

# **2017 Monterey Peninsula Water Conservation Program Annual Report**



**PREPARED BY  
CALIFORNIA AMERICAN WATER, COASTAL DIVISION**



## EXECUTIVE SUMMARY

This report documents conservation efforts undertaken by California American Water's Coastal Division during 2017 pursuant to the Partial Settlement Agreement between the Office of Ratepayer Advocates, the Utility Reform Network, and California American Water Company on Revenue Requirement as to the Conservation Budget for the Monterey District under the California Public Utilities Commission (CPUC) D.12-06-016.

California American Water, has prepared this report to provide a record of the Coastal Division's water conservation programs and activities implemented in 2017, as well as projected efforts for 2018. Reports for previous years are available by contacting California American Water's Monterey District.

California American Water's Monterey district continued to offer one of the most comprehensive water conservation programs in the state with several new program items and educational components added during 2017. The Monterey conservation rebate program remained unchanged providing some of the most generous incentives for indoor and outdoor water efficiency upgrades for both residential and non-residential customers. Monterey's innovative and extensive conservation program offerings are a significant and effective element in managing the water supply limitations present in the area. California American Water's professionally trained conservation staff provided 820 residential water wise house calls in 2017 helping Monterey customers detect indoor and outdoor leaks, address inefficient water use, assist with landscape appropriate irrigation scheduling and assured Best Management Practice compliance for non-residential customers. All these efforts have significantly contributed and continue to contribute to Monterey's unique conservation culture having one of the lowest per capita residential water usage in the State.

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### **Summary of Reporting Requirements**

The following are the mandatory Coastal Division reporting requirements. Additional information has been provided in this report to document other conservation efforts undertaken by California American Water during 2017. The report breaks out conservation activities that California American Water undertakes that are funded through the California American Water conservation surcharge. The report includes:

- A brief explanation of the need for each activity, the nature of the activity, measurable goals, and the results and achievements for each program (including information such as number of units distributed or installed, estimated water—and energy if quantifiable – savings in water and dollars, etc.).
- A summary of the conservation plan for the following year with timelines and implementation plans by California American Water with budgeted amounts for each type of activity.
- Electronic spreadsheets that include usage history for each customer receiving an audit, a rebate, a rain sensor and a commercial audit for years 2016 & 2017.
- Estimated water savings for each device offered through California American Water conservation programs funded through the California American Water's conservation surcharge. *This information is confidential and is therefore provided under separate cover.*
- An evaluation of the effectiveness of the Outreach Program.
- An annual analysis of the weather-adjusted consumption in the Coastal Division.

## **Abbreviations Used Throughout the Report**

The following abbreviations are found throughout this report:

CAW – California American Water

MPWMD – Monterey Peninsula Water Management District

AFA – Acre-feet annually

BMP – Best Management Practice

CHECW – Commercial High Efficiency Clothes Washer

CIMIS – California Irrigation Management Information System

CLIA – Certified Landscape Irrigation Auditor

CPUC – California Public Utilities Commission

CUWCC – California Urban Water Conservation Council

ORA – Office of Ratepayer Advocates

$E_t$  – Evapotranspiration

GPF – Gallons per Flush

GPM – Gallons per Minute

GRC – General Rate Case

HECW – High Efficiency Clothes Washer

HET – High Efficiency Toilet (1.28 GPF)

IAHWS – Instant-Access Hot Water System

MCBC – Monterey County Business Council

RSOD – Rain Sensor Shut Off Device

SMS – Soil Moisture Sensor

UHET – Ultra High Efficiency Toilet (0.8 GPF)

ULFT – Ultra Low Flush Toilet (1.6 GPF)

WBIC – Weather based (or “Smart”) irrigation system controller

## California American Water, Coastal Division– 2017 Programs Funded by the Conservation Surcharge

### Summary of California American Water Programs

The programs funded by the conservation surcharge during 2017 are summarized and described in the following table.

TABLE 1. CALIFORNIA AMERICAN WATER 2017 PROGRAMS

| Program                              | Cost                          | Need For Program  | Nature of Activity  | Measurable Goal   | Result of Achievements                                      | Estimated Savings (AF)              |
|--------------------------------------|-------------------------------|---|---|---|---|-------------------------------------|
| <b>Water Wise House Calls</b>        | None (funded by Labor budget) | Residential conservation including high use evaluations         | Customers given assessment of indoor & outdoor water usage, recommended irrigation schedule, water saving devices including hourly usage data collection utilizing AMI meter reading system | Audits upon request and immediate investigation of high use         | 476 audits completed  | <b>2017 Estimated Savings 17 AF</b> |
| <b>Residential Plumbing Retrofit</b> | \$45,428                      | Provide conservation devices to customers to reduce consumption | Distribution of water saving devices at events, and walk ins.   | Reduce waste water from high flow water fixtures                    | See Conservation Devices Section                            | <b>39.91 AF</b>                     |
| <b>Rebates</b>                       | \$498,823                     | Provide rebates to customers to encourage water reductions      | Provide incentives to customers for upgrading to high efficiency/water saving fixtures and appliances   |   | 1,928 SF rebates;<br>101 MF rebates;<br>47 CII rebates.     | <b>30.15 AF</b>                     |
| <b>Public Outreach and Education</b> | \$114,486                     | Promote Water Conservation , SWRCB Cease and Desist Order       | Promote quantifiable BMP programs, educate customers and communicate water issues and efforts needed for Monterey Peninsula   | Support BMP programs, attend events, and reduce spring water usage. | Multimedia conservation campaign with community involvement | <b>Not quantifiable</b>             |
| <b>Low Income Retrofit Program</b>   | <b>\$34,140</b>               | Promote Water Conservation , SWRCB Cease and Desist Order       | Partner with Pacific Gas and Electric to retrofit residential homes   | Reduce inefficient high flow water fixtures                         | <b>189 homes served</b>                                     | <b>Not quantifiable</b>             |

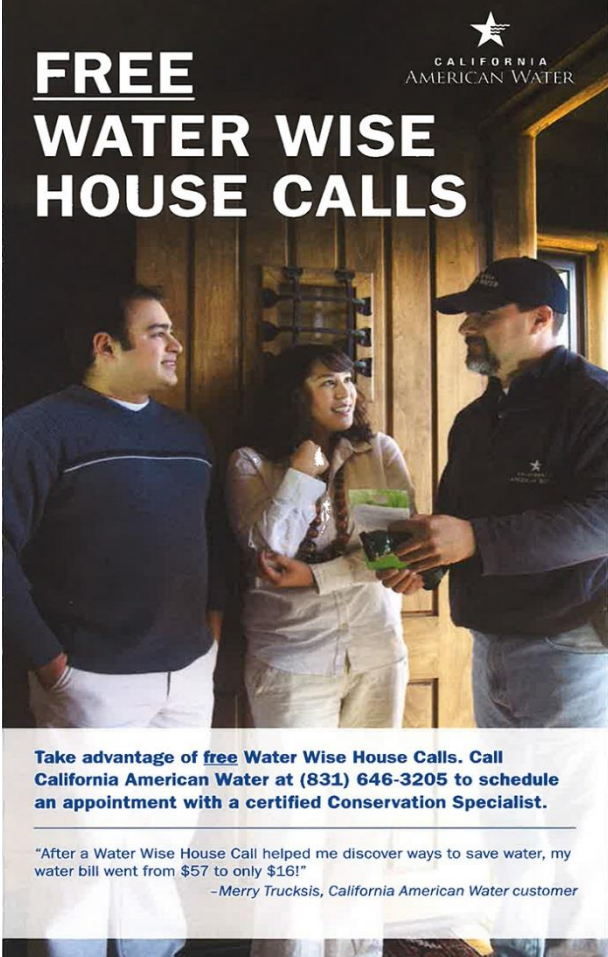


## RESIDENTIAL AUDITS (WATER WISE HOUSE CALLS)

California American Water has been providing free Water Wise House Calls to its customers since 2008, and utilizes in-house trained audit staff. The program is available to residents of single and multi-family properties and to owners and managers of apartments and condominiums, offering free residential audits to identify ways by which the customer can save water indoors and outdoors and possibly detect leaks.

California American Water's conservation staff completed 476 Water Wise House Calls in 2017. In addition, conservation staff completed 195 high bill investigations and irrigation sprinkler checks at the beginning of the spring season. Customer irrigation systems were evaluated to ensure there were no leaks and to identify root causes of possible high water use. Outdoor tips and recommendations were also provided to customers.

California American Water promoted the Water Wise House Call program through bill inserts, rebate brochures, offering the service to customers who visited the office to make payments and by targeting customers who had received high water bills and had been billed in the higher tiers of California American Water's five-tiered rate design.



