



LANDSCAPE
TOOL SERIES

SURVEY & BEST PRACTICES GUIDE

Community-Based Social Marketing: Vol. 2 SEPTEMBER 2018



CALIFORNIA
**WATER EFFICIENCY
PARTNERSHIP**

A Chapter of the Alliance for Water Efficiency



Alliance
for Water
Efficiency

PARTNERS FOR A WATER-EFFICIENT CALIFORNIA

SURVEY & BEST PRACTICES GUIDE

Community-Based Social Marketing: Vol. 2 SEPTEMBER 2018

Prepared by California Water Efficiency Partnership and
the Cadmus Team (Cadmus, C+C, and Action Research)



ACKNOWLEDGEMENTS

Prepared and written by

Wesley Schultz, Ph.D, Professor of Psychology
California State University, San Marcos

Jennifer Tabanico, President
Action Research

Kaitlin Phelps, Senior Project Manager
Action Research

Lisa Cuellar, Program Manager
California Water Efficiency Partnership

This project was made possible by funding from the California Department of Water Resources, with support from the East Bay Municipal Utility District.

The California Water Efficiency Partnership would like to acknowledge the contributions of the following individuals:

C+C / Public Relations & Social Marketing

- Julie Colehour, *Partner*
- Jan Kleszynski, *Director & President of Project Management*

The Cadmus Group, Inc.

- Crystal Myers, *Senior Associate*

East Bay Municipal Utility District

- Richard Harris, *Manager of Water Conservation*
- Jessica Woodard, *Water Conservation Representative*

Long Beach Water Department

- Krista Reger, *Water Conservation Specialist*

Rancho California Water District

- Justin Haessly, *Senior Water Resources Planner*

Western Municipal Water District

- Rob Whipple, *Water Use Efficiency Specialist*

California Water Efficiency Partnership

- Sarah Foley, *Deputy Director*
- Michael Walker, *Administrator*



Cover Photo Source: Peter Veilleux, East Bay Wilds | Design: Sonja Turner-Montano, Design & Effect

CONTENTS

BEST PRACTICES GUIDE	4
Survey Materials	4
Community-Based Social Framework	4
Survey Goals and Objectives	5
Mode of Administration	5
Interpreting Results.	6
Survey Methodology Recommendations	10
SURVEY	12
Landscape and Outdoor Water Survey	12
Section 1: About Your Property	12
Section 2: Water-wise Landscaping	13
Section 3: Community	14
Section 4: Household Characteristics	15
Section 5: Yard Characteristics	15

BEST PRACTICES GUIDE

The survey is part of a package of materials designed to assist water conservation professionals develop a CBSM campaign developed for the California Water Efficiency Partnership (CalWEP). The survey was designed to solicit responses from residential water customers and generate insights into potential barriers and attitudes towards water-wise landscapes. Analysis of survey response data is intended to help inform CBSM campaigns or other outreach efforts to promote outdoor water conservation and efficiency.

SURVEY MATERIALS

The survey is part of a package of materials designed to assist various water conservation practitioners in developing a CBSM campaign to encourage residents to reduce their outdoor water consumption. This publication is the second of a three-volume CBSM resource package, which has been organized as follows:

CBSM Volume 1: Case Study Report & Pilot Framework

CBSM Volume 2: Landscape and Outdoor Water Survey & Best Practices Guide

CBSM Volume 3: Survey Implementation & Findings

The case study report summarizes several approaches that utilize CBSM tools in conjunction with water conservation education, incentive, and service programs to encourage water-conserving behavior by residential end-users. The CBSM pilot framework was designed to address a single target behavior proven to result in significant outdoor water savings: removal of front lawns and replacement with climate-appropriate landscaping. Although the Landscaping and Outdoor Water Survey can be used to refine the CBSM pilot framework included in Volume 1, its application can also be more broadly applied as explained in this guide.

The CBSM package of resources is available on the CalWEP website and in print. All materials were produced by CalWEP in collaboration with EBMUD and a team of marketing and research experts.¹ The team used CBSM as a guiding framework for all phases of the project (www.cbsm.com).

