

CAW Monterey County District – MPWMD
Water Conservation Program
2010 Annual Report

May 2011



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Introduction

This report documents conservation efforts taken by California American Water's Monterey District (CAW) and the Monterey Peninsula Water Management District (MPWMD) pursuant to the Settlement Agreement between the Division of Ratepayer Advocates (DRA), CAW and the MPWMD, as to the Conservation Budget for the Monterey District under the California Public Utilities Commission (CPUC) decision D.09-05-029 (May 2009).

The approval of the Conservation Budget occurred about half-way through 2009. During the first six months of the year, both CAW and MPWMD were wary about spending funds, other than to continue the Landscape Irrigation Audits and Landscape Water Budgets required by Rule 14.1.1 and MPWMD Regulation XV, the Expanded Water Conservation and Standby Rationing Plan. In mid-July 2009, CPUC clarified all provisions of the decision and the 2009-2011 Conservation Surcharge was enacted.

CAW, in collaboration with MPWMD, has prepared this report to provide a record of the Monterey service area water conservation programs and activities implemented in 2010, as well as projected efforts for 2011.¹

Reporting Requirements

The following points list the mandatory reporting requirements for approval of the conservation surcharge. Additional information has been provided in this report to document other conservation efforts undertaken by CAW and MPWMD during 2010.

- CAW and DRA agree to break out (1) conservation activities CAW undertakes on its own, (2) conservation activities MPWMD undertakes from its own budget, (3) programs MPWMD undertakes under the conservation surcharge.
- Include 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.).

¹ Paragraph 4(k) of the Settlement Agreement

- Summary of the conservation plan for the following year with timelines, implementation plans, whether to be implemented by CAW or MPWMD and budgeted amounts for each type of activity.
- Electronic spreadsheet that includes estimated water savings for each customer receiving an audit, a rebate or a retrofit (Attachments 1, 2, 3).
- Estimated water savings for each device offered through CAW and MPWMD's conservation programs funded through the conservation surcharge. CAW and MPWMD will establish consistent water saving estimates (Attachments 1, 2, 3).
- MPWMD is required to provide a report to DRA in the next General Rate Case (GRC) detailing the amount of water saved through the Rebate Program that was reinvested through the Water Credit Program.
- Evaluation of the effectiveness of the Outreach Program.
- CAW will conduct an annual analysis of the weather-adjusted consumption in the Monterey District and provide this information in the annual report (Attachment 4).

California American Water – Monterey County District

The programs funded by CAW's conservation surcharge during 2010 are summarized in Table 1 on the next page and described in detail in the narrative that follows.

Table 1. CAW Monterey County District: Summary of 2010 Programs

Program	Program Costs	Need For Program	Nature of Activity	Measurable Goal	Result of Achievements	Estimated Savings (AF)
Residential Audits (Former BMP 1)	None (funded by Labor budget)	Meet former BMP 1 requirements of CUWCC MOU, customer requests.	Customers given assessment of indoor & outdoor water usage, individualized water budget, recommended irrigation schedule, water saving devices.	Marketing objective - 5% response with audit requests 676 single-family and 68 multi-family audits	Marketing Ads 40% 92 audits completed	5.15 AF
Residential Plumbing Retrofit (Former BMP 2)	\$29,794.38	Meet BMP 2 requirement (75% saturation)	Distribution of water saving devices at events, walk-ins, mailer responses.	Number of Devices Distributed	2,721 Showerheads, 1,300 Kitchen Aerators, 3,366 Bath Aerators	5.164 AF
Large Landscape Audits and Water Budgets (Former BMP 5)	\$475,000 (Audits funded by MPWMD)	Required by MPWMD Regulation XV. Meet CUWCC BMP objective of 90% dedicated irrigation meters assigned water budgets.	CAW staff provide water usage history and other customer data to consultant completing audits and water budgets. Contact customers about audit by calls and/or letters.	MPWMD\$475,000 + CAW \$126,395 = \$601,395 worth of audits by contracted consultant between 2009 - 2011	Actual Savings 123 AF (12 months before 12 months after	123 AF actual savings
Rebates (Former BMPs 6, 9, 14)	\$614,956	Meet CUWCC former BMPs 6,9,14 objectives and MPWMD Ordinances.	Provide incentives to customers for upgrading to high efficiency/water saving fixtures and appliances	2,199 SF rebates; 821 MF rebates; 205 CII rebates.		62.21 AF
Public Outreach and Education (Former BMP 7)	\$207,623	Meet CUWCC former BMP 7 and meet demand goals under Rule 95-10.	Promote quantifiable BMP (programs), educate customers on water use efficiency and communicate current water issues and efforts needed on the Monterey Peninsula.	Support BMP programs, attend 3+ events, and reduce spring water usage.	Multimedia conservation campaign with community involvement	Not quantifiable
CII Commercial, Industrial & Institutional Audits	\$75,000	CII Audits by WaterWise Consulting	Water use survey includes: audit of water fixtures, water & behavior use patterns, report includes findings, recommendations, and payback periods for retrofit or replacement of fixtures.	Goal 35 CII Audits	Completed 29 CII Audits	47 AF
CII Survey Data Collection (Former BMP 9)	None (funded by Labor budget)	New commercial customers who require CII allotments	Scheduling and conducting onsite surveys to collect data to determine CII allotments	100% new accounts assigned allotments	95% of new accounts assigned allotments	Not quantifiable
Free Water Usage	None (funded by Labor budget)	Required by Settlement Agreement	Review and limit free water usage by free water customers	Identify and address all free water customers	5 audits completed	Not quantifiable

Residential Audits (Water Wise House Calls)

California American Water continued its Residential Audit Program (also known as the Water Wise House Call program) utilizing in house trained audit staff at no cost to the Conservation budget. Under the program, customers were offered the free service of having a CAW Conservation Specialist come out to their single- or multi-family homes and assess indoor and outdoor water usage for ways to save water and money.

CAW promoted Water Wise House Calls through several means: newspaper and radio ads, approaching customers who visited the office to make payments, and targeting customers who had high water bills. Due to the new rate structure that began in February 2010, many customers who exceeded their allotments saw significantly higher bills. This resulted in many Water Wise House Calls to help these customers. In fact, approximately fifty percent of all Water Wise House Calls were the result of referrals from customers with high water bills. Complete residential audits were conducted to determine the cause of the high bills and to also assist the customer in reducing their water usage. Many of these customers had toilet and irrigation leaks. After the audit, such customers were referred to the call center to provide the necessary documentation that the leaks were repaired so that they could receive adjustments on their bills.

In addition, California American Water created a door hanger that is left with customers who register high usage on their water meters identified through our meter reading and billing system. Most customers are not home during the verification of high meter readings, so a conservation door hanger is left at the customer's home that encourages customers to call the conservation local number to assist in searching for leaks and/or identifying why there is excessive usage.

For each residential audit, the portfolio of services offered included an indoor audit, outdoor audit, individualized annual watering schedule, installation or provision of water saving devices, final audit report, as well as additional services outlined below. California American Water is also proud to say that it provided customers with a specific appointment time instead of a one to four hour window as may be common among other water purveyors and utilities.

The indoor audits consisted of inspecting all water using fixtures and appliances for leaks, and measuring showerhead and faucet flow rates. Conservation staff in 2009 automatically offered to directly install low flow showerheads and low flow aerators for all customers

The outdoor audits included a demonstration of how to read the water meter, calculation of water use, and how to identify irrigation system leaks. The customer's irrigation system was also evaluated to identify irrigation station leaks and other inefficiencies. California American Water conservation staff has identified irrigation leaks such as broken heads, over spraying and clogged heads, as common inefficiencies in irrigation systems. Additionally, many of the customers were running their sprinkler systems too long.

When requested, CAW conservation staff assisted customers by properly adjusting their irrigation controllers to meet the water needs of the plants and to irrigate in compliance with MPWMD's two day per week watering schedule. Watering schedules considered the local weather conditions, type of irrigation system, and vegetation at the home. Conservation staff provided the customer with individualized watering schedules that assisted the reduction of water usage.

Water Wise House Calls on site audit usually averaged between one and four hours depending on the number of the indoor water fixtures and outdoor landscaping. Larger properties including multi-residential customers required two conservation specialists. Analyzing the collected field data and creating the report usually averaged between one and two hours. The total average time to complete the onsite audit and the report was approximately four to five hours.

CAW conservation staff also offered information to customers on the various rebates that were offered through the Monterey Peninsula Water Management District's rebate program to evaluate the effectiveness of the outreach program. Roughly one-third of the audits were generated from California American Water's outreach program, specifically through customer letters, bill inserts, newspaper ads, rebate brochure. The audit reports also included recommendations on utilizing the rebate program for the replacement of specific appliances at customers' homes.

Each customer was sent a detailed personalized report with the following information and items:

- Assessment of indoor and outdoor water usage.
- Projected water savings if the customer upgrades fixtures and appliances.
- An individualized water budget along with visual charts identifying potential savings and comparing actual usage versus water budget.
- Landscape evaluation worksheet with a check list of recommendations and system improvements to improve watering efficiency.
- Recommended site specific monthly irrigation schedule based on customer's landscape water requirements.
- Customer evaluation form of the free service.
- Rebate application forms.
- Educational material and any additional water savings devices and tools applicable to help the customer save water at their home.

The Water Wise House Call program was monitored by including an evaluation form along with a pre-stamped envelope in its customer report package. The survey form included questions regarding the service and asked the customer to rank on a scale of one to five the most and least useful components of the package. Customers who did not return the survey were called by the Conservation Intern, who then asked the questions from the survey. Forty-nine surveys were completed and customers gave very positive feedback on the service.