**FREE  
WATER WISE  
HOUSE CALLS**

**Take advantage of free Water Wise House Calls. Call California American Water at (831) 646-3205 to schedule an appointment with a certified Conservation Specialist.**

"After a Water Wise House Call helped me discover ways to save water, my water bill went from \$57 to only \$16!"  
-Merry Trucksis, California American Water customer

During the Water Wise House Calls (audits) & high bill investigations, California American Water identified common inefficiencies and water waste in many of the Monterey residences. The most common occurrences were:

- Toilet and faucet leaks
- Irrigation controllers set to run too long resulting in water waste
- Misaligned and broken sprinkler heads
- Customer service line leaks

California American Water's conservation staff assisted customers by showing them how to read their water meters and properly convert cubic feet units to gallons so that customers can better monitor their daily usage and also compare the meter readings to the billing units identified on their water bills. In addition, conservation staff also assisted customers by properly adjusting their irrigation controllers to meet the plant water needs and to irrigate in compliance with MPWMD's two day a week watering schedule. Conservation staff also provided free water conserving devices to customers. The audit reports also include recommendations on utilizing the rebate program for the replacement of high water-use fixtures and appliances at customers' homes.



**California American Water offers free Water Wise House Calls.** A certified Conservation Specialist will visit your home, check for leaks, and identify ways you can save water both indoors and out. Our experts will teach you how to read your meter and help you develop an irrigation schedule based on your landscaping. We would like to help you save water and money by offering you a free Water Wise House Call. In addition to helping lower your water bill, you will also be helping to preserve our most precious resource: water.

**A WATER WISE HOUSE CALL PROVIDES:**

- ◆ **Leak Detection:** We will help you identify leaks inside and out. Leaks are not only big water wasters, they can also be very costly.
- ◆ **Read Your Water Meter:** We will show you how to read your water meter to find possible leaks. By monitoring your meter regularly, you can catch and fix leaks more efficiently.
- ◆ **Free Plumbing Retrofit Materials:** We will check your showerhead and faucet flow rates as well as toilet flush volumes. Free low-flow showerheads and faucet aerators for the bathroom(s) and kitchen will be provided where needed.
- ◆ **Schedules and Tips:** We will help you create appropriate landscape irrigation schedules and show you water saving tips. Resources on planting native and drought tolerant plants will also be provided.

**WHO'S ELIGIBLE?**

**All residents in the California American Water Monterey District are eligible for a free Water Wise House Call. Residents of single-family homes, condominiums, town houses, apartments, and mobile homes are all welcome to participate.**

**MAKE WISE WATER USE PART OF YOUR DAILY ROUTINE**

**Inside**

- ◆ Run dishwashers and clothes washers only when they are full. If you have a water-saver cycle, use it.
- ◆ Check for leaks in your toilet. Place a few drops of food coloring in the tank. If, after 10 minutes, color appears in the bowl, you have a leak.
- ◆ Turn off the tap while brushing your teeth or washing dishes in the sink.

**Outside**

- ◆ Make the most of your water by watering in the early morning. As much as 30 percent of water can be lost to evaporation by watering during midday.
- ◆ Use drip irrigation to water plants.
- ◆ Plant appropriately for your local climate. Check with local nurseries for non-invasive, drought-tolerant plants.



The effectiveness of the Water Wise House Call program was measured through the evaluation of water savings, as well as by inclusion of an evaluation survey form along with a pre-stamped envelope in the customer report package. 135 surveys were returned. The customer evaluation surveys received from the Water Wise House Call service showed high customer appreciation.

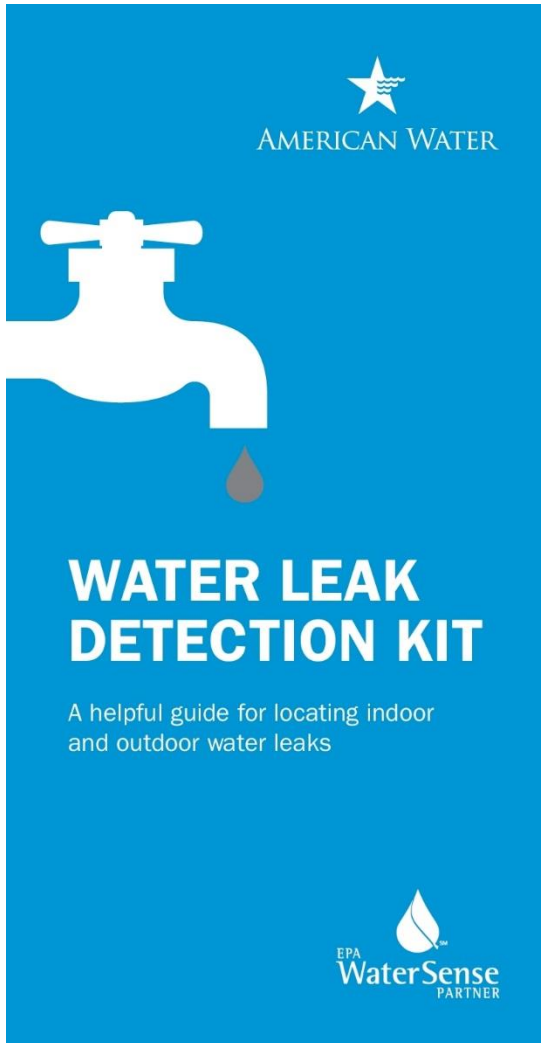
Comments included on the evaluation form acknowledged that the staff was courteous, helpful and knowledgeable:

- “Mr. Ray was amazing, professional, kind, and caring person. Our very special appreciation to Mr. Ray to take his time and educate us regarding proper usage of water.
- “Kelly was very courteous and efficient.”
- “Harriet was more than helpful explaining the new rates and helping me find places to conserve water.”
- “Melissa was very professional, and she takes pride in her work, she was very informative and was a pleasure for her visit.”

- “Ray was patient with me and with the process. He was and is highly rated”
- “Kelly: So knowledgeable, yet very personal. She was able to answer all our questions.”
- “Harriet was professional extremely knowledgeable, helpful and friendly. A pleasure to have her evaluate our home.
- “Melissa is wonderful in explaining how things work with the drip system and everything else regarding water conservation.

## Water Leak Detection Kits

California American Water provided customers in 2017 with a guide on how to detect the most common and not so common leaks indoors and outdoors. Not so common leaks typically are found with water heaters, boilers, dishwashers, water softeners, dishwashers and more. The guide was mailed to customers and also provided at conservation events and water wise house calls. Included in the packet were leak detection tablets for detecting toilet leaks.



The graphic features a large white faucet icon on a blue background. Above the faucet is the American Water logo, which includes a stylized star and the text "AMERICAN WATER". Below the faucet, a single water droplet is shown falling. The text "WATER LEAK DETECTION KIT" is prominently displayed in large, bold, white capital letters. Below this, a subtitle reads: "A helpful guide for locating indoor and outdoor water leaks". At the bottom right, the EPA WaterSense Partner logo is visible.

AMERICAN WATER

# WATER LEAK DETECTION KIT

A helpful guide for locating indoor and outdoor water leaks

EPA WaterSense PARTNER

At American Water, we are committed to environmental stewardship and the responsible management of our precious natural resources. By using this leak detection kit to identify and repair water leaks, you can help make a difference in your monthly bill while conserving water.

### COMMON INDOOR LEAKS

#### THE LEAKY TOILET

Accounting for more than 95 percent of all water waste, toilet leaks are caused by worn or damaged parts in the toilet flush tank. (Toilet flushes account for about 100 gallons of the water use in your house each day. That's about 40 percent of the average household use.)

Some of these leaks will empty directly into the sewer line without leaving any clues. Even so, you can check for these leaks. Common causes include:

##### Float arm problems

Remove the lid from the top of the flush tank. See if the overflow pipe and the plunger ball are working properly. Do this by flushing the toilet, watching the tank mechanism and listening. You should hear the water flow shut off.

If the water does not shut off, check the water level. If it has risen above the overflow pipe, gently bend the float arm down and flush again.

You may need to replace the plunger ball if the water level is about one inch below the top of the overflow pipe and you still hear water flowing.

##### A tiny pinhole

A pinhole opening below the overflow pipe's water line could produce an



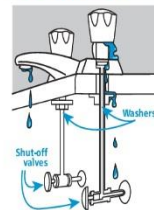
Water in the overflow pipe could also be caused by a pinhole in the float or a worn washer on the inlet line.

invisible leak. Check for this by shining a flashlight down into the overflow pipe. If you see running water, you have a leak that should be repaired.

##### Defective plunger ball (flapper valve)

This is often a silent leak which causes the tank to continually drain and refill. Check for a worn or improperly seated plunger ball (flapper valve) by dropping one of the dye-tracing tablets (included with this kit), or a few drops of food coloring, into the toilet tank. Do not flush. If a leak exists, the dye-colored water will seep into the bowl in about five minutes. If it does, the plunger ball (flapper valve) may need to be replaced or realigned.

#### THE LEAKY FAUCET



A slow drip can waste as much as 20 gallons of water each day.