COMMUNITY-BASED SOCIAL MARKETING FRAMEWORK

CBSM combines principles of behavioral science with applied research methods to provide a practical framework for campaigns to promote behavior change across diverse settings. CBSM has been utilized with success in the energy sector to help curb household energy usage, and serves as a promising model for integrating with water conservation programs that promote adoption of water use efficiency behaviors. Ultimately, CBSM campaigns remove barriers to a desired behavior change, while simultaneously promoting associated benefits of the behavior. The approach follows a five-step sequence that includes small-scale piloting of CBSM interventions prior to rolling out a broad-scale program. These five steps include:

1. Selecting the target behavior(s);
2. Identifying barriers and benefits to behavior change;
3. Developing strategies that focus on removing the identified barriers, while simultaneously enhancing the benefits;
4. Piloting an outreach program using proven strategies to change behavior; and
5. Broadly implementing and evaluating the most effective strategies from the pilot test.

¹ The Cadmus Group, Inc.'s (Cadmus) services were procured to develop this survey in conjunction with CalWEP staff. The Cadmus team included a group of experts from a marketing agency (C+C), a research firm (Action Research), and academia (California State University San Marcos). In addition, representative CalWEP members provided peer review of the survey content.

SURVEY GOALS AND OBJECTIVES

Through the CBSM case study literature review, the team identified sustainable landscaping as impactful for saving water. Subsequently, replacing front lawns was selected as the behavior to target in the CBSM pilot framework design - CBSM Step 1.² The primary objective of the Landscape and Outdoor Water Survey included herein, is to assess customers' perceived barriers and benefits as well as attitudes towards replacing front lawns with climate appropriate vegetation (referred to as "water-wise landscapes" in the survey questions) - CBSM Step 2. For those who are interested in the CBSM pilot design framework targeting high-water users, feedback from this survey can be used to refine the pilot program approach including selection of effective CBSM tools. The survey can also be used for more general applications such as generating marketing content focused on outdoor water efficiency and sustainable landscaping.

This survey was developed to be relevant to regions across the state of California. While there may be some commonalities in barriers to turf replacement statewide, many are context specific and unique to different regions and target audiences. For example, one of the partner agencies involved in the development of this survey was interested in reaching high-income residents and developing a program that would encourage these residents to replace their lawns without the use of financial incentives. This audience may have unique contextual barriers, such as a larger lawn or a higher likelihood of using a lawn service, that are different from other target audiences. The survey questions were designed to account for these differences. Ultimately, CBSM encourages programs to be designed based on meaningful data collected from the target audience, rather than by making assumptions about what barriers an audience may face or what benefits they may perceive.

To summarize, the survey was developed to achieve the following objectives:

1. [Broader application] Utilize survey feedback to identify: 1) barriers to mitigate, and 2) benefits to promote, amongst a select group of residential water customers to increase participation in demand-management programs focused on sustainable landscapes.
2. [CBSM pilot application] Utilize survey feedback to refine CBSM pilot strategies and messaging for optimal program effectiveness.

MODE OF ADMINISTRATION

The Landscape and Outdoor Water Survey is available online through SurveyMonkey® for web-based administration. The survey questions are also provided at the end of this guidance document (see page 12). The Online version can be transferred by CalWEP to other SurveyMonkey® account holders. The team selected SurveyMonkey® as the online platform because of its relative low cost and ease of administration.

There are several options for administering the survey to customers using SurveyMonkey (or similar survey platforms). First generate a link to the survey. The link can then be e-mailed, embedded within a website, displayed on printed communication (i.e. on-bill message, newsletter, postcard), or advertised via smartphone push notification (i.e. text message, app-based communication). Some practitioners may choose to interview customers and record their responses in real-time on a mobile device, such as a smart phone or tablet with access to Wi-Fi. While the survey can accommodate a wide range of formats, we encourage practitioners to be mindful of response rates (see page 10).

A hard-copy of the survey questions has been included with this Best Practices Guide for programming into the survey platform of one's own choosing. In these instances, it is recommended that the administering party avoid changing the wording on existing items, and instead add

² The selection process used to identify front lawn removal as the target behavior is summarized in the CBSM pilot framework within CBSM Volume 1.


any new items or questions to the end of the survey. Note that the survey structure is an intentional design used to generate meaningful feedback that can be used in the development of CBSM pilot programs and campaigns; any modification to the wording or order of questions has the potential to reduce the overall value of responses in this regard. As a final note, for those seeking assistance to customize the survey and/or expand data analytics capabilities, procurement of professional, consulting services is recommended.