The customer evaluation surveys received from the Water Wise House Calls service showed high customer appreciation. Comments included on the evaluation form acknowledged that the staff was courteous, helpful and knowledgeable:

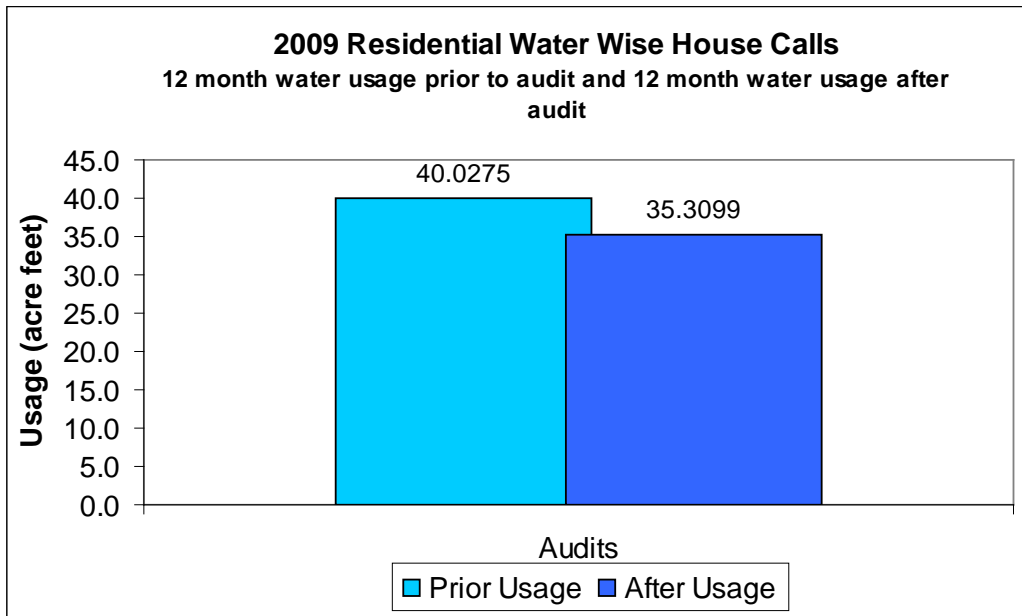
- "Very prompt, professional."
- "I will recommend this service to my friends!"
- "Learned a lot of things to save water and \$\$"
- "Great service and great representative!"
- "I will encourage friends and neighbors to use this service. Many thanks to Mr. Borrego! He was very professional and thorough—a real credit to your company."
- "Very personable, patient, professional."
- "Information is invaluable—thank you."

California American Water, as required by the Conservation Settlement, tracked audit results and efforts in an Excel data base. The data base contains estimated savings from equipment provided, 12 months of prior usage and 12 months of usage after a customer received an audit or a rebate, including labor hours to complete an audit, recommendations and the number and type of water consumption fixtures provided. Estimated savings of the type of each device installed were also included on the spreadsheet (Attachment 1).

There were no costs for the Water Waste House Call program in 2010, not including the labor and related overhead expenses for the audits that were completed by internal Conservation staff.

California American Water's Water Wise House Calls showed 12-month water savings to be 4.7 acre feet of water for participating customers. There were 92 audits and of those, 60 accounts showed water savings in the 12 months after the audit.

Note: Some of the data provided did not have the complete 12 months prior and/or 12 months after usage. The data used only included the usage that had a month to compare.



	Prior Usage	After Usage	Actual Savings	% Reduction	# of Audits	# with Lower Usage	% Saving
Audits	40.0275	35.3099	-4.7176	-11.79%	92	60	65%

Residential Plumbing Retrofit

California American Water provided residential customers with various free water savings devices including showerheads, faucet aerators for the bathroom and kitchen, leak detection tablets/kits and outdoor water saving tools, such as hose nozzles that automatically shut off when not in use. In 2010, California American Water tracked the distribution of the various water savings devices to identify the total number of each device distributed and where or how they were distributed to customers. For all conservation related events, customers who received water conserving devices were required to provide service addresses. This process helped to ensure

that California American Water customers – as the ones who had paid into the program – were the ones who benefitted from the program.

The various devices were distributed to California American Water customers in a variety of means including but not limited to:

- Community events (at Company booth/display)
- California American Water Front Desk (walk-in customers)
- On-site Audits
- Upon customer request
- Special giveaway offer (through the Front Desk staff) advertised in the residential customer’s monthly water bills.

In addition to the standard devices listed under the CUWCC’s former BMP 2 requirements, California American Water also offered a variety of outdoor devices. In 2010, the total number of each type of water saving device distributed to California American Water residential customers in Monterey are listed in the following table.

Name of measure, as listed in Decision or Settlement	# of units / activities	\$ per unit, activity, etc.	Total \$ spent	Estimated water savings per unit per year	Unit lifespan	Estimated Annual measure savings (AFY)	Estimated Lifetime measure savings (AF)
Showerheads	2,721	\$5.50	-	-	5	3.35	16.76
Faucet Aerators	4666	\$0.40	-	-	5	1.57	7.84
Leak Detection tablets	1700	\$0.06	-	-	5	0.24	1.22
Shower Timers	1903	\$1.65	-	unknown	5	unknown	unknown
Moister Meters	1111	\$2.50	-	unknown	5	unknown	unknown
Total	12101	\$2.02	\$29,794	-	5	5.16	25.82

MPMWMD also provided water saving devices to customers on the Monterey Peninsula as described in the MPWMD Conservation Activities section of this report.

Large Landscape Audits and Water Budgets

California American Water and the Monterey Peninsula Water Management District diligently worked together to continue to complete the landscape water audits and budgets as required by MPWMD’s Regulation XV, Rule 172. This was a top priority in 2010.

Each new water year, beginning in October, California American Water identifies new customers who require landscape water audits and budgets. These are customers whose water usage averages at least 320 units (measured in 10 cubic feet) per month, have a separate irrigation meter, or whose properties are 3 acres or greater. These select customers are required to adhere to their budgets during Stage 2 Water Conservation under Rule 14.1.1. The audit involves an on-site-analysis of existing plant types and locations, soil types, existing irrigation, and watering practices and equipment. The CLIA then determines a watering budget based on those factors and efficient water use and makes recommendations for improvement to the irrigation system.

In 2010, a major effort was conducted by both California American Water and the Monterey Peninsula Water Management District to get customers into compliance with Rule 172.

Customers not responding to the initial request for an audit were mailed reminder notices. This was followed with personal call that included information about potential fines for noncompliance. CAW upgraded its billing system in February of 2010 to enable use of the monthly budget allotment as the basis for billing dedicated irrigation metered customers. Dedicated irrigation customers who stayed within their budgets were billed at the first tier; any excess usage was billed at the second tier.

CAW staff entered the reported landscape budgets for residential customers into a spreadsheet to monitor the usage of high users and to be prepared in the event that higher stages of the conservation plan require customers to stay within their budgets or face fines from the MPWMD.

The Landscape Water Audits and Landscape Water Budgets contracts were administered by the MPWMD. In 2010, a total of 230 landscape audits and water budgets were completed by the Certified Landscape Irrigation Auditors contracted by MPWMD. The totals in Table 12 reflect the total potential savings reported for implementation of recommendations, which include those reports paid for by Monterey as well as those pay for by the MPWMD.

The conservation settlement provided the Monterey Peninsula Water Management District with a budget of \$475,000 to complete the landscape audits. Due to an increase of the number of landscape water audits and budgets required, and also due to the requirement that residents in the areas of Hidden Hills and Bishop complete landscape audits, the funding was expended prior to completion of the required audits. California American Water agreed to additional funding of \$140,000 from its conservation budget to assist the MPWMD with completing high priority landscape water audits in 2010. The total amount reimbursed to the MPWMD was \$601,395.85.

At the beginning of the new water year in October 2010, California American Water reviewed its records to identify customers who have met the criteria to receive a landscape audits and budget that have not had an audit and budget in the past. At the beginning of Water Year 2011 in October 2010, there were 34 customers who exceeded the threshold of 320 units or more on an average monthly basis, seven customers who also exceeded 320 units with lot sizes of three acres or greater and 60 customers with dedicated irrigation meters. The increase in the number of dedicated irrigation meters is due to the discovery of accounts that were previously thought to be commercial accounts and that were corrected identified during the commercial survey data collection as serving landscaping only. There were also accounts that had previously not met the threshold for an audit and that had increased use in Water Year 2010.

Since the funding of MPWMD's budget for contracted landscape audits has been exhausted, these audits will be completed pending approved funding by the California Public Utilities Commission as a components of the 2012-2014 General Rate Case.

Landscape Grant Program

In 2010, California American Water developed and began implementing its new Landscape Grant Program to reduce the water demand of municipal properties through projects to change landscaping and upgrade irrigation systems. California American Water marketed the large landscape grant program for replacement of turf on city property with low water use landscaping or synthetic grass, and/or for the installation of water saving irrigation technology. The grant award aims to provide funding for a demonstration project with high visibility, water savings, exemplary landscaping, and/or use of water saving-irrigation technology. In late September, letters outlining the program were sent to the cities of Monterey, Pacific Grove,

Seaside, Sand City, Carmel-by-the-Sea, and Del Rey Oaks. The same letter was sent to the Presidio of Monterey in mid-December after the Presidio asked to be included. The program is currently in the beginning stage of the implementation in 2011, and the company has received 12 bids from 5 public authority customers to date.

The program offers \$125,000 to be divided among local cities, as well as the Presidio of Monterey—a local Army installation. In late September, letters outlining the program were sent to the cities of Monterey, Pacific Grove, Seaside, Sand City, Carmel-by-the-Sea, and Del Rey Oaks. The same letter was sent to the Presidio in mid-December after they requested to be included.

In late December 2010 and early January 2011, Monterey, Pacific Grove, Seaside, Carmel-by-the-Sea, and the Presidio all submitted proposals for landscape changes. (Sand City and Del Rey Oaks did not submit proposals.) The proposals included such changes as replacing turf with drought-tolerant plants and replacing pop-up spray heads with drip irrigation.

The requirements for the proposal include:

Proposal information:

- Name of city.
- Name and contact information for the city employee who will be managing the project.
- Site address (or addresses if adjacent sites are to be treated as one project).
- Water service account number (or numbers if adjacent sites are to be treated as one project).
- Description and map of proposed landscaping.
- An itemized budget for labor, equipment, and plants.
- A timeframe with start and end dates for the project.
- A maintenance plan detailing who will check on the equipment and plants and how often.
- Estimated water savings, calculated by taking the difference between the Estimated Applied Water Requirement (Rule 172) for the existing and the proposed landscaping.