##### A dripping faucet

A slow drip can waste as much as 20 gallons of water each day. A mere 1/16-inch leak wastes 100 gallons of water each day. With that much water — and money — going down the drain, it's important to get leaky faucets fixed as soon as possible.

If you notice that a faucet is dripping, first try closing it tightly. If it continues to drip, the most likely cause is a worn or wrong-size seat washer (also

### COMMON INDOOR LEAKS CONTINUED

called a stem washer). With just a little effort, you may be able to replace the washer yourself. You may need an adjustable wrench, a standard-blade screwdriver, and a Phillips screwdriver for older plumbing fixtures. It may be more economical to rebuild or replace the faucet if it is washerless.

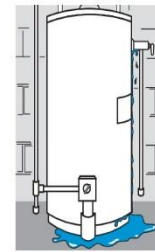
##### Changing a washer

Before you start, turn off the water supply to the faucet by closing the fixture's shut-off valve. Most kitchen

and bathroom faucets have shut-off valves under the sink. Turn the valve clockwise until it's tight. This shuts off the water to the sink only, and does not affect the water service for any other part of the house.

Be certain that the replacement washer is the same size as the worn one (if the worn washer was the correct size). If you need help, bring the worn washer to your plumbing supply or hardware store, and the store representative can help you match it with a new one.

### NOT-SO-COMMON INDOOR LEAKS



Water dripping down the side of the tank could mean the pressure release valve is stuck.

##### Water heater tank

The pressure valve release could be stuck. This valve is most often found near the top of the tank, and is usually a large brass fitting threaded into the tank. If it's not working properly, water will be leaking from it, dripping down the side of the tank and accumulating on the floor.

##### Boiler

Listen for the sound of running water. If it is continuous and does not stop and start periodically, your boiler system may have a leak.

##### Water softener

If you have a water softener, it could be wasting water if it is not recycling properly. The cycling

process, regulated by a timer, often occurs between 2 a.m. and 4 a.m. You're likely to have a problem in this unit if you constantly hear the sound of running water.

##### Washing machine

If you see water on the floor near the machine, it could mean a leak. You may want to call your washing machine repair service.

##### Humidifier

Water accumulated beneath the unit could be a sign of a leak. If the overflow discharge is piped into a sewer or drainage line, you may not find any visual signs of a leak. Listen for running water. If it's continuous, the float valve could be stuck.

##### Fire suppression systems

Many newer homes and businesses have fire suppression systems. If so, check to make sure that the sprinkler heads are tight and not leaking.

##### Dishwasher

Water accumulated on the floor near the unit could be a sign of a leak. You may want to call your dishwasher repair service.



## Leak Detection



California American Water Conservation staff was able to identify leaks and difficult-to-diagnose high water bills by utilizing meter reading data logging software and downloading up to 180 days of usage, hour by hour, from the company's electronic meters (representing approximately 57% of the meters currently installed).

By evaluating hourly usage patterns instances of high water use can be pinpointed to, for example, improperly programmed irrigation controllers, leaks in the irrigation system, toilet leaks, service line leaks, and hoses left running. This new technology assisted us in determining the root cause of high water bills for 473 customers in 2017. The report also allows for identification of potential backflow issues which could compromise the quality of

the water system and pose potential health risks to our customers.

### DATA LOG REPORT FOR RESIDENTIAL CUSTOMERS

| MIU#       | Date                                     | Time     | Meter Read | Gallon Consumption | Intermittent Leak | Continuous Leak |
|------------|--|----------|------------|--------------------|-------------------|-----------------|
| 1830128801 | Friday, September 08, 2017               | 9:18 AM  | 21251.588  | 0.374              | 0                 | 0               |
| 1830128801 | Friday, September 08, 2017               | 10:18 AM | 21251.593  | 0.2992             | 0                 | 0               |
| 1830128801 | Friday, September 08, 2017               | 11:18 AM | 21251.597  | 266.8864           | 0                 | 0               |
| 1830128801 | Friday, September 08, 2017               | 12:18 PM | 21255.165  | 1328.6724          | 0                 | 0               |
| 1830128801 | Friday, September 08, 2017               | 1:18 PM  | 21272.928  | 353.43             | 0                 | 0               |
| 1830128801 | Friday, September 08, 2017               | 2:18 PM  | 21277.653  | 294.5624           | 0                 | 0               |
| 1830128801 | Friday, September 08, 2017               | 3:18 PM  | 21281.591  | 65.076             | 0                 | 0               |
| 1830128801 | Friday, September 08, 2017               | 4:18 PM  | 21282.461  | 18.6252            | 0                 | 0               |
| 1830128801 | Friday, September 08, 2017               | 5:18 PM  | 21282.71   | 11.3696            | 0                 | 0               |
| 1830128801 | Friday, September 08, 2017               | 6:18 PM  | 21282.862  | 7.6296             | 0                 | 0               |
| 1830128801 | Friday, September 08, 2017               | 8:18 PM  | 21282.964  | 0.0748             | 0                 | 0               |
| 1830128801 | Friday, September 08, 2017               | 9:18 PM  | 21282.965  | 0.2244             | 0                 | 0               |
| 1830128801 | Friday, September 08, 2017               | 10:18 PM | 21282.968  | 0                  | 0                 | 0               |
| 1830128801 | Friday, September 08, 2017               | 11:18 PM | 21282.968  | 8.3028             | 0                 | 0               |
|            | <b>Friday, September 8, 2017 Total</b>   |          |            | 2355.5268          |                   |                 |
| 1830128801 | Saturday, September 09, 2017             | 12:18 AM | 21283.079  | 466.9764           | 0                 | 0               |
| 1830128801 | Saturday, September 09, 2017             | 1:18 AM  | 21289.322  | 141.4468           | 0                 | 0               |
| 1830128801 | Saturday, September 09, 2017             | 2:18 AM  | 21291.213  | 0.0748             | 0                 | 0               |
| 1830128801 | Saturday, September 09, 2017             | 3:18 AM  | 21291.214  | 5.984              | 0                 | 0               |
| 1830128801 | Saturday, September 09, 2017             | 4:18 AM  | 21291.294  | 491.81             | 0                 | 0               |
| 1830128801 | Saturday, September 09, 2017             | 5:18 AM  | 21297.869  | 348.3436           | 0                 | 0               |
| 1830128801 | Saturday, September 09, 2017             | 6:18 AM  | 21302.526  | 0.5236             | 0                 | 0               |
| 1830128801 | Saturday, September 09, 2017             | 7:18 AM  | 21302.533  | 0.374              | 0                 | 0               |
|            | <b>Saturday, September 9, 2017 Total</b> |          |            | 1455.5332          |                   |                 |

## **Residential & Commercial Plumbing Retrofit**

California American Water has been offering various free water savings devices for its residential and commercial customers including showerheads and kitchen faucet aerators with a flow rate of 1.5 gallons per minute, bathroom faucet aerators with a flow rate of 0.5 gallons per minute, leak detection tablets/kits and outdoor water saving tools such as soil moisture meters and hose nozzles that automatically shut off when not in use.

The various devices were distributed to California American Water customers in a variety of means including:

- Community events (at Company booth/display)
- California American Water front desk (walk-in customers)
- Residential Water Wise House Calls
- Commercial audits
- New customer welcome packets
- Upon customer request
- Special giveaway offer advertised in the residential customer's monthly water bills

In addition to the items listed above, California American Water also offered a variety of outdoor devices. The total number of each water saving device distributed in 2017 to California American Water's residential customers in Monterey are listed in Table 2.

**TABLE 2. COASTAL DIVISION: RESIDENTIAL PLUMBING RETROFIT DETAIL**

| Water Saving Device                   | Number of Units | Estimated water Savings per unit per year | Estimated Annual measure savings (AFY) |
|---------------------------------------|-----------------|---|--|
| Showerheads                           | 4,450           | 0.0062                                    | 27.59                                  |
| Handheld Showerheads                  | 324             | 0.0062                                    | 2.01                                   |
| Bathroom Faucet Aerators              | 7,250           | 0.0017                                    | 12.33                                  |
| Kitchen Faucet Aerators               | 3,900           | 0.0017                                    | 6.63                                   |
| Leak Detection tablets                | 5,900           | 0.0007                                    | 4.13                                   |
| Leak Detection Kits                   | 2,492           | 0.0007                                    | 1.74                                   |
| High Efficiency Pre Rinse Spray Valve | 5               | 0.392                                     | 1.96                                   |
| Shower Timers                         | 3,135           | unknown                                   | unknown                                |
| Dish Squeegees                        | 2,445           | unknown                                   | unknown                                |
| Hose Shut Off Nozzles                 | 1,995           | Varies                                    | Varies                                 |
| Moisture Meters                       | 2,562           | unknown                                   | unknown                                |
| Total                                 | 34,458          |   | 56.39                                  |

## Rain Sensor Installation Program

California American Water continued its Rain Sensor Installation Program through its contractor WaterWise Consulting. A total of 440 rain sensors have been installed since the program began in 2011 for residential and non-residential customers. In addition, soil moisture sensors were offered to select customers with landscapes that would benefit from this add-on to the Sensor Program. A total of 39 customers have participated in the soil moisture sensors program since its inception.