INTERPRETING RESULTS

The survey is structured using a “funnel sequence”, beginning broadly, moving to the core focus on barriers and benefits, and then broadening back out with general questions and property characteristics. A total of 32 questions have been organized into 5 sections:

- Section 1: About Your Property
- Section 2: Water-Wise Landscaping
- Section 3: Community
- Section 4: Household Characteristics
- Section 5: (Optional) Yard Characteristics

The response options selected for many of the questions make use of an 11-point scale, ranging from 0 (not at all)



**CALIFORNIA
WATER EFFICIENCY
PARTNERSHIP**
A Chapter of the Alliance for Water Efficiency

Landscape and Outdoor Water Survey

Section 2: Water-wise Landscaping

Water-wise landscapes include plants and groundcover that use less water than traditional grass lawns.

11. To what extent do each of the following represent a barrier for you in replacing your front grass lawn with a water-wise landscape?

	Not a barrier											A significant barrier
	0	1	2	3	4	5	6	7	8	9	10	
My yard would look ugly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
The cost of replacing my lawn.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
It could decrease the value of my home.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
It is difficult to find a good contractor to do the work.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
It takes too much time to remove and replace lawn myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
I don't know what types of plants to use instead.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
I have other home improvement projects that are more important.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	


Figure 1. Barriers Question Survey Page

to 10 (a great deal). This type of response option allows for a wide range of variability and provides data more conducive to behavioral science (rather than public opinion polling which typically use yes/no, or agree/disagree options). More variable data allows for barriers and benefits to be prioritized by comparing them to each other, allowing the program to focus on the most meaningful and important pieces. Interpreting the responses to the 11-point scale should be based on the mean (average) score, and not the counts of each numeric response.

BARRIERS. Survey question 11 contains eleven barriers commonly associated with replacing front lawns with water-wise landscaping. Comparing the average response

to each of these barriers will provide an indication of the top-rated items. In addition, the average score across the eleven items will provide an indication of the overall level of barriers associated with lawn replacement among the respondents. High scores on barriers should provide the primary starting point for developing an outreach campaign. See Figure 1 for a screen shot of the barriers survey question 11.

BENEFITS. Survey question 9 contains eight positive benefits commonly associated with water-wise landscaping. Calculating and comparing the average response to each of these benefits can help to identify the top reasons that people give for replacing front lawns, and the average score



**CALIFORNIA
WATER EFFICIENCY
PARTNERSHIP**
A Chapter of the Alliance for Water Efficiency

Landscape and Outdoor Water Survey

Section 2: Water-wise Landscaping

Water-wise landscapes include plants and groundcover that use less water than traditional grass lawns.

9. Below is a list of benefits that are often associated with replacing grass lawns with water-wise landscapes. Please rate the degree to which each of the following benefits is important to you.

	Not at all important	0	1	2	3	4	5	6	7	8	9	Extremely important	10
I'd save money on my water bill.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I'd spend less time maintaining my yard.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It could increase the value of my home.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My neighbors would compliment me for my yard.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would help the environment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would save water.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would help enhance the character of my neighborhood.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would help create habitat and food for birds & pollinators	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Figure 2. Benefits Question Survey Page

across the eight items can provide an indication of the overall motivation within the target audience. Comparing the overall benefits score to the barriers score can help to prioritize the outreach efforts and indicate whether the campaign should focus on highlighting the benefits (in instances where benefits are perceived to be low) or reducing barriers (when barriers are high). See Figure 2 for a screen shot of the benefits survey question 9.

While the barriers should serve as the primary focal point for outreach campaigns, additional insight can be obtained from the combination of barriers/benefits scores. The grid below can be used as a guide to help match the appropriate behavior change tool to the target audience. For ease of interpretation, average barriers/benefits scores below 5 can be considered low, and scores of 5 or above can be considered high. Reference the CalWEP CBSM case study summary report (CBSM Vol. 1) for a more in-depth discussion on how to apply the information provided in Figure 3 below.