For the description and map of the proposed landscaping, please include:

- An irrigation plan with devices and flow rates
- A landscape plan with the names, sizes, and locations of plants
- A hydrozone plan with plants grouped by watering need, need for sun or shade, and any slopes

Requirements:

- MP Rotators & Drip Systems
- Rain and soil moisture sensors
- Maintenance of the landscaping

In March and April of 2011, Conservation staff met with representatives from each of the municipalities and visited the sites for which landscape changes were proposed. The pertinent landscaping, irrigation, and meters were inspected to identify the existing system and confirm

the service connection. In April, the municipalities were requested to submit final proposals with more information for final approval or denial before alterations begin to be made.

Commercial, Institutional & Industrial (CII) Audits

In October of 2009, California American Water contracted with Water Wise to conduct commercial, institutional, and industrial audits and implemented the new program in 2010. In 2010, WaterWise produced 29 CII audits with an estimated savings of 47.17 acre feet following the implementation of the audit recommendations.

California American Water was selective in choosing sites for CII audits. In 2010, California American Water, through its upgraded billing system, discovered there were approximately 376 customers who exceeded their annual assigned water allotments, In order to achieve the greatest potential water savings, non-residential customers who exceeded their monthly billing allotments were given top priority in being selected for audits. To also ensure CII audits were offered to customers with the greatest need, California American Water as part of its process of selecting potential candidates, the Monterey Peninsula Water Management District reserached their data base for any previous conservation retrofit requirements.

Customers were given audit reports that focused on applicable water-saving devices, and that estimated water and cost savings and the 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. California American Water conservation staff followed up 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 they had been provided the report and agreeing to provide a copy of the audit report the MPWMD.

In addition, California American Water collaborated with the Monterey Peninsula Water Management to assist in implementing the MPWMD's school retrofit program. The schools in the company's service are high water users and the goal is to reduce a significant level of water usage and then to track the actual savings over a three-year time period.

California American Water and MPWMD staff, met with the Superintendents of the Monterey Peninsula Unified School District (MPUSD) and the Pacific Grove Unified School District (PGUSD) after indoor and landscape audits were completed on the highest use schools. Stephanie Pintar, MPWMD Water Demand Manager, and Joe DiMaggio, CAW Water Conservation Supervisor, reviewed the reports and offered funding for school retrofits.

Water saving retrofits in the MPUSD schools are expected to be completed in 2011. Retrofits within the PGUSD are currently on hold pending permitting of several construction projects that have not received the required Water Permits. PGUSD has also indicated a desire to retain Water Use Credits available for retrofits done at PGUSD's expense and may not choose to participate in the School Retrofit Program. Information about retrofits undertaken at MPUSD will be reported in the 2011 Water Conservation Program Annual Report.

Conservation Intern

In December of 2009, California American Water hired a conservation intern to assist with a variety of tasks relating to conservation programs. The conservation intern's duties have been to:

- Develop and run the Landscape Grant Program
- Develop the Rain Sensor Installation Program
- Review audit reports for accuracy and meet with non-residential customers, along with the Conservation Supervisor, in order to review the reports with the customers
- Maintain data and information for annual BMP (conservation) reporting
- Enter customer information and generate reports and program analysis
- Assist customers with their questions regarding conservation programs and allotments
- Call customers to inquire about the helpfulness of their Water Wise House Calls
- Assist with miscellaneous administrative tasks

Non Residential Water Billing Allotment Survey Data Collection for Existing Customers

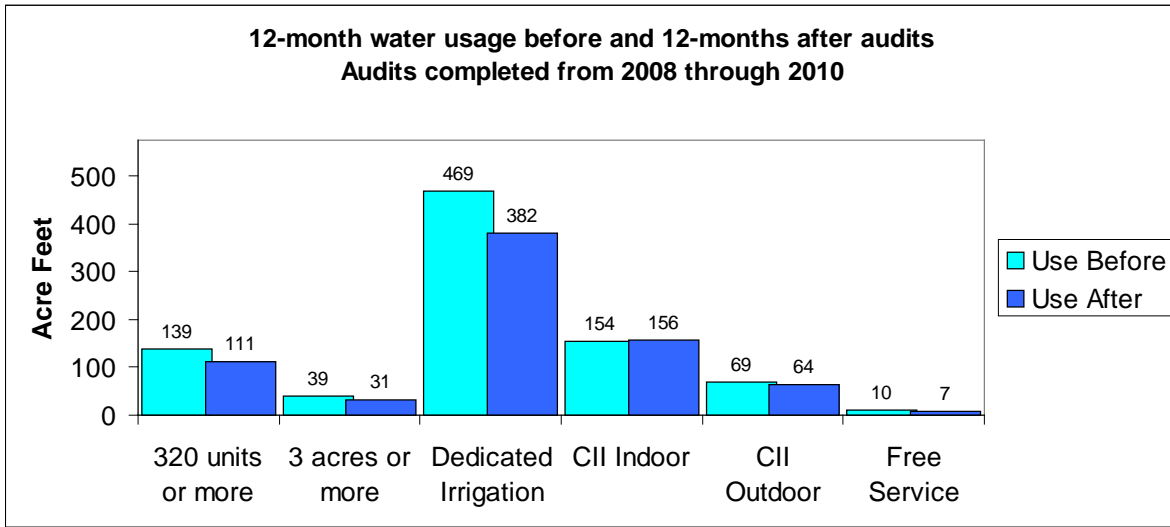
California American Water in 2010 updated over 1,000 existing non-residential customer surveys that may have been outdated since 1999, when the establishment of allotments was created as a basis for monthly billing. Over the years, non-residential customers have been issued surveys to update their allotment to ensure accurate and fair billing and to encourage water conservation. It was discovered that over the years, many customers did not return their surveys even after several attempts.

A plan was then developed by California American Water to collect and update the survey on site. As we met customers in the field for on site survey collection, we found the Monterey commercial customers very cooperative and willing to join us in our efforts to conserve water and reduce water usage. All available resources at our disposal were used to complete our project utilizing conservation staff and two additional employees from our distribution department

The assignment of water allotments is unique and requires special attention and handling at the local level. To ensure assignment of future water allotments is completed for all new commercial businesses or the transfer of ownership of existing businesses, new business generated calls from the Call Center in Alton, Illinois are automatically transferred to the local office. A water conservation specialist will review the account and collect survey data on site to ensure accurate and fair billing.

Actual Water Savings for Rebates, Landscape Audits, and CII Audits

California American Water per the conservation settlement agreement is required to include an electronic spreadsheet that provides 12 months of prior usage for a customer and 12 months of usage after a customer receives an audit or a rebate. The following tables below describe the actual water savings for these programs. The actual water savings for the rebates reflect year 2009 since twelve months of after usage is collected during the months of 2010.



	320 units or more	3 acres or more	Dedicated Irrigation	CII Indoor	CII Outdoor	Free Service	Total
Use Before	139	39	469	154	69	10	831
Use After	111	31	382	156	64	7	706
Savings	28	8	87	-2	5	3	125
% Reduction	20%	21%	19%	-1%	7%	30%	15%
# of Audits	129	31	141	28	12	5	346
# Using less	92	27	121	12	7	3	262
Less water used	32.67	8.80	91.80	8.65	7.99	2.95	153
# Using more	24	4	18	16	5	2	69
More water used	5.16	1.24	4.96	10.70	3.20	0.49	26

Notes

- Audits completed in the period of the past three years have all seen a reduction in water usage at the respective sites, except for the CII Indoor audits. CII Indoor audits, as well as audits for CII outdoor and Free Service customers, were only started in the second half of 2010, and thus have limited usage figures. It will take more time to get a complete picture of the savings for these audits.
- The savings displayed only account for savings in the 12 months after the completion of the respective audit. For audits completed more than 12 months ago, any continued savings at those sites are not listed here.
- The majority of CII Outdoor audits had companion CII Indoor audits, resulting in the usage and savings for those accounts being listed twice. In order to adjust for this repetition, the amount used by those accounts was deleted from the Total Use Before cells and the Total Use After cells.
- As of the submittal of this report, there is one CII Indoor audit and one Free Service audit that was completed in 2011. They are not included in the summary, but are listed in the particular sheets pertinent to those audit categories. As a result, the savings in this summary and in those specific sheets show slightly different results.

- Another factor that may have played a role in water savings was a rate change. In February 2010 there was a dramatic rate change made for all accounts. This may have lead to more savings happening during the months following the rate change.

Rate Change Impact Analysis – Landscape Audits

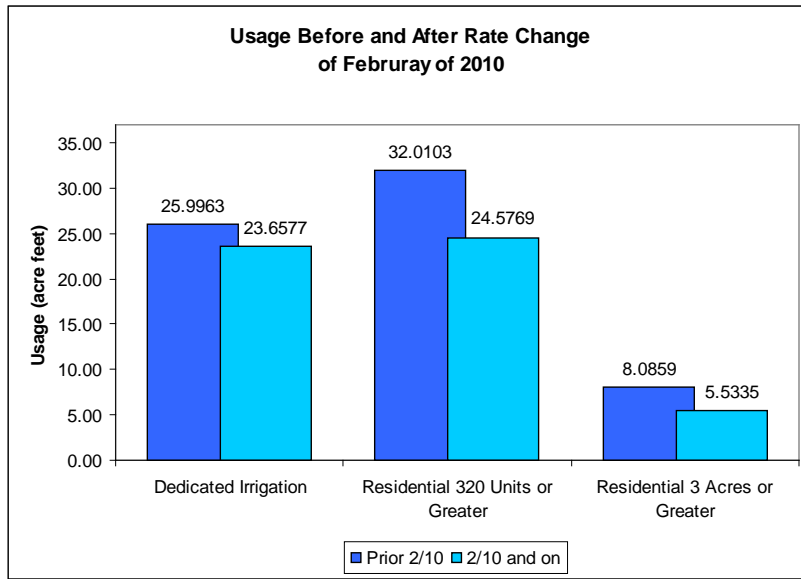
California American Water's analysis of the required landscape audits (2008 through 2010) indicate there was a savings of 123 acre feet of actual consumption twelve months after the audits were completed. The first chart describes the actual savings of water prior to and after the rate increase and rate structure change for customers who had audits completed before June 2009 for each of the categories. The second chart describes usage prior to the audits versus usage after the audit prior to the rate change of 2010. The third chart describes the water savings after the audit versus the savings after the rate change. Attachment 5 contains the supporting analysis.