The rain sensor has a shut off device, which automatically signals the irrigation controller to curtail irrigation when it rains, and allows watering to resume when needed. Pictured is the actual installation of a receiver being installed that connects to the rain sensor that is typically placed on the eaves of a customer's home.



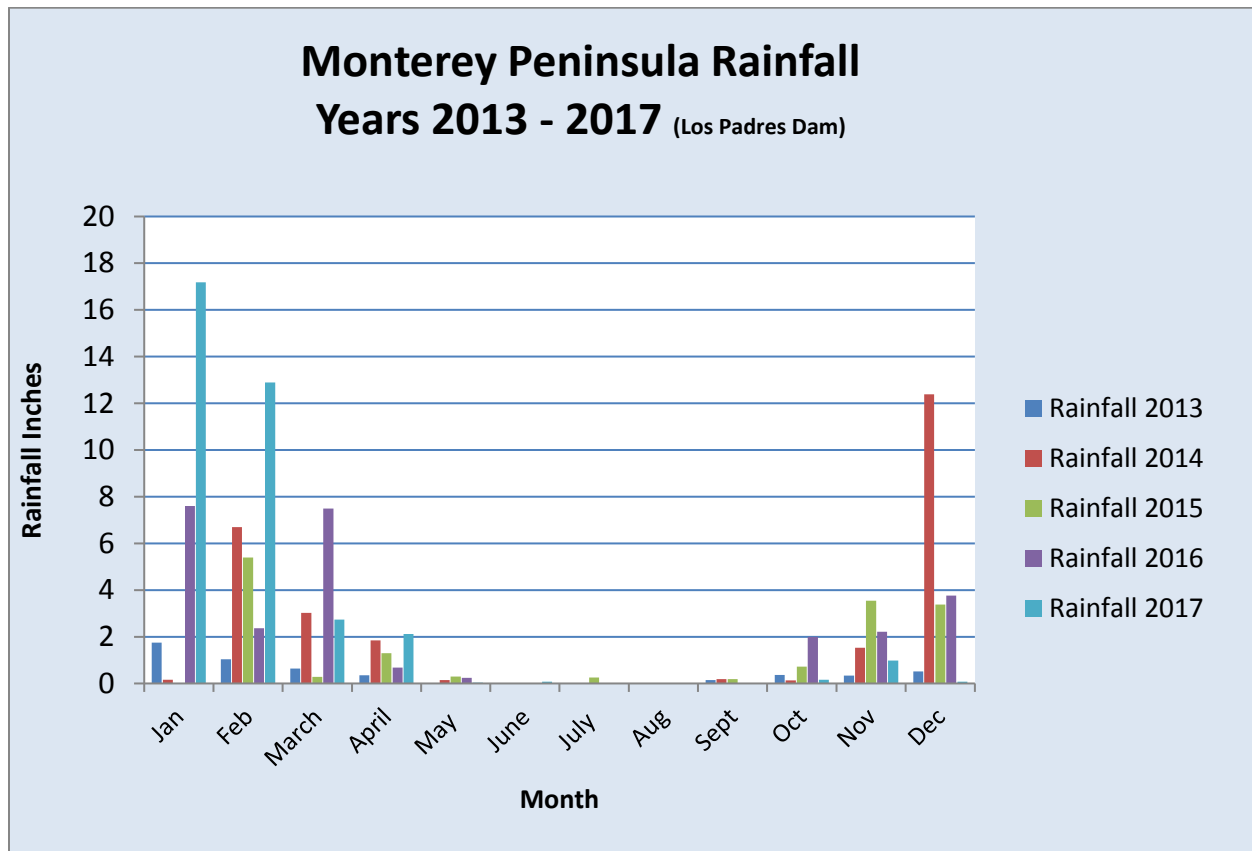
Potential candidates for rain sensors are customers who have second homes and cannot quickly turn off their irrigation systems, and customers who have been billed in the higher tiers of California American Water's five tiered residential rate structure. The rain sensor savings are most realized during the months of January through April and during the months of November and December, indicating possible over-irrigation occurring during those particular months. These customers would have exceeded their landscape irrigation allotments during these particular months.



Sample Rain Sensor for  
Residential Customers



**TABLE 3. MONTEREY PENINSULA MONTHLY RAINFALL 2013 – 2017  
(LOS PADRES DAM WEATHER STATION)**



| Monthly Rainfall for Years 2013 through 2017 (Los Padres Dam) |       |       |       |       |      |      |      |     |      |      |      |      |        |
|---|-------|-------|-------|-------|------|------|------|-----|------|------|------|------|--------|
| Year  | Jan   | Feb   | March | April | May  | June | July | Aug | Sept | Oct  | Nov  | Dec  | Totals |
| Rainfall 2013   | 1.75  | 1.04  | 0.64  | 0.35  | 0    | 0    | 0    | 0   | 0.14 | 0.36 | 0.34 | 0.51 | 5.13   |
| Rainfall 2014   | 0.16  | 6.7   | 3.03  | 1.85  | 0.15 | 0    | 0    | 0   | 0.19 | 0.13 | 1.53 | 12.4 | 26.13  |
| Rainfall 2015   | 0     | 5.39  | 0.28  | 1.29  | 0.29 | 0    | 0.3  | 0   | 0.19 | 0.72 | 3.54 | 3.38 | 15.35  |
| Rainfall 2016   | 7.6   | 2.37  | 7.49  | 0.68  | 0.24 | 0    | 0    | 0   | 0    | 2    | 2.21 | 3.76 | 26.36  |
| Rainfall 2017   | 17.18 | 12.89 | 2.74  | 2.12  | 0.04 | 0.08 | 0    | 0   | 0    | 0.16 | 0.98 | 0.08 | 36.28  |

## Commercial, Industrial, Institutional (CII) Audits

California American Water continued its commercial audit program established in 2009 along with its contract with WaterWise Consulting to conduct commercial, institutional, and industrial audits during 2017. Water Wise Consulting completed 7 audits with an estimated potential savings of 13.28 acre feet following the implementation of the audit recommendations. Since the program began in 2009, over 263 commercial customers have participated in such survey and implemented significant water savings as a result.

California American Water's conservation staff conducted follow ups with the customers on site and in person to review the audit reports and provide free devices, such as faucet aerators and pre-rinse spray valves. Customers were also requested to sign a statement confirming their receipt of the report and their consent for MPWMD to receive a report copy.



Customers were given audit reports that focused on applicable water-saving devices, and estimated water and cost savings together with expected payback periods for such upgrades. The payback period calculations included the rebate incentives available to CII customers through the California American Water and MPWMD Rebate Program.

**Chualar Elementary School Participated in our Commercial Audit Program**



California American Water offers all its non-residential customers low flow devices for hotels, restaurants and other types of businesses on the Monterey Peninsula. Mr. Suresh Patel visited our office in Pacific Grove to retrofit his Howard Johnson Hotel with 85 rooms to replace 2.5 gallon per minute showerheads with lower flow 1.5 gallons per minute. Mr. Suresh was also provided with low flow bathroom aerators at a flow rate of 0.5 gallons per minute

## **Rate Best Management Practice Survey Inspections**

In 2017, California American Water continued to inspect non-residential customers to ensure compliancy with indoor and outdoor best management practices also known as Rate BMP's. The current rate structure places customers in one of four rate divisions based on compliancy. Non-residential customers are required to complete a survey to determine their appropriate rate category when signing up for a new account.

In order to ensure that non-residential customers are complying with the BMPs that placed them in one of the four rate divisions, California American Water partners with the Monterey Peninsula Water Management District (MPWMD) to inspect non-residential properties.

MPWMD Conservation staff inspects all indoor fixtures and identifies customers that have outdoor irrigation and reports its findings to California American Water's Conservation Department. California American Water conservation staff inspects customers that have been identified to have landscaping and also utilize MPWMD's findings to ensure customers are in compliance with the Rate BMP's and placed in the appropriate rate division. Non-compliant customers have 30 days to make necessary corrections to avoid a potential change in rate classification.

In 2017, 292 inspections were completed by California American Water and the MPWMD. Five customers were found non-compliant with California American Water's rate BMP's, of which three made corrections within the 30 day time frame to avoid paying the higher rate.

California American Water and the MPWMD have completed a total of 1,233 inspections over the period of 2016 and 2017. All 473 dedicated irrigation metered customers have been inspected by California American Water conservation staff.

