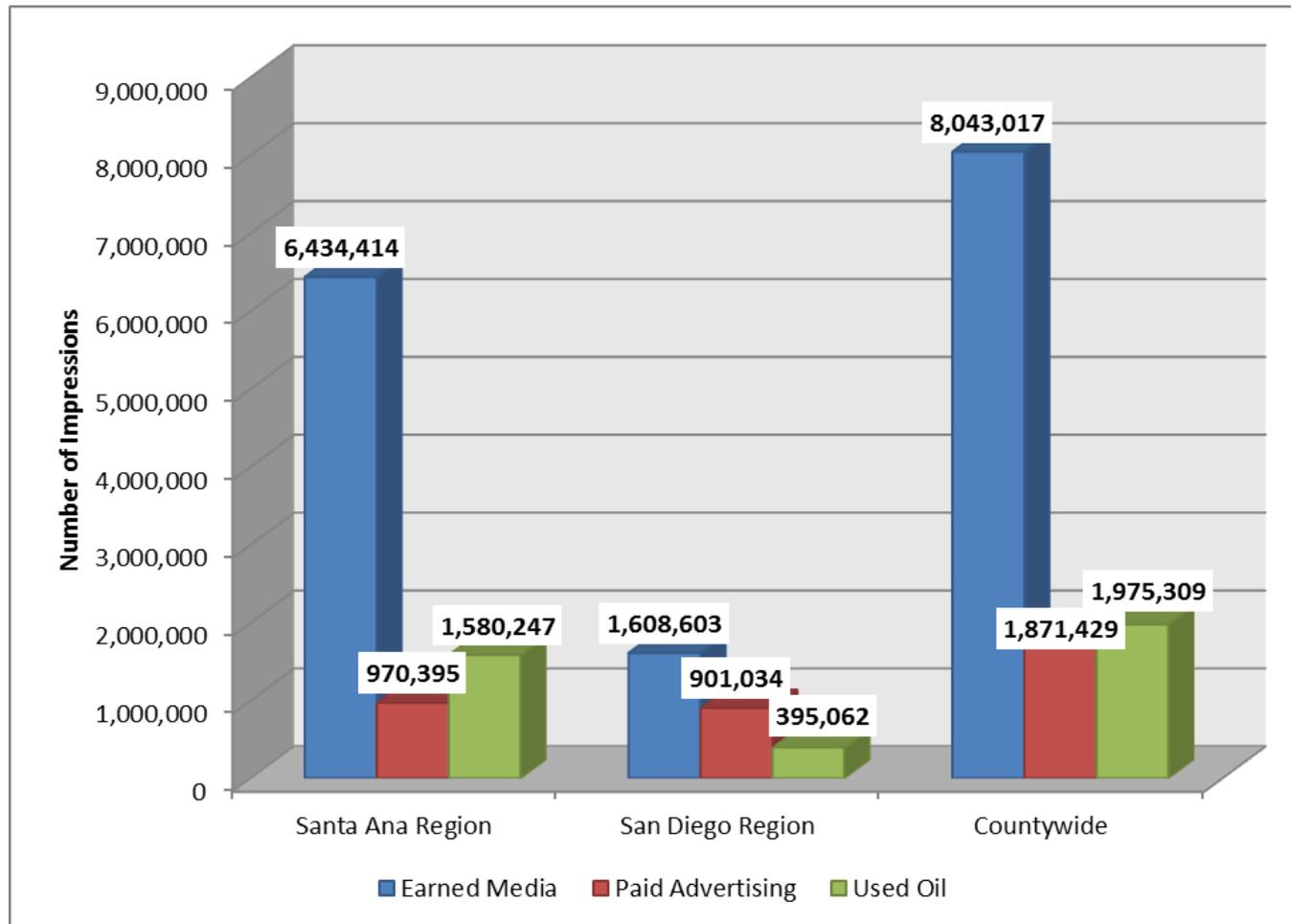


Figure C-6.2: *Overwatering Action Campaign* Gnorman the Gnome Event Photo Prop Standee



Figure C-6.3: Overwatering Action Campaign “Gnorman Approved” Yard Sign and “Water Champion” Sticker Program



**Get your free yard sign or sticker now!**

I have... \*  
Let my lawn go brown (dormant) ▾

I have... \*  
Removed turf grass and replaced ▾

First Name \*

Last Name \*

Email \*

Full Address \*

Pin my action on the map  
(optional, last name will not be displayed)

**Submit!**

Figure C-6.4: OC Garden Friendly Planning and Plant Guide

(a) Outside panels

(b) Inside panels

Figure C-6.5: *Overwatering Action Campaign* Email Opt-ins by Zip Code as of June 30, 2017