California American Water in February of 2010 upgraded its billing system to further encourage conservation and dramatically increased the rate of water for the 4th and 5th tier of its 5 tiered residential rate structure. Dedicated irrigation metered customers continued to have a two-tiered rate structure, however the rate at the first and second tier automatically doubled. Customers in the area of Bishop and Hidden Hills were converted to the per capita rate structure in 2009 used for Monterey Main customers.

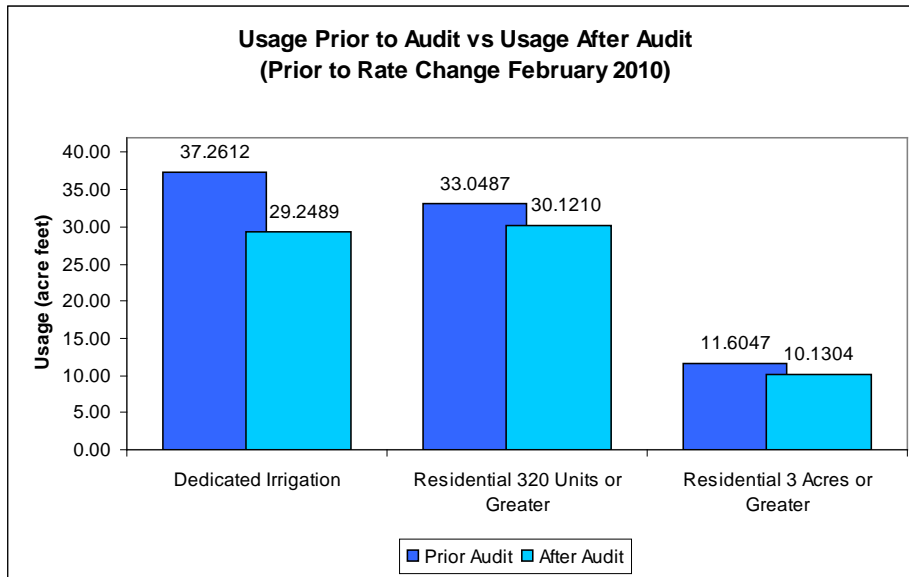
Water savings actually increased for residential customers using 320 units or greater per month and accounts with 3 acres or greater due to the rate increase. The monetary factor was a great influence for these customers to reduce usage and follow the recommendations in the audit report and make changes. Dedicated irrigation metered accounts showed more savings after they had received their audit report instead of the rate increase which was a surprise. These customers may have made changes prior to the rate change and thus not have additional water to save. This is a great indicator that the certified professional auditors hired by the MPWMD, who meet on site with the customer's landscaper, are communicating best practices for landscape efficiency.

The landscape audit is a very effective tool in reducing consumption and encouraging customers to be more landscape efficient. Other factors which also encouraged the reduction of usage is the change in the per capita rate design and the increase of water rates which occurred in 2010, workshops sponsored by the MPWMD and CAW, rebates, public relations, etc.

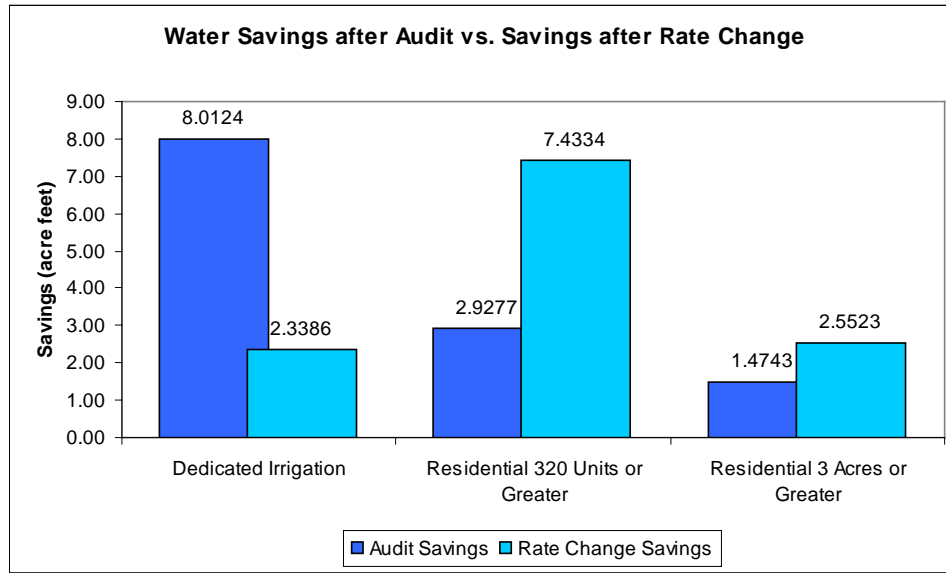
Please note this analysis was taken from a small group of each category of the landscape audit completed prior to June 2009 to compare before and after the February rate change.



Audit Category	Prior 2/10	2/10 and on	Savings Difference	% Difference
Dedicated Irrigation	25.9963	23.6577	2.3386	9%
Residential 320 Units or Greater	32.0103	24.5769	7.4334	23%
Residential 3 Acres or Greater	8.0859	5.5335	2.5523	32%
	66.0925	53.7681	12.3244	19%



Audit Category	Prior Audit	After Audit	Savings Difference	% Difference
Dedicated Irrigation	37.2612	29.2489	8.0124	22%
Residential 320 Units or Greater	33.0487	30.1210	2.9277	9%
Residential 3 Acres or Greater	11.6047	10.1304	1.4743	13%
	81.9146	69.5002	12.4144	15%



Rebates

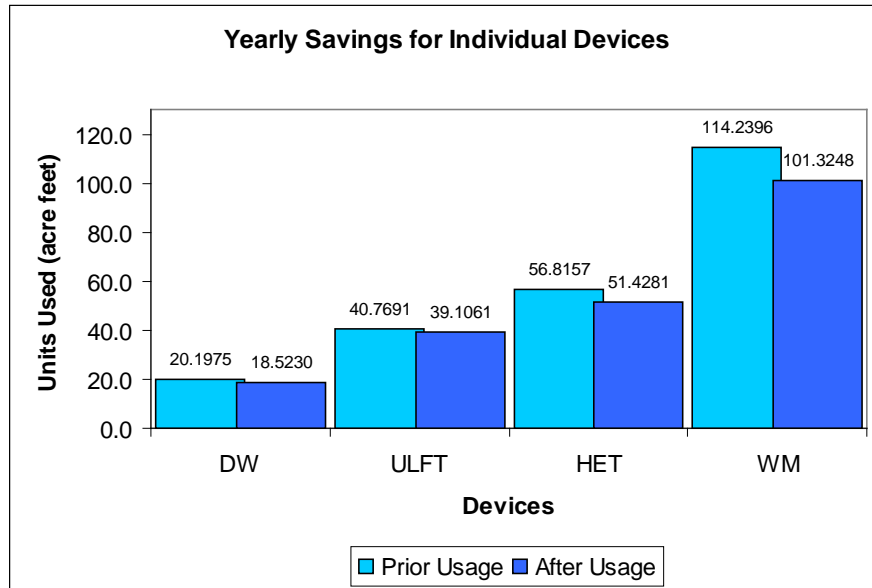
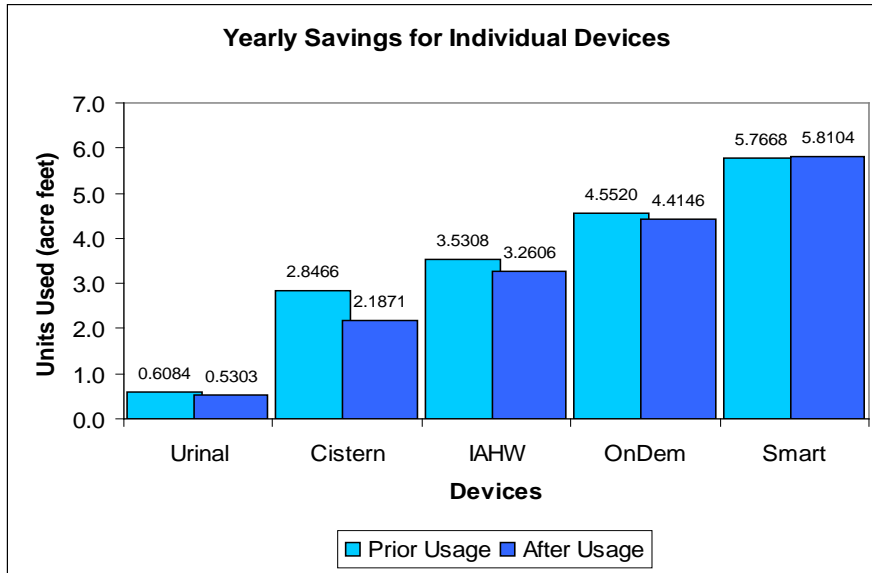
The rebates program is funded out of California American Water-Monterey's surcharge, but administered through MPWDM.

The CPUC approved \$924,925 for rebates in the 2009-2011 Conservation Budget. By January 2011, MPWMD had processed close to \$900,000 in rebates from the GRC. MPWMD notified California American Water of the need to file an Advice Letter with the CPUC to secure additional funding in the amount of \$250,000 for water conservation Rebates in the Monterey County District. The Settlement Agreement for the Conservation Program Budget (Section 5-C) allowed California American Water to "file an advice letter to increase the budget by the rate of overspending, or \$250,000, whichever is smaller." California American Water filed the Advice Letter in January 2011 and additional funding of \$250,000 was approved in February 2011. Information about rebates issued during 2010 is shown as Table 3.