### Rate BMP Survey Inspection Summary

| Date               | Total Completed<br>Indoor and/or<br>Outdoors by<br>CAW &<br>MPWMD | Indoor<br>Audits<br>Completed<br>MPMWD | Mixed Use:<br>Indoors<br>completed<br>MPWMD/<br>Outdoors by<br>CAW | Mixed Use<br>(Indoor<br>and<br>outdoor)<br>by CAW | Dedicated<br>Irrigation<br>Meters<br>Completed<br>by CAW |
|--------------------|---|--|--|---|--|
| <b>2017 Totals</b> | <b>292</b>  | <b>143</b>                             | <b>59</b>  | <b>7</b>  | <b>83</b>  |



California American Water's Conservation Specialist Melissa Ward inspecting a commercial property to ensure the customer is Rate BMP compliant. Melissa is checking the sprinkler types to confirm the turf grass is irrigated with either gear driven rotor sprinklers, multi stream, multi trajectory rotating sprinklers, and/or high efficiency fixed spray nozzles. In addition, all landscape customers are required to have an irrigation controller with a water budget feature and a rain sensor.



CALIFORNIA  
AMERICAN WATER

511 Forest Lodge Road, Suite 100, Pacific Grove, CA 93950 | Phone: (831) 646-3205 | Fax: (831) 646-3204

## NON-RESIDENTIAL INSPECTION REPORT

### Water Usage Survey For:

Business Name: \_\_\_\_\_  
Owner's Name: \_\_\_\_\_  
Person Contacted: \_\_\_\_\_ Rate Division: \_\_\_\_\_  
Service Address: \_\_\_\_\_  
City \_\_\_\_\_ Account Number \_\_\_\_\_  
State \_\_\_\_\_ Zip Code \_\_\_\_\_ Premise Number \_\_\_\_\_

#### INDOOR:

☐ Inspected by M.P.W.M.D. Date: \_\_\_\_\_ Reference #: \_\_\_\_\_

**OUTDOOR:** Do you water outside? Y / N

#### Compliance

Y N N/A

☐ ☐ ☐ Automated irrigation controller: \_\_\_\_\_ Water Budget Feature \_\_\_\_\_ Rain Sensor \_\_\_\_\_ Soil Sensor \_\_\_\_\_

Remarks: \_\_\_\_\_

☐ ☐ ☐ Turf grass: Gear drive rotor sprinklers \_\_\_\_\_ Multi-stream, multi-trajectory rotators (MP Rotators) \_\_\_\_\_

High efficiency fixed spray nozzles \_\_\_\_\_ Subsurface low volume emitters \_\_\_\_\_

Remarks: \_\_\_\_\_

☐ ☐ ☐ Shrub beds: \_\_\_\_\_ Size of bed (width): \_\_\_\_\_ Type of heads: \_\_\_\_\_  
(The use of standard fixed spray nozzles will not be allowed in landscape beds measuring 3' or less)

☐ ☐ ☐ Hand watering by hose: \_\_\_\_\_ Hose nozzle: \_\_\_\_\_

**Is outdoor watering essential to your business? (Examples: nurseries, golf courses, public parks, ball fields and cemeteries)?**

☐ Yes ☐ No ☐ Not Sure ☐ Not applicable If yes, type of business: \_\_\_\_\_

**How much of your property is irrigated?**

☐ Less than 10% ☐ More than 10% ☐ Not applicable

#### INSPECTOR NOTES:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Date: \_\_\_\_\_

This Form certifies that an inspection was conducted at the above address for your commercial business to verify compliance with the Rate Best Management Practices (BMP's) for your current rate division. At the time of inspection, the property was found to be ☐ In ☐ Out of compliance with your current rate division.

#### Action Required

- ☐ Items not in compliance must be corrected within thirty (30) days to avoid a potential change in rate classification.  
☐ Re-inspection required. Please call 831-646-3205 to schedule appointment.

I acknowledge receipt of the BMP inspection report as provided by California American Water.

Auditor Initials \_\_\_\_\_

Acknowledgement of Receipt \_\_\_\_\_

Date \_\_\_\_\_

## School Education and Outreach

In 2017, California American Water continued reaching its key objectives for ongoing school education and outreach in water conservation.

The key goals included:

- Ongoing relationship building with the Water Awareness Committee (WAC);
- Outreach to students at community events offering free educational materials;
- Outreach to students in-class and at afterschool activities to offer education regarding water conservation.



### Zun Zun School Performances

California American Water, through the Water Awareness Committee of Monterey County, offered school presentations by the Zun Zun performance group. In 2017, Zun Zun provided fifteen 45-minute performances within California American Water's service territory. The performances reached a total of 6,388 students and covered topics such as the water cycle, watershed, indoor conservation and conservation tips, including information about fixing leaks.

Students were encouraged to participate during the event through a song and dance presentation of the water cycle. Conservation tips were also presented to the students such as taking shorter showers, not letting the faucet run when brushing teeth, using a positive shut off nozzle at the end of a hose when watering the plants, and to notify their parents when they see leaks at home or their school teacher when they see leaks at school.

**TABLE 4. SCHOOL EDUCATION PROGRAM – ZUN ZUN PERFORMANCE**

| Date    | School               | Performances | Number of Students | City     |
|---------|----------------------|--------------|--------------------|----------|
| 1-10-17 | Ord Terrace School   | 2            | 490                | Seaside  |
| 1-24-17 | San Carlos School    | 2            | 200                | Monterey |
| 3-14-17 | International School | 2            | 418                | Seaside  |
| 3-14-17 | Chualar Elementary   | 1            | 400                | Chualar  |
| 4-27-17 | Del Rey Woods School | 2            | 525                | Seaside  |
| 5-15-17 | Monte Vista School   | 2            | 325                | Monterey |
| 5-15-17 | Marshall School      | 1            | 540                | Seaside  |
| 9-2-17  | Monterey County Fair | 2            | 2,500              | Monterey |
| 9-12-17 | Ord Terrace School   | 2            | 490                | Seaside  |
| 9-14-17 | Highland School      | 2            | 500                | Seaside  |

In addition, California American Water offered school conservation presentations by the Zun Zun group for students and adults alike attending the Monterey County Fair during Labor Day Weekend. The attendees consisted of elementary and up to the 5<sup>th</sup> grade students and totaled approximately 2,500 students for both events.



## Conservation Events

California American Water held many conservation events throughout 2017, participating in several events with the Monterey Peninsula Water Management District. Events included the Good Old Days in Pacific Grove, a mulch and drought tolerant plant give away at Del Rey Woods School, earth days, and landscape irrigation classes with the MPWMD.

### 2017 Monterey County Fair

California American Water sponsored and participated in the annual Monterey County Fair for four days by holding a conservation booth and providing water saving devices, handouts and tips on how to conserve water. The company also participated in the Water Awareness Committee's (WAC) Water Awareness Day, which is further described in the WAC section.

Pictured: Joseph Riso Distribution Foreman interacting with a customer at the conservation booth and discussing the Monterey Distribution System and how main leaks are found and repaired.



### Race of Thrones – Crapper Derby

California American Water participated in the Race of Thrones Crapper Derby on May 2, 2017 in Salinas and came in third place with a special low flow, high efficiency toilet vehicle. The event was hosted by the Salinas Rotary Downtown Club, which served as a fundraiser to benefit the



Franciscan workers who run the homeless services for Dorothy's Place in Chinatown. Pictured left is California American Water's Jeremiah Andalon and Jason McCarter pushing the vehicle.

The vehicle was to showcase the need to upgrade to high efficiency toilets and promoted the available rebates for such toilets offered by California American Water.

A relay style race was made up of homemade outhouse type vehicles. Teams were made up of three people where two people push or pull the machine, and one person to occupy

the throne. California American Water's Theme was "Low Flow and Go" and included a vehicle sticker that is mounted on all California American Water vehicles "UR TXT CAN W8 Please Drive Safely."





[illegible]

## Free Mulch Giveaway Event

California American Water in March of 2017 held a free mulch and plant give away event at the Monterey Peninsula Unified School's District Del Rey Woods School, in Del Rey Oaks. Partner agencies that participated in the event were the Monterey Peninsula Water Management District (MPWMD) and the Monterey Regional Storm Water Management Program (MRSWMP).

The event was promoted through the delivery of 5,000 flyers to select customers in California American Water's service area that could best benefit from the potential water savings for their landscapes. Additional promotion included California American Water's and the MPWMD's Facebook pages. The event was implemented on a first come first served basis where customers would first register and provide proof of residing in California American Water's service area. Customers were required to complete an application and confirming the mulch would be used at their place of residence.



Once the customer was registered and confirmed, they would enter with their vehicles and/or trucks to the loading area where a tractor skip loader and operator would fill their vehicle with the mulch. Some customers came with large bags and large buckets and containers to load their mulch.



In addition, California American Water, the MPWMD and the MRSWMP agencies held a conservation booth and were given informational handouts which included gardening and water conservation tips for the landscape. Water conserving devices were also provided to customers.

The mulch used was of high quality which consisted of eucalyptus and oak trimmings.

In addition, each customer received a drought tolerant California native plant.

## Free Water Wise Workshops

California American Water, in partnership with the Monterey Peninsula Water Management District, held Free Water Wise Workshops during the spring of 2017. The classes were held in California American Water's training room and at the Martin Luther King Jr. School. A postcard describing the 5 landscape classes was mailed to all residential customers.