MESSAGING: Sections 1 and 2 of the survey contain questions designed to generate feedback regarding attitudes towards water-wise landscaping and water efficiency. See Figure 4 for an example attitudes survey question. Section 3 contains questions to help identify the preferred modes by which residents seek out information regarding water-wise landscaping. See Figure 5 for an example modes of information survey question. This information is critical not only for developing impactful CBSM messaging content, but also for selecting effective modes of information dissemination (i.e. churches, box stores, online platforms, etc.) as part of a marketing strategy.

BARRIERS	HIGH	Incentives Contests	Make it Easy Commitments
	LOW	Social Modeling Social Norms	Education Feedback Prompts Cognitive Dissonance
		LOW	HIGH
		BENEFITS	

Figure 3. Identifying when various behavior change tools work best³

3 Schultz, W. (2014). "Strategies for Promoting Proenvironmental Behavior, Lots of Tools but Few Instructions." *European Psychologist*. 19(2), 107–117.

Landscape and Outdoor Water Survey

Section 2: Water-wise Landscaping

Water-wise landscapes include plants and groundcover that use less water than traditional grass lawns.

16. Please rate the extent to which each of the following statements reflect your opinion about water-wise landscapes.

	Not at all 0	1	2	3	4	5	6	7	8	9	Definitely 10
I like water-wise landscapes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I prefer water-wise landscapes over traditional grass lawns.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am interested in water-wise landscapes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am satisfied with my landscape the way it is.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Having a lawn is more important to me than having a water-wise landscape.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am willing to pay high water bills in order to have a green lawn.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My yard is currently water-wise.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Figure 4: Attitude Question Survey Page

19. If you wanted to replace your front grass lawn with water-wise landscaping, where would you go for information? (check all that apply)

- ☐ Neighbors
- ☐ Friends
- ☐ Family
- ☐ Co-Workers
- ☐ Church/Club members
- ☐ Online networks
- ☐ Gardening or landscape professionals
- ☐ Water Department at my Utility or City
- ☐ Home Improvement Store (e.g., Home Depot, Lowes)
- ☐ N/A, No grass on my front lawn
- ☐ Other (please specify)

Figure 5: Modes of Information Survey Page

SURVEY METHODOLOGY RECOMMENDATIONS

The ability to administer the survey online greatly increases the number of homes that can be reached (vs. door-to-door interviews). The survey should be administered to a sample of residents that live within an area of interest. This area can be defined by zip code, watershed, neighborhood, metered routes, an area possessing distinct demographics (i.e. home price, water usage, multi-family, etc.), or any other screening criteria of interest. The number of homes selected for the sample will depend on the expected response rate. For example, if a minimum of 500 responses are needed, and the response rate is estimated at 20%, then the survey should be administered to 2,500 homes. Typically, once the area of interest has been determined, surveys can be administered to all homes within the area or via random selection to reduce bias.

An example survey approach for those looking to utilize the survey to adapt the CBSM pilot design framework

included within Volume 1 of the CalWEP CBSM resource package might be conducted as follows:

The CBSM campaign is focused on high-consuming households in the region. As a starting point, the utility could identify the top 10 highest consuming meter routes in the region; each route contains approximately 500 homes. From these 10 routes, the utility randomly selects two for the survey, and plans to conduct door-to-door interviews with all the residents at these properties. Interviewers go door-to-door with a mobile device and follow a script and read the items within the survey. The data from each interview is automatically stored in the SurveyMonkey© database, and can be accessed by the survey team for analytics once the data collection has been completed.