Name of measure, as listed in Decision or Settlement	# of units / activities	\$ per unit, activity, etc.	Total \$ spent	Estimated water savings per unit per year	Unit lifespan (years)	Estimated Annual measure savings (AFY)	Estimated Lifetime measure savings (AF)
SFD ULFT	18	\$100.00	\$1,800.00	0.023	25	0.414	10.35
SFD-HET	752	\$200.00	\$141,724.14	0.030	25	22.560	564.00
SFD HE DW	367	\$125.00	\$45,875.00	0.003	10	1.101	11.01
SFD HEW 5.0 or less Water Factor	830	\$250.00	\$205,950.00	0.016	10	13.363	133.63
SFD ULF WM-28 gallons	8	\$150.00	\$1,200.00	0.016	10	0.129	1.29
IAHW Systems	28	\$200.00	\$5,447.61	0.005	10	0.140	1.40
On Demand	10	\$100.00	\$1,100.00	0.005	10	0.050	0.50
Cisterns	32		\$13,736.25	0.000	10	0.000	0.00
Smart Controllers	16	\$120.00	\$2,250.00	0.000	10	0.000	0.00
Residential Zero Water Urinals	0	\$200.00	\$0.00	0.000	25	0.000	0.00

Table 3. Monterey County District Rebates							
Name of measure, as listed in Decision or Settlement	# of units / activities	\$ per unit, activity, etc.	Total \$ spent	Estimated water savings per unit per year	Unit lifespan (years)	Estimated Annual measure savings (AFY)	Estimated Lifetime measure savings (AF)
Residential Rain Sensors	13	\$25.00	\$515.00	0.000	10	0.000	0.00
Residential Soil Sensors	1	\$25.00	\$25.00	0.000	10	0.000	0.00
Lawn Removal & Replacement	72		\$128,781.61	0.149	10	10.700	107.00
Rotating Sprinkler Nozzles	51	\$0.50	\$60.50	0.000	10	0.000	0.00
MFD ULFT	1	\$100.00	\$120.50	0.023	25	0.023	0.58
MFD-HET	445	\$200.00	\$74,760.83	0.036	25	16.105	402.63
MFD HE DW	17	\$125.00	\$3,750.00	0.003	10	0.051	0.51
MFD HEW 5.0 or less Water Factor	35	\$250.00	\$7,825.00	0.016	14	0.564	7.89
MFD Rain Sensors	1	\$25.00	\$0.00	0.000	10	0.000	0.00
MFD ULF WM-28 gallons	9	\$150.00	\$1,250.00	0.016	10	0.145	1.45
MFD HEW Common Laundry	0	\$450.00	\$0.00	0.000	10	0.000	0.00
CII ULF	1	\$100.00	\$75.00	0.023	10	0.023	0.23
CII HET	190	\$200.00	\$20,483.32	0.042	25	7.932	198.30
CII HEW	10	\$250.00	\$18,112.00	0.117	14	1.166	16.33
CII HE DW	2	\$125.00	\$250.00	0.003	10	0.006	0.06
CII Smart Controller	3	\$120.00	\$1,070.00	0.000	10	0.000	0.00
CII Zero Water Urinals	11	\$200.00	\$3,300.00	0.092	10	1.013	10.13
CII Rotating Hose Nozzles	40	\$0.50	\$55.00	0.000	10	0.000	0.00
Rebate Refund			-\$1,625.00				0.00
HE DW- Courtesy	5	\$125.00	\$625.00	0.003	10	0.015	0.15
HEW- Courtesy	27	\$250.00	\$6,950.00	0.017	10	0.451	4.51
HET- Courtesy	22	\$200.00	\$4,073.77	0.025	10	0.550	5.50
IAHW- Courtesy	2	\$200.00	\$200.00	0.005	10	0.010	0.10
Cisterns- Courtesy	1	\$25.00	\$25.00	0.000	10	0.000	0.00
Lawn- Courtesy	4		\$15,363.53	0.511	10	2.045	20.45
Smart Controllers- Courtesy	3	\$120.00	\$370.00	0.000	10	0.000	0.00
Total	3,027		\$705,499.06	1.179		78.556	1497.99

Clearly, the Rebate Program is a successful conservation project that results in significant water savings and contributes to the community's compliance with regulatory restrictions. MPWMD has projected that rebate funds will be fully expended by May 2011. At that time, the program will be shut down pending funding by the CPUC in the 2012-2014 GRC.



Rebate Type	Prior Usage	After Usage	Actual Savings	% Reduction	# of Rebates	# of Lower Usage	% Saving
Washing Machine	118.3494	105.7668	-12.5826	-10.63%	483	268	55%
High Efficiency Toilet (1.28 g)	59.5108	53.8154	-5.6954	-9.57%	173	102	59%
Ultra Low Flow Toilet (1.6 g)	40.6703	38.9991	-1.6712	-4.11%	70	44	63%
Dishwasher	21.6116	18.8944	-2.7172	-12.57%	95	60	63%
Smart Irrigation	5.7668	5.8104	0.0436	0.76%	14	5	36%
On Demand	4.6782	4.5381	-0.1401	-2.99%	14	8	57%
Instant Access Hot Water	3.7328	3.4417	-0.2911	-7.80%	23	12	52%
Cistern	2.9017	2.2300	-0.6717	-23.15%	13	11	85%
Zero Urinal	0.6084	0.5303	-0.0781	-12.84%	3	1	33%
Totals	257.8300	234.0262	-23.8038	-9.23%	888	511	58%

The data collected for rebates issued in 2009 includes accounts that were activated after the beginning of the prior 12 months and accounts that were closed before 12 months. Data was only used if there was a prior month and an after month. There was a total of 888 rebates identified and 511 of those accounts were seen to have saved water. There was a total savings of 23.08 acre feet of documented savings. Three zero water use urinals installed and only one account showed a savings. Of 13 cisterns installed, 11 resulted in water savings. Cistern installation resulted in a 23.15% reduction in water use. Of 23 instant access hot water installations, 12 saved water. Of 14 on-demand hot water installations, there were eight saved water. Of 14 smart irrigation installations, only four showed a savings. Smart irrigation is the only rebate that did not show a savings in water and may be the result of incorrect programming. Of 95 dishwashers installed, there were 60 that saved water. Accounts with dishwashers installed showed a 12.57% reduction in water use. Of 70 ultra low flow toilets installed, there were 44 that saved water. Ultra low flow toilets that were installed showed a 4.11% reduction in water use. Of 173 high efficiency toilets installed, there were 102 that saved water. High efficiency toilets that were installed showed a 9.57% reduction in water usage. Of 483 washing machines installed, there were 268 that saved water. Washing machines that were installed showed a 10.83% reduction in water usage.

Please note that not all the rebates approved by the MPWMD in 2009 are listed in this analysis. In the City of Carmel, addresses are by location and not by a numbered street address as most areas are. California American Water service addresses in Carmel are listed as meter locations. Due to this reason, it was very difficult to locate accounts in the company's data base. In order to provide a complete analysis of all rebates, the MPWMD has added a request for customer account numbers on the Rebate Application.

School Education and Outreach

In 2010, 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 Advisory Committee (WAC) and outreach to students at community events offering free educational materials.

Water Awareness Committee (WAC) Activities

California American Water and the Monterey Peninsula Water Management District coordinated with the local Water Awareness Committee (WAC) to offer school education opportunities and outreach. Activities included class presentations as well as interactive school assemblies on water conservation. Both California American Water and the MPWMD have been members of WAC since 1988 and are major contributors to many of the WAC school outreach and general education programs.

In-School Education - Zun Zun Performances

California American Water and the Monterey Peninsula Water Management District, through the Monterey County Water Awareness Committee, offered school assembly presentations by the Zun Zun performance group. In 2010, Zun Zun provided 10 performances, 45 minutes each, within California American Water's service territory. The performances reached a total of 1,960 students and covered topics such as the water cycle, watershed, indoor conservation and conservation tips, including fixing leaks. In 2009, the following schools were visited by the Zun Zun Group:

- Foothill School (5-6-10) 2 performances
- Water Awareness Day presentation (5-14-10) 2 performances
- La Mesa Elementary School (9-14-10) 2 performances
- San Carlos School (9-24-10) 2 performances
- Foothill School (9-29-10) 2 performances

In addition, California American Water participated in Pacific Grove Middle School's Annual Career Day in March of 2010. The conservation staff joined other area professionals in the Monterey County to discuss work opportunities for the students. The event was hosted by the Parent Teacher Association and the Chamber of Commerce. Lead Water Conservation Specialist Ray Dolor educated the students by describing their daily duties and the responsibilities involved in conserving water. Water saving devices and shower timers were distributed to the students to take home to their parents.

Free Water Usage

Section 8 of the settlement provides that California American Water will review the deeds and /or contracts of the "free water" customers and will take reasonable and necessary action to limit the customers' usage to the amount of water that is legally available under the deeds/contracts, and will also determine whether it can negotiate termination of free service and if so, at what cost.

Review of deeds/contracts for customers receiving free water

California American Water has performed a review of deeds and/or contracts for customers receiving "free water" in exchange for rights-of-way and/or transfer of riparian water rights to the Carmel River. In 2010, all 'free water" customers were mailed a letter along with a survey to be completed to comply with the Monterey Peninsula Water Management District's Regulation XV as well as California Public Utilities Commission Rule 14.1.1. Each customer was required to complete the survey and return it in the postage paid envelope that was provided. The regulation requires that residential customers report the number of residents in the home, the lot size and the number of large animals. Commercial customers are required to report the business type along with a measurement unit to assign an allotment. Survey information is required in the event rationing occurs.