**Spring Beauty** STARTS IN THE FALL

Join the Monterey Peninsula Water Management District and California American Water for **free water-wise workshops**

- \* **Rainwater Harvesting**  
Oct. 7, 2017 | 10 a.m. – 12 p.m. | California American Water Office
- \* **Gardening for Birds and Butterflies with Water-Wise Native Plants**  
Oct. 14, 2017 | 10 a.m. – 12 p.m. | California American Water Office
- \* **DIY: Designing Your Own Water-Wise Native Plant Garden**  
Oct. 21, 2017 | 10 a.m. – 12 p.m. | California American Water Office
- \* **Sheet Mulching**  
Nov. 4, 2017 | 1 p.m. – 4 p.m. | Martin Luther King, Jr. School – Seaside

**Location Information**

**California American Water Office:** 511 Forest Lodge Road, Suite 100 in Pacific Grove (behind the Rite Aid at the Country Club Gate Shopping Center)

**Martin Luther King, Jr. School:** 1713 Broadway Ave. in Seaside

**Register to Attend**

Workshops are free and open to the public. Registration is required to ensure everyone has a seat.

**Register online:** [www.montereywaterinfo.org](http://www.montereywaterinfo.org)

**Call:** 831-658-5601



## Free Water Wise Landscape Workshops – Photos



Dan Finklea from Greenwise Water and Landscapes shows customers how they can install grey systems for their landscapes



MPWMD District Staff prepare the landscape in order to sheet mulch at the Martin Luther King Jr. School



Peigi Duvall from Indig/Design teaches customers how to design their own water wise native plant garden

## Free Multi Residential Water Wise Workshop

California American Water in partnership with the Monterey Peninsula Water Management District held Free Water Wise Workshops in September of 2017 for landlords and property managers who manage small and large apartment complexes. The theme of the event was “Are your tenants wasting water? How do you know? You pay the water bill.” A postcard describing the program and potential water savings for retrofitting was mailed to all multi residential customers instructing them to register on line at [www.montereywaterinfo.org](http://www.montereywaterinfo.org).

## Free Water-Wise Workshop for Landlords and Property Managers

**September 27, 2017 • 9 a.m. – 11 a.m.**

California American Water:  
511 Forest Lodge Road, Suite 100,  
Pacific Grove, CA  
(behind Country Club Gate Shopping Center)



Printed on recycled paper. Recycling one ton of paper saves 17 trees, 3 cubic yards of landfill space and 7,000 gallons of water. Please recycle.

Join California American Water and the Monterey Peninsula Water Management District to discover opportunities to reduce water use and save money.

- Learn how simple retrofits to multifamily units can greatly reduce tenant water use, lower utility costs, and combat rising rent prices.
- Receive free water-saving tips, tools, and devices like showerheads, faucet aerators, and toilet flappers.
- Send your maintenance crews to learn about water-wise landscaping.
- Learn about meter splits to individually meter each apartment.

[Register to attend.](#)

The workshop is free and open to the public, although registration is required to ensure everyone has a seat.

- Register online at [www.montereywaterinfo.org](http://www.montereywaterinfo.org)
- Call 831-658-5601



**CALIFORNIA  
AMERICAN WATER**  
511 Forest Lodge Road, Suite 100  
Pacific Grove, CA 93950



**Are your tenants wasting water?**  
How do you know? You pay the water bill!

## Multi-Residential Continued








Joe DiMaggio, California American Water's Conservation Supervisor and Stephanie Kister, MPWMD's Conservation Analyst gave a presentation on the effects of retrofitting apartment units with low flow water saving devices, such as low flow kitchen and bathroom aerators as well as installing low flow showerheads. A sample analysis was given using a four plex apartment and comparing the water bill between a retrofitted and non-retrofitted apartment building. The difference in monthly cost between the two was \$407.81. A water conservation guide (pictured below) was also given to landlords and property managers to distribute to all their tenants. Stephanie also reviewed the list of rebates available to the customers.





Jose Ballestros, Irrigation Expert from Ewing Irrigation presented on how to time and set your irrigation controller, checking irrigation for leaks, and common irrigation issues, which included irrigation controllers not set correctly, and then returning to default settings, resulting in the system irrigating every day. Jose also focused on upgrading sprinklers to MP Rotators for increased water efficiency, converting to drip, and the use of cisterns for irrigation.

# Water CONSERVATION GUIDE

**Water is the world's most precious resource.** Do you know that the average person on the Monterey Peninsula uses 50 gallons of water per day? This adds up to 18,250 gallons of water per year. We know that all living things need water and that's why we are working together to help California and our planet save water. **For water-saving tips, pin this list up in your kitchen and check frequently.**

|  |   |   |
|--|---|---|
|  <b>Don't use toilets as a wastebasket.</b><br>Flushing a small piece of trash wastes <b>1.6–3 gallons per flush.</b> |  <b>Run only full loads</b> in the washing machine or dishwasher.                                   |   |
|  <b>Keep showers at 5 minutes or less.</b>  |  <b>Let your landlord know immediately</b> if you notice a <b>leaky toilet or faucet.</b>            |  <b>Turn water off when brushing teeth or shaving.</b> |
|  <b>Rinse fresh produce in a bowl of water</b> instead of under the faucet.   |  <b>Let dirty pots and pans soak in the sink</b> rather than running the faucet while cleaning them. |   |

Thank you for your interest and cooperation in saving our Earth's most precious resource: **water.** California American Water and the Monterey Peninsula Water Management District applaud your efforts and encourage you to continue conserving!



Water Conservation Guide  
For Landlords and Property Managers to  
Provide to Tenants



## Water Awareness Committee Activities

California American Water coordinated with the Water Awareness Committee (WAC) to offer school education opportunities and outreach in 2017. Activities included class presentations as well as interactive school assemblies. Both California American Water and the MPWMD are founding members of WAC.



In addition to school education programs, WAC Sponsored a Water Awareness Day Celebration at the Monterey County Fair in September. The event was held on Saturday, September 2, 2017. This family friendly event featured booths including California American Water, the MPWMD, and the Marina Coast Water District.

California American Water in partnership with the Monterey Peninsula Water Management District also joined WAC by participating in the City of Monterey's cutting day held in March and the annual Master Gardener Event held each April in Carmel.



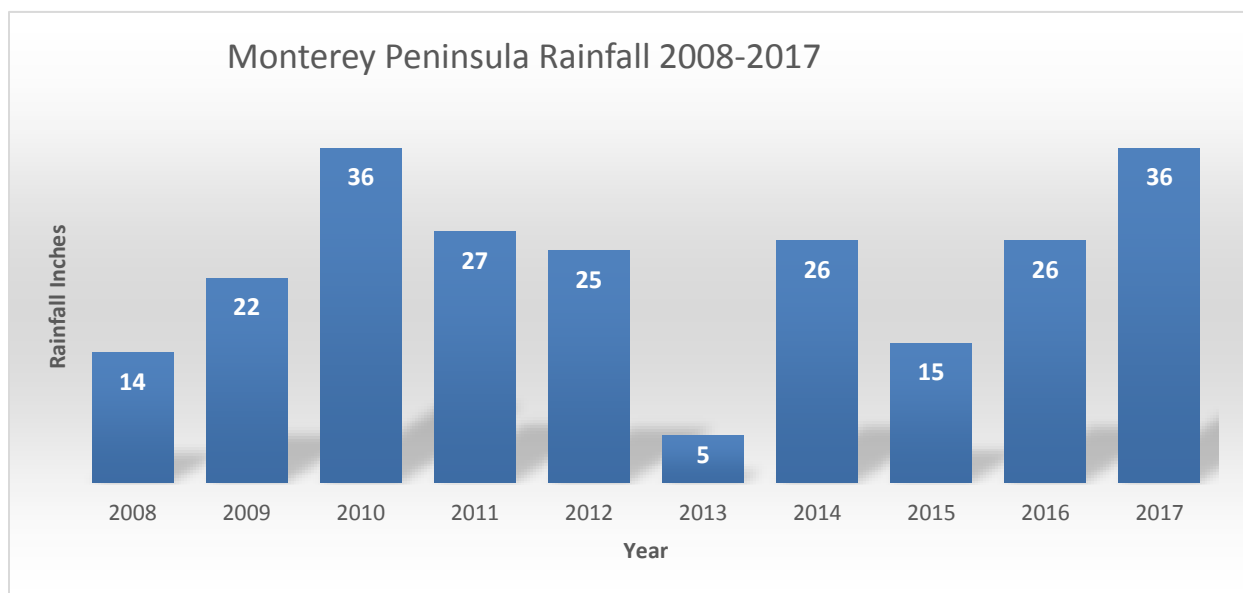
WAC Members participating in the annual Master Gardens Event in April of 2017. Customers who visited the booth were given water conservation devices and tips on how to save water outdoors and encouraged to take advantage of the rebate programs.