RESPONSE RATE. For door-to-door interviews, response rates are commonly in the range of 10%-20%, depending on the time of day and number of attempts. That is, of all the homes selected for the survey, it's possible to obtain complete data from 10%-20% within a small number of attempts for each home. Typically, survey interview teams

are scheduled to cover a range of times, with preference for evening and weekend hours, and return to non-responding households at least 3 times. For comparison, response rates for online surveys can vary widely, from as low as <1% for posted pop-up survey links on websites, to 80% or better for targeted survey projects with personalized communications and using multiple channels of communication (see Dillman & Smyth 2014 for more on this topic).⁴

There are a variety of techniques that can be used to increase response rates. The most frequently used strategies are:

1. **Incentives.** Offering residents some form of compensation for responding can be helpful for increasing response rates. Incentives can be in the form of direct financial compensation (i.e. \$10) or an item related to the topic of the survey (i.e. a hand-held nozzle). Research suggests that even a small token—such as a packet of flower seeds—can be sufficient to improve response rates. However, it's important to point out that incentives are not required, and that in most instances high response rates can be achieved without an incentive.
2. **Pre-notification.** Sending a post-card notification to residents describing the survey project, highlighting the importance of participation, and mentioning the interviewers will be in their neighborhood on specific dates can help to improve response rates. For example, a postcard might read, *“Dear Resident. During the period of July 10 – 24, 2020, a survey team will be in your neighborhood conducting interviews with residents about outdoor water use and landscaping. The results that we receive from this survey will help to inform our efforts to better provide outreach and educational materials in [your city/service area here], and to better meet the needs of our region.”*
3. **Credibility.** Sending interview teams that are wearing a branded shirt from the partner agency, and a lanyard with identification and contact information for verification can improve response rates.
4. **Interviewer Training.** Prior to sending interviewers into the field, there should be several hours of training. The training can teach general best practices related to conducting interviews (i.e. avoid leading responses,

establish eye contact, restate responses that might not be clear, body posture and tone of voice) and also specific training related to the survey questions, skip patterns, and response options.⁵

NUMBER OF RESPONSES. For the purposes of drawing general conclusions from the responses, we recommend a minimum of 100 completed surveys. This will allow for basic comparisons of the barriers and benefits, and help to gauge perceptions about water-wise landscaping and water efficiency. For agencies that are interested in conducting segmented analyses (for example, comparing large properties to small properties), the number of responses should be 100 for each target segment. In most cases, 400 completed surveys will allow for several cross-tabulation comparisons, and there is typically little incremental gain with more than 1,000 completed surveys.

If the administering party intends to survey the original survey group following implementation of a demand management outreach program or CBSM pilot to evaluate effectiveness or changes in attitudes towards the desired behavior change (i.e. lawn replacement with water-wise landscapes), it is reasonable to assume that several of the original survey respondents will be unavailable for the post-intervention survey due to uncontrollable factors (i.e. relocation to another home) (see Case Study #4 in the CBSM Vol. 1). Therefore, it is good practice to obtain additional survey responses above the target number of responses.

4 Useful information for conducting surveys can be found in Dillman & Smyth (2014). *Internet, phone, mail, and mixed-mode surveys: The Tailored Design Method*. NJ: Wiley.

5 The California Data Collaborative in partnership with the CivicSpark Water Fellow program generated training tools, a video, and other resources for an in-person survey effort which launched in 2017. Contact the Local Government Commission (www.civicspark.lgc.org).

SURVEY

LANDSCAPE AND OUTDOOR WATER SURVEY

This is a short survey about landscaping and outdoor water use at your home. It should take approximately 10 minutes or less to complete. The survey should be completed by an adult household member who is familiar with the landscape and watering practices on their property. Your responses will be kept completely confidential and are solely intended to help us understand ways to improve service for our customers.

SECTION 1: ABOUT YOUR PROPERTY

1. Does the property where you live have a front yard?
 - ☐ Yes
 - ☐ No [End Survey]
2. Does your front yard have a grass lawn?
 - ☐ Yes
 - ☐ No [End Survey]
3. Does your front grass lawn cover approximately 50% or more of your front yard?
 - ☐ Yes
 - ☐ No
4. Who has primary responsibility for maintaining your front yard?
 - ☐ Myself
 - ☐ Spouse or partner
 - ☐ Other household resident
 - ☐ Friend/Family member not living in the household
 - ☐ Lawn service or gardener
 - ☐ Landlord
 - ☐ Other: (Please specify)
5. Which of the following do you use to water the grass lawn in your front yard? (Check all that apply.)
 - ☐ By hand with a hose
 - ☐ A manual sprinkler attached to a hose and moved around the yard
 - ☐ Manual in-ground sprinkler system
 - ☐ Automatic sprinkler system (programmed to turn on/off)
 - ☐ Automatic sprinkler system (not programmed, but turned on/off manually)
 - ☐ Automatic sprinkler system (with a weather-based control that automatically turns off when it rains)
 - ☐ Drip irrigation system
 - ☐ Other: (Please specify)
6. On average, what percentage of your household water use do you think is indoor vs outdoor?
 - ☐ 90% Indoor, 10% Outdoor
 - ☐ 70% Indoor, 30% Outdoor
 - ☐ 50% Indoor, 50% Outdoor
 - ☐ 30% Indoor, 70% Outdoor
 - ☐ 10% Indoor, 90% Outdoor