Customers were also offered free residential, commercial and landscape audits. In addition, any of these residential customers whose usage averaged 320 units or more per month or who have a lot size of 3 acres or greater, or who have a dedicated irrigation meter were required to complete a landscape irrigation audit and budget as required by MPWMD's Regulation XV, Rule 172. Landscape irrigation audits with assigned monthly budgets were completed by 4 private residences. The audit reports included recommendations of site-specific fixture replacement in order to conserve water. A copy of the rebate application was also included in the report.

Free water service customers will soon be receiving a statement each month detailing the amount of water they use on their properties so they can monitor their usage. Customers who were required to complete a landscape audit and water budget per MPWMD's Regulation XV will be mailed the landscape irrigation audits reports and have an opportunity to review the report and recommendations. In the event CAW should move to higher stages of conservation, the free service water customer will be required to adhere to the budget or face fines from the MPMWD.

Public Information Program

California American Water-Monterey County District has participated in a variety of public outreach meetings, community events, and educational campaigns.

Website

In 2010, California American Water helped its customers to access information on available conservation programs by maintaining its joint conservation website with the Monterey Peninsula Water Management District. The site serves as a one-stop, easy-to-navigate 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 was publicized through direct mail and print advertising efforts and periodically listed on information inserts included in California American Water customers' bills.

Public Education

California American Water and the Monterey Peninsula Water Management District continued their joint campaign to spread awareness of water-saving programs and the need for water conservation.

The campaign included a series of print advertisements in local daily and weekly newspapers. Ad themes included available rebates, the Water Wise House Call program and reminders to shut off sprinklers during the rainy season. Advertising efforts resulted in increased applications for rebates and participation in the home water audit program. The advertisements reached an audience of more than 35,000 local residents, which roughly equates to the number of residential water connections California American Water services within the boundaries of the Monterey Peninsula Water Management District.

Local water users were also mailed a brochure detailing the rebate program, including descriptions of eligible appliances and irrigation systems. The mailing contained information on how to apply for rebates for water saving appliances, turf replacement and smart irrigation methods as well as information on other conservation programs including water wise house calls and available water saving devices.

Throughout the year, California American Water and the Monterey Peninsula Water Management sponsored daily messages on local public radio station, KAZU FM. Messages included promotion of water wise house calls, water wise landscaping and residential grey water systems, as well as reminders to fix household leaks, and turn off irrigation systems during the rainy season.

In addition, customers of California American Water received a conservation bill insert dedicated exclusively to rebate programs, listing application information and rebate amounts for high efficiency toilets, zero consumption urinals, high efficiency washing machines, dishwashers, smart controllers, rain sensors, lawn removal and replacement, rainwater harvesting and instant access hot water systems. The insert also contained information on water wise house calls and California American Water and the Monterey Peninsula Water Management District's joint conservation website.

California American Water and the Monterey Peninsula Water Management District also held booths at several local community events, offering local water users the opportunity to interact with water conservation experts and take advantage of free water-saving devices, such as low-flow shower heads, hose nozzles, sink aerators, moisture meters and more. Events included the Pacific Grove Good 'Ol Days, Monterey Peninsula College's Earth Day, the Monterey Bay Green Building Expo, the Monterey County Home Show and in collaboration with the Water Awareness Committee of Monterey County, Water Awareness Day at the Del Monte Shopping Center. In addition, California American Water conservation specialists also gave a conservation presentation to the Monterey Peninsula Volunteer Services, and participated in the Monterey Public Library's "Make a Splash" program centered around water.

California American Water also promoted participation in national programs such as the Environmental Protection Agency's Fix a Leak Week and National Water Awareness Month, during which California American Water authored an Opinion Editorial on water conservation for the Monterey County Herald.

Additional customer information pieces were created including three brochures: one dedicated to the Water Wise House Call program, including indoor and outdoor water conservation tips, a second describing the seven stages of the community Water Conservation and Rationing Plan and a third, which provided a fill-in-the-blank chart enabling customers to calculate their daily and weekly indoor water use and see how much water can be saved through use of water efficient technology and practices.

In-school education efforts were accomplished in partnership with the Water Awareness Committee of Monterey County and the Monterey Regional Water Pollution Control Agency (MRWPCA). Assembly presentations were delivered to elementary schools throughout California American Water's service territory and Monterey Peninsula Water Management District boundaries, concerning the water cycle, local need for water conservation, awareness of how much water we use and valuable ways to save water. Showerheads were provided for students who did not have efficient showers as part of a water science project led by MRWPCA.

MPWMD presented a monthly televised report on the joint Cal-Am/MPWMD conservation program. The monthly report included updates on compliance with regulatory restrictions, current drought status, past and future meetings, events, and training, conservation tips, rate updates, rebate facts, web links, and other conservation information.

All programs are conducted in partnership with the Monterey Peninsula Water Management District. Public outreach programs conducted in partnership with Water Awareness Committee of Monterey County.

This is summarized in Table 4 below:

Table 4. California American Water-Monterey County Public Information Program	
Item	Comments
Newsletter articles on conservation	None.
Flyers and/or brochures (total copies), bill stuffers, messages printed on bill, information packets.	38,000 rebate brochures direct mailed to customers; and 1 bill stuffer -- 38,000 copies, In addition, three informational brochures were produced on water wise house calls, calculating individual water use

	and potential savings, and the community Conservation and Rationing Plan – 2,500 copies of each were printed for distribution at the CAW and MPWMD business offices and at events.
Landscape water conservation media campaigns	Approximately 560 public radio announcements ; 47 newspaper ads
General water conservation information.	Approximately 940 public radio announcements; 53 newspaper ads
Website.	www.montereywaterinfo.org
Website - provide link to or list of qualified landscape professionals (WaterSense, California Landscape Contractors Association, Irrigation Association, etc.) and other helpful sites.	Links to: Alliance for water efficiency, WaterSense, American Council for a Water Efficient Economy
Direct mail or other notification to customer if water use is significantly higher than neighbors with similarly-sized lots.	None.
Booths at local fairs/events	Events included Pacific Grove Good 'Ol Days, Monterey Peninsula College's Earth Day, the Monterey Bay Green Building Expo, the Monterey County Home Show and Water Awareness Day.
Media outreach: news releases, editorial board visits, written editorials, newspaper contacts, television contacts, radio contacts, articles or stories resulting from outreach. Provide names of local media markets: newspaper, TV stations, radio stations reached via media outreach program during the reporting period	.4 press releases, 6 news articles, 1 opinion editorial: Monterey County Herald, Monterey County Weekly, Carmel Pine Cone, KAZU FM, KSBW TV, KION TV, KCBA TV, KSMS TV.
Water Conservation Gardens: involvement in a garden that promotes and educates the public about water-efficient landscaping and conservation techniques. May include "Corporate" or "business" sponsorship or memberships.	None.
Certification classes for professional landscape auditors	A free workshop for landscape professionals was hosted. Taught in English and Spanish

Weather-Adjusted Consumption in the Monterey County District

CAW staff produced an analysis of weather-adjusted consumption in the Monterey County District by calculating the acre feet consumed per rainfall inch (Attachment 3). As is expected, overall consumption is highest during the summer months lower during the winter months. Consumption also rises as rainfall decreases: from 2005 through 2010, consumption was highest

when rainfall was lowest (2007) and conversely, consumption was lowest when rainfall was highest (2010).

California American Water – Monterey County District 2011 Program Goals

California American Water has provided a detailed assessment of its plans for 2010. Table 3 provides a summary of the plans. The programs are then described and are based on the settlement agreement between California American Water, MPWMD, and the Division of Ratepayer’s Advocate.

Table 5. CAW Monterey County District: Summary of 2011 Program Goals

Program	Budget	Implementation Plan	Timeline
Residential Audits (Former BMP 1)	Labor Budget	Complete 200 SF and 10 MF audits	Offer audits throughout 2011.
Residential Plumbing Retrofit (Former BMP 2)	\$20,000	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 (BMP 5)	\$30,000	Install 25 Residential or Non Residential Rain sensors	Fall of 2011
Large Landscape Upgrade Grant Program (BMP 5)	\$125,000	Provide grants for expenses for equipment, materials, and/or installation to upgrade to conservation friendly landscapes	Late Summer-Fall of 2011
Public Outreach and Marketing Campaign (Former BMP 7)	\$317,000	Continue to support public awareness and participation in the organizations’ joint-conservation programs	Ongoing throughout 2011
Outreach and Education Seminars & Programs (Former BMP 7)	\$10,000	Continue to partner with Water Awareness Committee, continue to offer Landscape Irrigation Workshops, create conservation booklet, offer in-class presentations	Ongoing throughout 2011
Zun Zun Performances and WAC Activities (Former BMP 8)	\$8,000	Market schools in Summer of 2010 with events in the fall.	Performances in 2011 WAC ongoing.
CII Audits (Former BMP 9)	\$75,000	Offer CII Audits to 35 customers exceeding allotments and billed in higher tiers. MPWMD & CAW partners in School Retrofit Program.	Ongoing 2011
Conservation Intern(s) (Former BMP 12)	\$62,000	Conservation Intern continues to assist with regulatory reporting requirements, planning, creation and implementation of conservation programs, processing of audits, and assist customers.	Ongoing 2011

Residential Audits

California American Water in 2011 will continue to provide Water Wise House calls to its customers. Even though customer response was low in the past year, it is expected the number of customer requests for this service will increase due the new rate structure and the increase in rates, especially during the summer months when usage is the highest. Additional efforts to promote customer participation will include sending letters to customers who are billed at the 4th and 5th tier during the winter and summer months, door hangers for customers who have high

bills identified through our billing system and flyers distributed to property managers who manage large multi-residential units. California American Water's conservation staff set a target goal of 200 single family audits and 10 multi-residential audits to be completed in 2011

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 also require customers to sign up to receive devices at events, front desk, etc. so the company can log the information and identify how most of the devices are distributed. The focus will be on the hospitality industry such as hotels, motels to convert hundreds of rooms bathroom aerators from 1.5 gallon per minute aerators to 0.5 gallon per minute 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 gallon per minute (gpm) showerheads, 1.0gpm kitchen faucet aerators, and 0.50gpm bathroom aerators. In addition, California American Water will promote the 1.5 gpm showerhead 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 as required for the Best Management Practices (BMP) report to the California Urban Water Conservation Council (CUWCC).