## Weather Adjusted Consumption in the Coastal Division

California American Water staff produced an analysis of weather-adjusted consumption in the Coastal Division by calculating the acre-feet consumed per rainfall inch. (This information is provided under separate cover.) As expected, overall consumption is highest during the summer months and lower during the winter months. Consumption also rises as rainfall decreases: from 2008 through 2017, consumption was highest when rainfall was lowest (2013) and conversely, consumption was lowest when rainfall was highest (2010 & 2017).

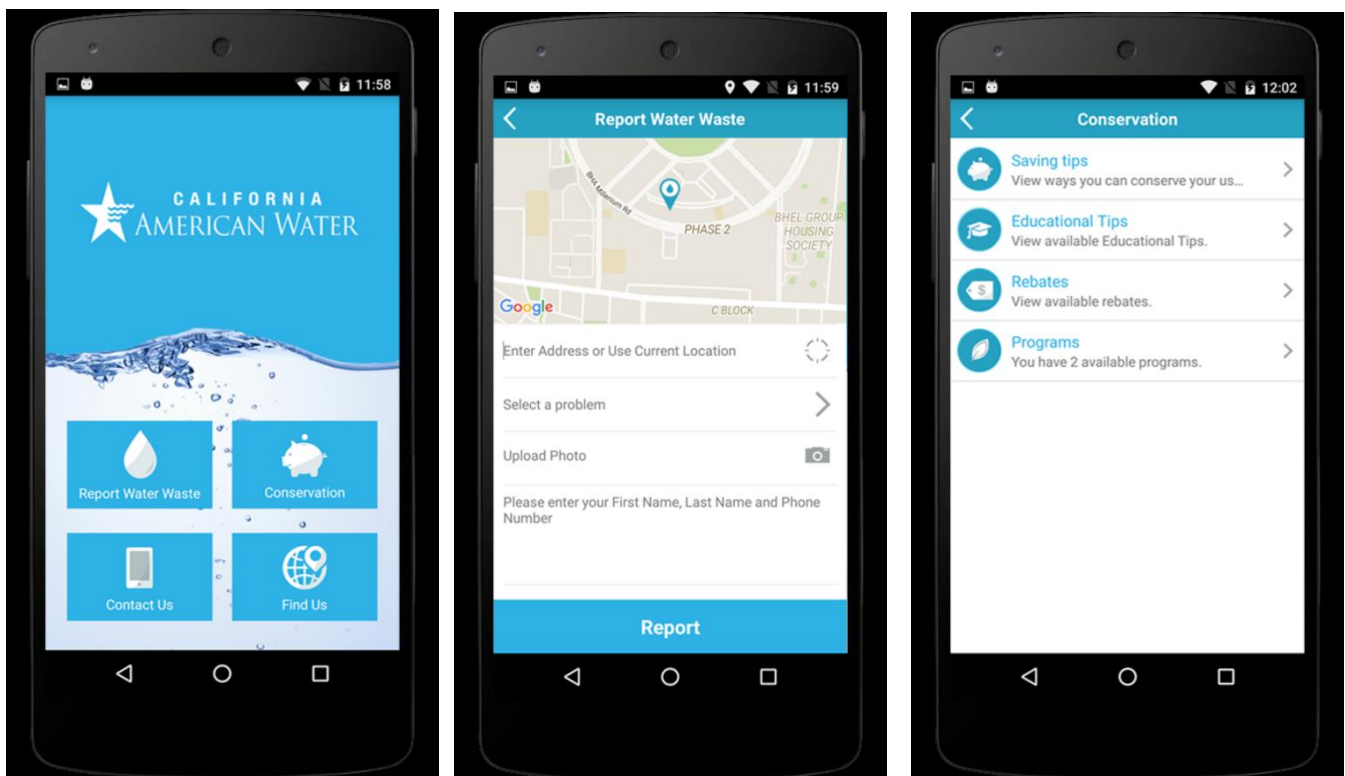
**TABLE 5. MONTEREY PENINSULA RAINFALL 2008 – 2017 LOS PADRES DAM WEATHER STATION**



## Water Waste App

California American Water introduced a new app in 2016 statewide, available for download in the Apple and Android app stores, which allows customers and other concerned residents to report water waste when they see it. Photos are geo-tagged and uploaded directly so that California American Water can investigate the leak or waste.

In 2017, California American Water customers utilized the app and reported leaks and customers violating the conservation rules. Customers were contacted and notified of the violation. Through the app, California American Water customers can also learn about the conservation programs offered in each of our districts across the state. Raising awareness of our Water Wise House Calls, rebates for water saving home appliances and free water smart devices will help customers control water use.



## **Public Outreach**

All public outreach and educational efforts are managed by California American Water's local external affairs and conservation departments in cooperation with MPWMD's conservation department.

California American Water utilizes professional marketing and design services to develop professional and effective educational brochures, direct mailers, print media advertisements, and other marketing items. The company continued its proactive outreach campaign to help keep water consumption within production limits on the Seaside Basin and Carmel River.

This year's efforts were largely centered on reminding customers what drought regulations were still in effect, how to continue conserving water, and how to avoid high water bills. A frequently advertised and utilized method was workshops for different customer groups like multi-family households, single family households, and non-residential users. Workshops centered on lowering water bills and usage rates while occasionally covering a specific topic like gardening. Mailers and print advertisements marketed rebates, water conserving devices, and watering schedules for gardens.

The campaign was highly successful; in California American Water's Monterey District, between June 2015 and March 2017, over 15 billion gallons of water have been saved compared to water use in 2013.

### **Public Radio Announcements**

California American Water was unable to conduct any public radio advertisements regarding conservation.

Public Radio Advertising costs: \$0

### **Television Advertising**

California American Water was unable to conduct any television advertisement regarding conservation.

Television advertising cost: \$0

### **Print Advertising Campaign**

During 2017, California American Water focused its print advertisements on promoting workshops which were educating customers about the rate increases while providing additional information about ways to save money and conserve water. Specific advertisements were put into popular newspapers like the Monterey County Weekly's Best of Monterey County issue. These print advertisements correlated with similar bill inserts, email blasts, and door handle items/brochures on the targeted subject of that month.

Print advertising campaign cost: \$4,521.50



**CALIFORNIA  
AMERICAN WATER**

Maximize Water Conservation  
and Savings

Take advantage of cash back rebates\* from California American Water.

- \$100 for a high-efficiency toilet
- \$150 for an ultra-high-efficiency toilet
- \$15 for a toilet flapper
- \$125 for a high-efficiency residential dishwasher
- \$500 for a high-efficiency residential clothes washer
- \$200 for an instant-access hot water system
- \$100 for an on-demand pump or point of source water heater

Visit [www.montereywaterinfo.org](http://www.montereywaterinfo.org) for more information.

\*\*Rebate amount may not exceed the actual cost of the qualifying device. Terms and conditions apply.

#### PRINT ADVERTISEMENT FOR BEST OF MONTEREY

##### Website: Monterey Water Facts

California American Water and MPWMD continued supporting the shared website for the Monterey area, which was established in 2009. The site serves as a one-stop, user-friendly resource for local water users to access information on rebate programs, home water audits, regulated restrictions on the area's water supply, and tips for saving water indoors and out.

The website has information for commercial and residential users and provides in-depth information on "water wise" landscaping. The web address is publicized through direct mail and print advertising efforts and periodically listed on California American Water customers' bills. The site additionally contains links to the Alliance for Water Efficiency, Water Sense, and the American Council for a Water Efficient Economy. In addition, California American Water and the MPWMD continued to support their joint Facebook and Twitter pages. These pages are updated bi-weekly with quick tips about conservation and other important news concerning water in the Monterey Peninsula.

Website cost: \$0

### Monterey Water Conservation Facebook Page

California American Water in partnership with MPWMD continued its Monterey Water Conservation Facebook page to keep local contacts informed about conservation efforts. The page provides timely conservation tips and news about upcoming events and local water issues.

Facebook cost: \$0

### Website Articles And Email Blasts

The drought was officially ended with the close of April, so continued email blasts were unneeded. However, California American Water did continue encouraging customers to maintain high levels of conservation and provided an educational email on what conservation regulations would be staying in place.

During the rest of the year, California American Water shared articles focusing on the recovery of the Carmel River and local steelhead populations due to the San Clemente Dam removal. Notable stories, like the rebounding of the steelhead populations, are useful for convincing people to conserve water, as they enjoy knowing how their efforts benefit the local environment.



**Drought Regulations Extended**

On Wednesday, the State Water Resources Control Board (SWRCB) voted to **continue emergency statewide drought regulations for an additional 270 days**, although they will revisit the regulations in May at the end of the winter rain and snow season.