7. How often is your front grass lawn typically watered?
- ☐ Daily
 - ☐ Three to six times a week
 - ☐ Twice a week
 - ☐ Once a week
 - ☐ Every other week
 - ☐ Once a month
 - ☐ Every few months
 - ☐ Never
 - ☐ Unsure
8. How important is it to you to have a front lawn?
- ☐ Very important
 - ☐ Important
 - ☐ Somewhat Important
 - ☐ Slightly Important
 - ☐ Not at all Important
10. [SLIDING SCALE] In the next six months, how likely is it that you will replace your front grass lawn with a water-wise landscape? From 0 (not at all) to 10 (extremely likely.)
11. [RANDOMIZED ORDER]: Using a scale from 0 (not a barrier) to 10 (a significant barrier), to what extent do each of the following represent a barrier for you in replacing your front grass lawn with water-wise landscape?
- ☐ My yard would look ugly
 - ☐ The cost of replacing my lawn
 - ☐ It could decrease the value of my home
 - ☐ It is difficult to find a good contractor to do the work
 - ☐ It takes too much time to remove and replace lawn myself
 - ☐ I don't know what types of plants to use instead
 - ☐ I have other home improvement projects that are more important
 - ☐ I don't have the skills or knowledge to maintain a water-wise landscape
 - ☐ I don't know where to start
 - ☐ I need a place for my kids and/or pets to play
 - ☐ I don't want to lose the function or use of my lawn

SECTION 2: WATER-WISE LANDSCAPING

Water-wise landscapes include plants and ground cover that use less water than traditional grass lawns.

9. [RANDOMIZED ORDER]: Below is a list of benefits that are often associated with replacing grass lawns with water-wise landscapes. Please rate the degree to which each of the following benefits is important to you using a scale from 0 (not at all important) to 10 (extremely important.)
- ☐ I'd save money on my water bill
 - ☐ I'd spend less time maintaining my yard
 - ☐ It could increase the value of my home
 - ☐ My neighbors would compliment me for my yard
 - ☐ I would help the environment
 - ☐ I would save water
 - ☐ I would help enhance the character of my neighborhood
 - ☐ I would help create habitat and food for birds and pollinators
12. How much of a financial incentive would motivate you to replace your lawn?
- ☐ I would replace my lawn with an incentive
 - ☐ 25% of project costs
 - ☐ 50% of project costs
 - ☐ 75% of project costs
 - ☐ 100% of project costs
 - ☐ I would NOT replace my lawn even with an incentive

The next few questions are about your views on water use and different types of landscaping.

13. [SLIDING SCALE] To what extent do you think water conservation is important? From 0 (not at all important) to 10 (extremely important.)
14. [SLIDING SCALE] To what extent do you think there is more your household can do to reduce OUTDOOR water use? From 0 (nothing more I can do) to 10 (a lot more I can do)
15. [RANDOMIZED ORDER] When you think of water-wise landscaping, which of the following come to mind? (Check all that apply.)
- ☐ Gravel / Rocks
 - ☐ Cactus
 - ☐ Flowers
 - ☐ Native plants
 - ☐ Vegetable gardens
 - ☐ Grass lawns
 - ☐ Trees
 - ☐ Rain barrels
 - ☐ Mulch
 - ☐ Other: (please specify)
16. [RANDOMIZED ORDER]: Please rate the extent to which each of the following statements reflect your opinion about water-wise landscapes using a scale from 0 (not at all) to 10 (definitely.)
- ☐ I like water-wise landscape
 - ☐ I prefer water-wise landscapes over traditional grass lawns
 - ☐ I am interested in water-wise landscapes
 - ☐ I am satisfied with my landscape the way it is
 - ☐ Having a lawn is more important to me than having a water-wise landscape
 - ☐ I am willing to pay higher water bills in order to have a green lawn
 - ☐ My yard is currently water-wise