Large Landscape Upgrade Grant Program

California American Water's Large Landscape Upgrade Grant Program of \$125,000 was developed and offered to the cities in 2010. 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. Proposals from the cities were received by California American Water in early 2011.

In 2011, California American Water's objective is to fund 5 to 7 landscape grant projects in the summer at a total program cost of \$125,000. All candidates for the landscape grant program are required to submit their proposed detailed landscape plans by May 15, 2011. The proposed sites will be selected based on projected water savings and the cost of water.

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 and the CUWCC annually to monitor the success of the program, We expect all sites chosen to completely upgraded by year end 2011.

Rain Sensor Installation Program

California American Water is in the process of finalizing a contract with Water Wise to provide direct installation of rain sensors to residential, commercial and public authority customers. The estimated cost is \$150 per customer, which includes \$40 labor for 2.5 hours plus the cost of each rain sensor estimated at \$50. The funds were originally approved in the conservation settlement for the weather based irrigation controller (WBIC) pilot study, however, CAW staff discovered the insignificant associated water savings with WBICs from analyzing MPWMD's data on WBIC rebates; CAW staff also observed that most dedicated irrigation customers were already watering below their water budgets; and last, a study conducted by the Metropolitan Water District of

Southern California and the East Bay Municipal Utility District found that 41.8% of customers increased their irrigation water use after a smart controller was installed.

Customer's selected for the program will be first public authority customers such as cities and schools with dedicated irrigation meters who lack funding to make upgrades, and then residential customers who are billed in the 4th and 5th tier of California American Water's residential 5 tiered per capita rate structure.

CII Audits

California American Water in 2011 will continue to provide commercial, institutional and industrial audits, and plans to complete up to 25 CII audits in 2011 utilizing experienced contracted consultants.

The focus will continue to be auditing customers who exceed their monthly billing allotments and the potential to achieve the greatest potential water savings. In addition, California American Water will seek to provide CII audits to customers that do not currently have a commercial factor used as a basis for billing for establishing an allotment for billing.

Currently, most non-residential customers have allotments based on 52 business types which are assigned a measurement type and a corresponding allotment factor. The factors are derived from a study that was prepared for the Monterey Peninsula Water Management District in 1992. Samples were obtained for each category pertaining to type of business, hours, square footage, employees and other details which might distinguish the business from others. For an example, an auto repair shop is one of the business types and the measurement type associated with its square foot. These factors are used as a basis for billing our customers. An annual allotment is established using the various business types and divided into monthly allotments based on historical usage. Non-residential customers have a three-tiered rate structure where 100% of the allotment is billed at tier one, 15% of the allotment is billed at tier two and any excess usage is billed at tier three.

The customers that do not currently have a commercial factor are:

- Coffee Houses such as Starbucks
- Industrial Laundromats (We have 2 in Monterey)
- Car Washes (Drive through and Self Serve)
- Pet Stores with Animal Grooming
- Wholesale Grocers
- Horse Stables
- Water Treatment/Filtration
- Ice Cream and Yogurt Establishments
- Funeral Homes
- Aquariums
- Boat Cleaning
- Seafood Processing

Monterey Peninsula Water Management District: Programs funded by the Conservation Surcharge

The programs funded by the Conservation Surcharge during 2010 are summarized in the table on the next page and described in detail in the narrative that follows.

Table 6. Monterey Peninsula Water Management District: Summary of Programs

Program	Program Costs	Need For Program	Nature of Activity	Measurable Goal	Results	Estimate Savings
Water Auditor Training	\$3,212	Limited non-agency Certified Landscape Irrigation Auditors (CLIA)	Training and Irrigation Association (IA) Certified Landscape Irrigation Auditor (CLIA) testing	At least 15 participants in each session	11 participants in each of 2 sessions, with 11 testing for CLIA	Not quantifiable
Water Conservation Representative	\$71,614 at actual cost	One staff position with focus on water waste enforcement and conservation.	Water waste enforcement and follow-up, public outreach events, property inspections, audits, etc.	Immediate response to water waste and 100% compliance within 1-30 days	All water waste violations were verified compliant within timeline	Not quantifiable
Water Conservation Seminars	\$3,779	Provide education and opportunity for hands-on learning. Focus is on reducing outdoor and CII water use.	Seminars and workshops focused on outdoor water use reductions including rainwater harvesting and graywater use	At least 10 attendees at each workshop	6 workshops conducted with up to 40 participants	Not quantifiable
Gardensoft CD Reprints	\$1,000 ²	Program became available as web application in 2009 and MPWMD has licensed product for web use, rather than reprinting	Monterey area-specific gardening software designed to assist customers with water efficient plant choices for landscaping.	Provide notice of software availability at all events	4,753 unique hits on software in 2010	Not quantifiable
Super Saver Recognition Program	None	Acknowledge extraordinary conservation efforts to encourage others to follow	Featured water efficient customer on Conservation Website.	Recognize one customer every 3 months	1 Super Saver was acknowledged	Not quantifiable
Water Audits & Budgets	\$427,706	Funds completion of the remaining required Large Landscape irrigation audits and budgets to achieve compliance with Regulation XV.	Landscape water audits & preparation of a Landscape Water Budget by a CLIA. Budget compliance is required in Stages 2-4 of 14.1.1.	Large Residential Water Users completed. Dedicated irrigation meters >9 unit/mo. completed.	229 landscape audits completed in 2010	2009 actual water savings were approximately
Linen/Towel Reuse Program	\$9794	Supports hotel room notification of linen and towel reuse program.	Reprints of cards for placement in rooms	Reduction in laundry, and water and energy consumption	Ongoing program	Up to 101 AFA @ 60% occupancy

² MPWMD paid additional cost of \$4,250 for software license

Table 6. Monterey Peninsula Water Management District: Summary of Programs

Program	Program Costs	Need For Program	Nature of Activity	Measurable Goal	Results	Estimate Savings
CIMIS Station Maintenance	None	CIMIS data is used by weather-based irrigation controllers to schedule irrigation times.	MPWMD sponsors two CIMIS stations in Zone 2/3 and Zone 3.	Reduced outdoor water use during low evapotranspiration	Data is available on CIMIS website	Not quantifiable
Conservation Devices	\$7,059	Provide conservation devices to customers to reduce consumption	Purchased automatic shut-off hose nozzles	Reduce use of running hose for irrigation	See Conservation Devices Section	18.94 AF
Conservation Printed Material	\$1,750	The printed material program acquires updates and distributes water conservation materials to the public via local retailers, organizations, and other means of notification.	Purchase and distribute pertinent print material promoting water conservation	Support BMP programs, provide at 3+ events, and reduce water usage.	MPWMD distributed window clings to visitor-serving commercial and distributed information at community events	Not quantifiable
Water Waste Prohibitions		Eliminate water running to waste and other forms of water waste.	Notification to property occupant and follow up to ensure corrections as needed.	Achieve compliance within reasonable time period	64 instances of Water Waste were compliant within reasonable time	Not quantifiable

Water Auditor Training

The second Certified Landscape Irrigation Auditor (CLIA) training took place on the Monterey Peninsula in October 2010. The training consisted of two related classes instructed by Andy Slack of Spot Water Management. The two classes were *Landscape Irrigation Auditor* and *Predicting and Estimating Landscape Water Use*. Andy Slack is a CLIA and a professional trainer for the Irrigation Association. He is also contracted with MPWMD to conduct Landscape Water Audits and Landscape Water Budgets. There were fifteen participants in the two classes, and eight participants tested for the CLIA certification at the completion of the courses. The Irrigation Association will not provide the number of passing CLIA applicants, making the success rate of the training unavailable.

Water Auditor Training will be repeated in 2011. Future training outreach will feature information about local requirements for landscape Water Audits and Landscape Water Budgets. In addition to the fact that Landscape Water Audits and Landscape Water Budgets required by MPWMD Regulation XV and California American Water Rule 14.1.1 must be completed by a CLIA, the relatively recent adoption of the State Model Water Efficient Landscape Ordinance and amendments to MPWMD rules implementing stricter outdoor regulations for new construction will increase the demand for these services. Although the current water situation limits the number of new homes and business currently being built in the main California American Water system, there are several new subdivisions using water from other sources that are being considered an currently under construction and there is potential for new construction in the

Laguna Seca systems of California American Water. There are other opportunities for construction in the California American Water system based on the use of Entitlement water from Pebble Beach Company and from Sand City. The combination of required certification and demand for CLIA services should increase the local participation level in coming years.

CLIA training makes sense from the perspective that locally trained CLIA work in the community and provide the benefits of their training to their clients. This in turn will result in higher water use efficiency and less waste. Instruction on landscape design and maintenance received by participants of the CLIA training is beneficial to the water company and the customer.

Water Conservation Representative

The Conservation Representative position was included in MPWMD's budget request with the full support of California American Water and is an ongoing position. Funding for the position was included in the MPWMD portion of the conservation surcharge in the 2005 General Rate Case (D.06-11-050). The position is primarily responsible for water waste enforcement, including responding to reports of water waste and providing enforcement and site investigations. The position also conducts conservation inspections and community outreach, provides information and educates the public on the need for water conservation and water demand management; assists other agencies and the general public in understanding District requirements and rules; performs inspections on properties to ensure compliance with water efficiency standards, rules and regulations; organizes and oversees water efficiency training and seminars; and assists in research, analysis, and reporting on water demand management and conservation programs.

Water Conservation Seminars

MPWMD has focused its training agenda to help provide the tools necessary for gardeners, landscapers, builders, homeowners, plumbers and others to maximize water efficiencies. During 2010, MPWMD used Conservation Surcharge funds to facilitate two Laundry to Landscape workshops and two American Rainwater Catchment Systems Association courses. Both courses were extremely popular and warrant future scheduling.