**What This Means for You**

This means mandatory drought restrictions will remain in effect until further notice. **Mandatory drought restrictions include:**

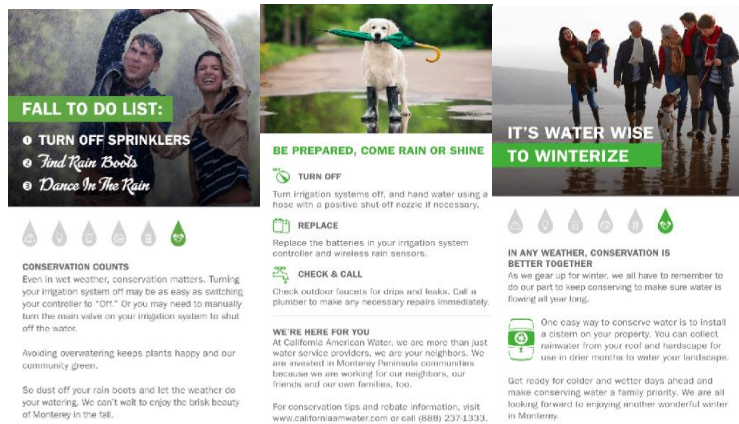
- Using an **automatic shut-off hose nozzle**
- **Repairing leaks** within 72 hours
- **Not watering** for 48 hours after rainfall
- Following local **water schedules**

For more information about drought restrictions, watering schedules and conservation products and services, please visit our [drought page](#) or our [Facebook page](#).

### DROUGHT REGULATION EMAIL FOR 2017

## Mailers/Bill Inserts

Throughout the year, the company utilized inserts/mailers/postcards on various subjects, including: different methods for paying (i.e. switching to paperless); reminders to follow the outdoor watering schedule; free workshops for a mixture of different water-users; and offers to receive a free water conservation consultation with an expert.



## EXAMPLES OF BILL INSERTS FOR 2017

Monterey-specific mailer cost: \$ 23,518.77

## Social Media

California American Water continued its social media support of conservation outreach by complimenting and echoing the same messaging produced in its newspaper advertisements and mailer campaigns. This includes routine updates to both the company's own Facebook page and the one it shares with MPWMD, which focuses on conservation.

California American Water also maintains a Twitter account, which it uses to inform its followers of various news items, including conservation tips and rebate offers.

Social media cost: \$0

## Collateral/Others

Throughout the year, California American water provided brochures/other items for water wise house calls; promoted meetings with California American Water employees; created factsheets on wastewater, how to read a meter, and desalination; and designed water conservation guides to be used by homeowners, landlords, and non-residential areas. Associated with these Water Wise brochures, were at home water audits by a specific expert.



## WATER WISE BROCHURE CREATED FOR 2017

Collateral/Other cost: \$32,129.61 (Water Audit Kits) and \$5,106.48 (brochures and other items)



## California American Water, Coastal Division - 2018 Program Goals

The 2018 California American Water programs funded by the Conservation Surcharge are summarized in the following table and described in detail in the narrative that follows.

**TABLE 6. CALIFORNIA AMERICAN WATER COASTAL DIVISION:  
SUMMARY OF 2018 PROGRAM GOALS**

| Program                                    | Budget                  | Implementation Plan   | Timeline   |
|--|-------------------------|---|--|
| Residential Audits                         | Budget                  | Complete 200 SF and 10 MF audits  | Offer audits throughout 2018   |
| Residential Plumbing Retrofit              | \$8,200                 | Continue providing devices to residential and non-residential customers, walk-in, and events.   | Residential Water Wise House Calls and efforts throughout the year at events, walk-ins, etc. |
| Rain Sensor Installation Program           | \$8,000                 | Install 25 Residential Rain sensors and/or Soil Moisture Sensors and offer to all customers through a postcard mailing in the fall of 2018  | Jan through Dec 2018   |
| Large Landscape Upgrade Grant Program      | \$30,000<br>2018 - 2021 | Provide grants for expenses for equipment, materials, and/or installation to upgrade to conservation friendly landscapes  | Jan through Dec 2018   |
| Public Outreach and Marketing Campaign     | \$123,33                | Continue to support public awareness and participation in the organizations' joint-conservation programs  | Ongoing throughout 2018  |
| Outreach and Education Seminars & Programs | \$10,000                | Continue to partner with Water Awareness Committee, continue to offer Landscape Irrigation Workshops, create conservation booklet, offer in-class presentations   | Ongoing throughout 2018  |
| Zun Zun Performances and WAC Activities    | \$5,000                 | Market to schools in Summer of 2018 with events in the fall.  | Performances in 2018 WAC ongoing.  |
| CII Rate BMP Survey Inspections            | \$1,000                 | Inspect 150 non-residential properties for compliance with Rate Best Management Practices to determine rate category and collaborate with the MPWMD to complete indoor inspections & CAW complete outdoor inspections | Ongoing 2018   |
| CII Audits                                 | \$20,000                | Offer CII Audits to customers – greatest potential need & to comply with the new BMP Compliance Rate Structure  | Ongoing 2018   |

## **Residential Water Wise House Calls**

California American Water will continue to provide Residential Water Wise House Calls to its customers in 2018. Efforts to promote customer participation will include offering Water Wise House Calls for customers with high water bills and promoting the program at events and through California American Water ads. California American Water's conservation staff set a target goal of 200 single family audits to be completed in 2017 and actually surpassed its goal and completed 471 house calls in 2017. The expectation is to complete 225 Residential Water Wise House Calls in 2018.

## **Residential Plumbing Retrofit**

California American Water will continue to provide low flow conservation devices and conservation kits to residential customers in the Monterey service area, and will require customers to sign up to receive devices at events, front desk, etc. so that the company can log the information and identify how devices are distributed. The focus will be on the hospitality industry such as hotels and motels to convert hundreds of bathroom aerators from 1.5 GPM aerators to 0.5 GPM aerators. California American Water will also look for upgraded low flow devices and new technologies that provide greater water savings. Current devices include 1.5 GPM showerheads, 1.5 GPM kitchen faucet aerators, and 0.5 GPM bathroom aerators. In addition, California American Water will promote 1.5 GPM showerheads for customers who have retrofitted in past years with the 2.5 GPM. The company will continue to track the devices specifically given to single and multi-family residents.

## **Large Landscape Upgrade Grant Program**

California American Water will continue its successful Large Landscape Grant Program developed and implemented in the fall of 2010 for large landscape customers including cities, schools and parks. In 2016, a total of \$25,000 was awarded to the Salvation Army to upgrade its sprinklers systems for its school and adjacent properties.

The funding is to offer assistance to upgrade current landscape and irrigation systems to increase water efficiency, and to help cover the expenses for equipment, materials, and/or installation. Sites are specifically chosen for high visibility and visitor traffic in order to maximize educational value and promote similar retrofits at customer sites.

In 2018, California American Water's objective is to fund one landscape grant project at a cost of \$30,000 to a school district in the company's service area. The proposed sites will be selected based on projected potential water savings, cost to retrofit, educational value of site, project participation and engagement from the program partner and other criteria.

Each year, the sites will be reviewed identifying their actual usage compared to their expected usage and the actual water savings will be calculated. This information will be reported to the CPUC annually to monitor the success of the program.

## **Rain Sensor Installation Program**

California American Water will continue the rain sensor installation program that began in November of 2011, which provides free direct installation of rain sensors to residential, commercial and public authority customers and will also begin the installation of soil moisture sensors through its contractor, EcoTech. The focus will continue to be on customers who have the greatest potential to reduce their water usage especially during the winter season.

Focus will continue to be on customers who are billed in the higher tiers of California American Water's five tier residential rate structure during the three consecutive winter months of December, January and February. In addition, California American Water will send a postcard to all residential customers in the fall of 2018 to continue to promote the program.

The estimated cost is \$150 per customer, which includes \$40/hour labor for 2.5 hours plus the cost of each rain sensor estimated at \$50.

## **CII Audits**

California American Water will continue in 2018 to provide commercial, institutional and industrial audits to non-residential customers utilizing experienced contracted consultants.

The focus will continue to be on auditing customers who have the greatest need and potential to achieve significant water savings. California American Water will continue to meet with each customer who receives a CII audit and also offer rebates and any programs that may assist in reducing overall water usage.

## **Rate Best Management Practice Survey Inspections**

California American Water in 2013 changed its non-residential rate structure that now places customers in one of four rate divisions based on compliancy with indoor and outdoor BMP's. Non-residential customers were required to complete a survey to determine their appropriate rate category.

In order to ensure that customers are complying with the BMPs that placed them in one of the four rate divisions, California American Water, in partnership with the Monterey Peninsula Water Management District, will continue inspecting non-residential properties.

Customers who are confirmed to be out of compliance with the indoor and/or outdoor requirements will have 30 days to make necessary corrections to avoid a potential change in rate classification. These customers are contacted by CAW conservation staff 30 days after the inspection to verify compliancy. If the customer is not compliant, the classification is changed to Rate Division 4, which is the non-compliant rate, until necessary corrections have been made. Customers are required to provide proof of corrections by providing a receipt to CAW and/or verification for indoor compliancy by the MPWMD.