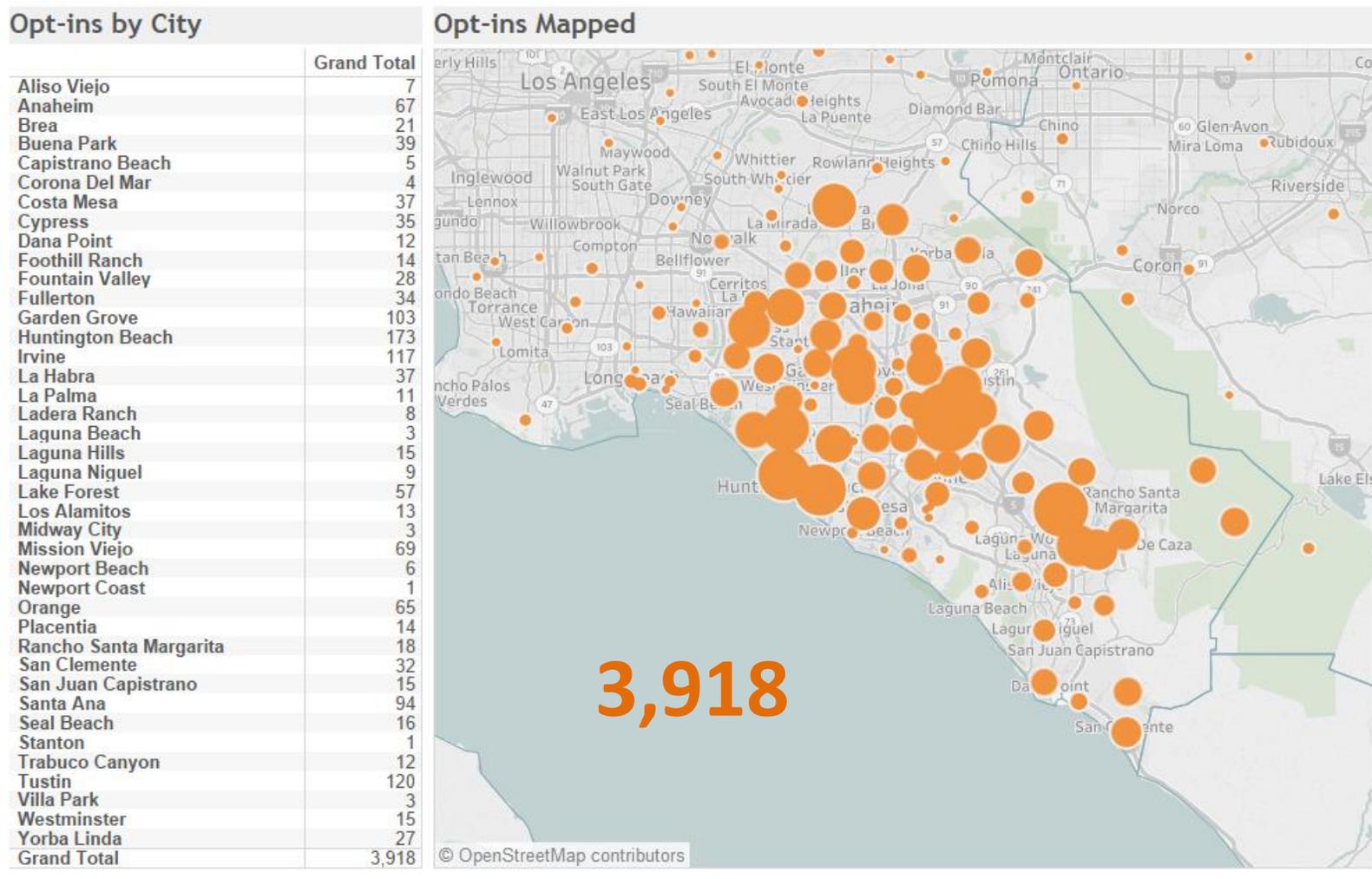
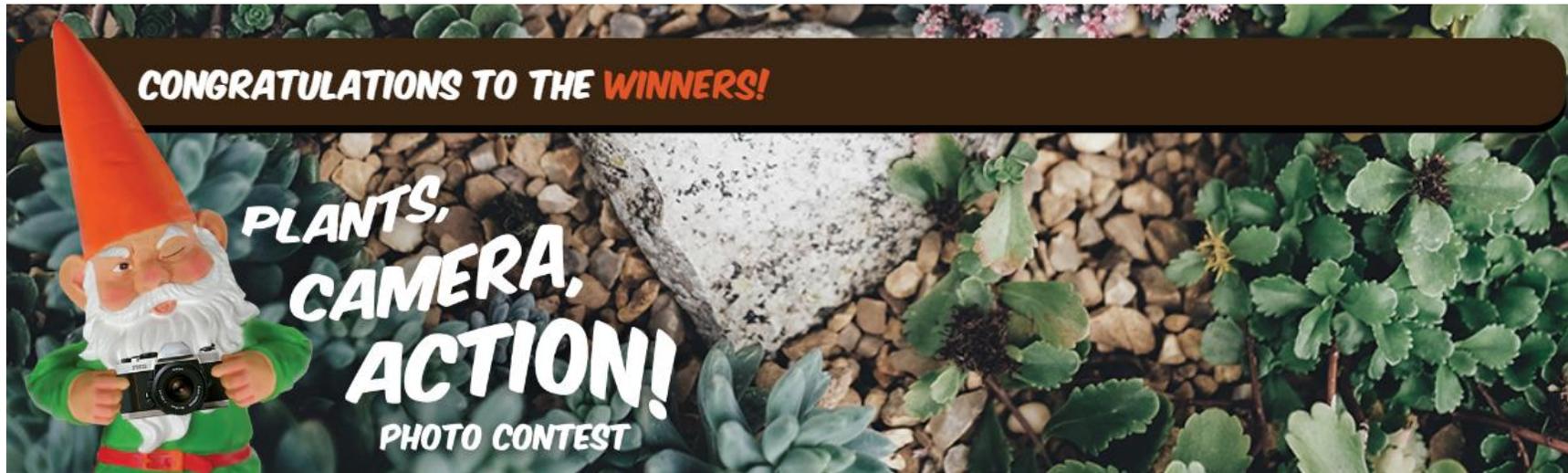


Figure C-6.6: *Overwatering Action Campaign Website Landing Page Action Map*



Figure C-6.7: *Plants, Camera, Action!* 2017 Photo Contest



*Most Beautiful Photo of a California Friendly Landscape*  
Nina, San Juan Capistrano



*Most Beautiful Photo of a California Friendly Plant*  
Tommy, Laguna Hills



*People's Favorite*  
Donna, Huntington Beach