SECTION 3: COMMUNITY

17. Approximately how many of the homes in your neighborhood (several blocks surrounding your house) have water-wise landscaping in their front yard?
- ☐ 0
 - ☐ 1
 - ☐ 2
 - ☐ 3
 - ☐ 4
 - ☐ 5
 - ☐ 6
 - ☐ 7
 - ☐ 8
 - ☐ 9
 - ☐ 10 or more
 - ☐ I haven't noticed if any of the houses in my neighborhood have water-wise landscapes
18. [SLIDING SCALE] To what extent does your Home Owner's Association encourage water-wise landscaping? (Please skip if you do not have an HOA) From 0 (not at all) to 10 (a great deal.)
19. If you wanted to replace your front grass lawn with water-wise landscaping, where would you go for information? (Check all that apply.)
- ☐ Neighbors
 - ☐ Friends
 - ☐ Family
 - ☐ Co-Workers
 - ☐ Church/Club Members
 - ☐ Online Networks
 - ☐ Gardening or Landscape Professional
 - ☐ Water Department at my Utility or City
 - ☐ Home Improvement Store (e.g., Home Depot, Lowes)
 - ☐ N/A, No grass in my front yard
 - ☐ Other: (Please specify)

20. In the past year, has your household participated in any incentive or service programs related to water-wise landscaping? (Check all that apply.)

- ☐ Turf removal rebate
- ☐ Irrigation upgrades
- ☐ Rain barrels
- ☐ Landscape design
- ☐ Water-wise landscape class
- ☐ On-site irrigation assessment
- ☐ Other: (Please specify)

28. What is your gender?

- ☐ Female
- ☐ Male
- ☐ Prefer not to answer
- ☐ Prefer to self-describe:

29. Is your annual household income more or less than \$50,000?

- ☐ More
- ☐ Less

30. If you are interested in receiving information about rebates and other programs to support water-wise landscapes, please provide your preferred contact information below.

Postal mail address:

Email:

Phone:

Text:

SECTION 4: HOUSEHOLD CHARACTERISTICS

21. Approximately how many years have you lived in California?

22. For how many years have you lived at your current address?

23. Including yourself, how many people live in your household?

23a. How many are children under 18?

24. Do you rent or own the home where you live?

- ☐ Rent
- ☐ Own

25. Please enter your postal address:

26. Who pays the water bill for your household?

- ☐ Yourself
- ☐ Spouse, partner
- ☐ Landlord
- ☐ Homeowners Association
- ☐ Other: (Please specify)

27. In what year were you born? [year]

SECTION 5: YARD CHARACTERISTICS

The following section asks for details about your property and landscaping to help us understand which services will be of use to our customers.

31. Please estimate the following categories to the best of your abilities.

Estimated lot size in square feet

Estimated square feet of grass in the front yard (A grass patch that is 10-feet by 10-feet would be 100 sf)

Estimated square feet of grass in the back yard (A quarter acre of grass would be 10,000 sf)

32. Please estimate your front yard plant coverage by category. The total percentages should add to 100%.

Water Intensive (grass lawn)

Moderate water use
(Non CA native flowers, annuals, shrubs,
groundcover, and trees)

Low water use
(CA native flowers, perennials, shrubs,
groundcover, trees, succulents or similar)

Hardscape and very low water use
(Rocks or gravel, pavers, dirt, unmaintained weeds,
brown/dead grass - excludes driveways)



LANDSCAPE TOOL SERIES



CALIFORNIA WATER EFFICIENCY PARTNERSHIP

A Chapter of the Alliance for Water Efficiency

716 10th Street, Ste 200
Sacramento, CA 95814

P 916-552-5885

F 916-552-5877

WWW.CALWEP.ORG

*Printed on recycled paper, manufactured with 100% post-consumer fibers.
FSC and Rainforest Alliance Certified, Processed Chlorine Free Certified.*