Garden Soft Water Wise Gardening for Monterey County CD Reprints

During the hearings on A.07-12-010, MPWMD requested funding for reprints of a highly desirable landscape planning software that was designed specifically for Monterey County. The software was developed with sponsorships from California American Water and MPWMD through the Water Awareness Committee of Monterey County. It provides photos of various types of local gardens examples, including front and back yards, hillsides, raised planters, shrub and perennial borders, walkways, parking strips, patio areas, theme gardens, native gardens, decks, fences, gates, surfaces, benches, trellises, low-maintenance gardens, and Mediterranean style gardens. There are hot-links embedded within the garden images of plants which link to photography, plant or material identification, and related information. Users are able to search for plants relevant to specific Monterey County areas by botanical name or common name, by look or color, by general variety, and much more. A brief questionnaire leads the user to the appropriate plants to solve their gardening wants or needs. A series of information pages are

provided that list watering tips on a month-by-month basis and general lawn and planting area instructions for each month of the year.

In 2008, Garden Soft made its software available on the web for \$5,000 per year. In March 2009, MPWMD purchased a one-year license to feature the software on its website and on the joint MPWMD/California American Water conservation website. MPWMD also allowed other local water agencies such as the Marina Coast Water District and the Water Awareness Committee of Monterey County to link to its site to offer the software. The license has been renewed for 2011.

Super Saver Recognition

This program was intended to provide public recognition of people and businesses that have done extraordinary measures to conserve water. The program has not yet been fully implemented due to higher priority programs.

Water Audits/Budgets

Landscape Water Audits and Landscape Water Budgets completed by a CLIA are required for specific users by District Rule No. 172. Landscape Water Audits and Landscape Water Budgets are offered at no charge to all water users of California American Water that have dedicated landscape meters, large irrigated areas over three acres, and large residential water users that average more than 320 units or 23,936 gallons of water per month of use. The audit involves an on-site analysis of existing plant types and locations, soil types, existing irrigation and watering practices and equipment. The CLIA then determines a watering budget based on those factors and efficient water use. Stage 2 Water Conservation (and higher stages) implements enforcement of Landscape Water Budgets to maintain regulatory compliance. During Stage 2, all water users required to have a Landscape Water Budget must manage outdoor irrigation within their budget. Use in excess of the Landscape Water Budget is considered Water Waste and is subject to Water Waste fees and enforcement. Every October (i.e., beginning of a new Water Year), California American Water reviews their customer consumption database to determine which customers are subject to the audit/budget requirement.

During 2010, MPWMD continued its contracts with three contractors that had CLIA on staff: Pacific Water Management, Inc., Spot Water Management, Inc., and WaterWise Consulting, Inc. Over the course of the year, 230 audits were completed. It was evident that a significant delay often exists between the time a property is turned over to an auditor for action and the time the final Water Audit and Water Budget report is completed. These delays usually result from difficulties in contacting and arranging inspections with the appropriate personnel. Municipal and large CII sites may also require several visits and investigative work to locate the meters and the irrigation that is supplied by each meter.

Linen/Towel Reuse Program

The towel/linen program budget is used to reprint cards for use in hotel rooms and for restaurant "drinking water served only on request" tent cards. In 2007, MPWMD and California American Water funded the design and printing of durable placards to encourage the reuse of towels and sheets. The program included a partnership with the Association of Monterey Bay Area Governments and the Monterey County Hospitality Association, among others. Participation in

this program became mandatory on the Monterey Peninsula on January 1, 2010. MPWMD reprinted the durable recycled plastic products in 2010 at a cost of \$9,794.

During 2010, MPWMD distributed the following:

- Conservation Towel Cards – 1,491 pieces (pc.).
- Conservation Water Service Cards – 1,085 pc.
- Conservation Linen Cards – 1,699 pc.

The California Irrigation Management Information System (CIMIS)

During 2010, MPWMD staff continued its coordination with Department of Water Resources staff and local golf course operators and the City of Pacific Grove to secure locations for California Irrigation Management Information System (CIMIS) stations in Evapotranspiration (ET) Zones 2 and 3. The locations will provide full coverage ETo data for the Monterey Peninsula. MPWMD oversees one station that is on the border of Zone 3 in Carmel Valley that provides data for mid-Peninsula water users. The location in Zone 2 is in the coastal area and the location in Zone 3 is inland. Due to delays in execution of documents needed to complete the installation process, MPWMD plans to have the two additional sites operational in 2011. Hardware for this project was purchased in 2010.

School Retrofit Program

MPWMD's School Retrofit Program is designed to grant money to educational facilities on the Monterey Peninsula to achieve cost-effective water-saving retrofits that might otherwise not occur due to budget constraints or conflicting funding priorities. The first step is to audit the indoor and outdoor water uses of each school. The audit report includes cost/benefit analysis and cost/water savings that can be anticipated by completing retrofits. Funding may be used for replacement of older toilets with dual-flush models, replacement of water using urinals with zero water consumption urinals, low-flow and self-closing faucets and showers, low-flow pre-rinse spray valves and dishwashers, Smart irrigation system controllers, cistern installations turf replacement when feasible, etc. This program has potential for significant water savings, as many of the facilities are more than 40 years old and generally have older and inefficient water fixtures.

During 2010, audits were completed for the top water using schools in the Monterey Peninsula Unified School District (MPUSD) and at the San Carlos School in Monterey. In 2011, MPWMD will fund retrofits for these schools. San Carlos School is particularly intriguing, as it offers a perfect opportunity for a rainwater harvesting system that would be accessible as a demonstration site. The school is located in downtown Monterey and has optimal roof area and landscaping. A demonstration project is planned for 2011.

Retrofits within the MPUSD include basic plumbing fixtures and irrigation system retrofits. Most of the schools in the MPUSD are older and offer opportunities for significant water savings. A challenge to this program is working around school schedules to achieve retrofits during vacation periods.

MPWMD staff presented a poster on the School Retrofit Program at the WaterSmart Innovations Conference in October 2010. The conference is attended by over 1,000 water efficiency professionals from around the world. Monterey Peninsula's program received attention for

identifying challenges and opportunities. Comments from other areas with similar programs mirrored the comments of MPWMD regarding coordination and timing.

Cash for Grass

The District implemented its “Cash for Grass” program as a component of the Rebate Program on January 1, 2010. The initial budget was \$45,000, which was expended before July 1, 2010. In May 2010, staff requested authorization from the Board and California American Water to roll the program into the general Rebate Program. The initial success of the program warranted continuing the program as a rebate.

The Lawn Removal Rebate Program was revised in 2011 and will be highlighted in the 2011 report.

Conservation Devices and Materials

MPWMD provided customers with various free water savings devices including 1.5 gpm showerheads, 0.5 gpm faucet aerators for the bathroom and 1.5 gpm for the kitchen, leak detection tablets/kits and outdoor water saving tools. In 2010, MPWMD tracked the distribution of the various water savings devices to identify the total number of each device distributed and where or how they were distributed to customers. For all conservation related events, customers who received water conserving devices were verified as California American Water customers.

The various devices are distributed at a number of events, including but not limited to:

- Community events
- MPWMD Front Desk (walk-in customers)
- On-site inspections
- Upon customer request
- During presentations
- During water waste enforcement visits

In addition to the standard devices listed under the CUWCC’s BMP 2 requirements, MPWMD also offered a variety of outdoor devices to help improve water use efficiency. In 2010, the total number of each type of water saving device was distributed to by MPWMD in Monterey:

- Showerheads – 1,021 (estimate 26.546 AFA)
- Shower timers -- 331
- Hand held (with hose) showerheads – 28 (estimate 0.728 AFA)
- Kitchen faucet aerators – 315 (estimate 3.15 AFA)
- Bathroom faucet aerators – 811 (estimate 8.11 AFA)
- Leak detection kits/dye tablets – 527
- Garden hose spray nozzle – 452
- Soil moisture probes – 743
- Hose timer -- 44

- Rain sensors – 90
- Rain gauges – 520

Monterey Peninsula Water Management District: Programs funded outside of the Conservation Surcharge

The following projects were funded by the MPWMD budget during 2010. MPWMD operates on a July-June fiscal year. MPWMD's funding is summarized below.

Water Conservation Website

The water conservation website, www.montereywaterinfo.org is hosted by MPWMD with full editing capabilities by both California American Water and MPWMD staff. There is limited number of staff authorized to make changes to the website to prevent loss of quality control. The goal of the website is to be information and factual, with a focus on the Monterey Peninsula's water conservation programs. During 2010, MPWMD staff provided services to update and maintain the information on the joint website.

Garden Soft Water Wise Gardening for Monterey County

MPWMD funded \$2,000 toward a one-year license to use the Water Wise Gardening for Monterey County as a web-based application. Detailed information about this project is discussed in the previous section (i.e., MPWMD Programs Funded by the Conservation Surcharge).

Rebate Program Applications

MPWMD purchased 2,000 Rebate Program applications in 2010 at a cost of \$400. The documents are 2-part NCR (no carbon required) legal-sized forms.

Personnel Budget

The Water Demand Division which is primarily tasked with water conservation and demand management programs employs a staff of five. MPWMD budgeted approximately \$542,000 in labor costs for Fiscal Year 2010-2011, including an analyst position that was not filled. Additional costs are associated with overhead, transportation/vehicle expenses, office supplies, training and travel. MPWMD funds the administration of the Rebate Program, including one Conservation Technician who determines rebate qualifications have been met and arranges for verification inspections and deed restrictions as needed, an accountant who processes the rebate checks, and an office specialist who mails the checks. During 2010, MPWMD hired a temporary full-time employee to assist with processing applications and data entry resulting from the overwhelming success of the Rebate Program.

Other Expenses Covered by MPWMD

A primary project that MPWMD undertakes is enforcement of its conservation requirements for new construction, remodels/additions, change of ownership/use, expansion of use, visit serving facilities and water waste. MPWMD sends one to two inspectors into the field daily to conduct

site inspections. Non-compliance is followed up with enforcement procedures until compliance is achieved.

MPWMD inspected 1,639 properties in 2010, 902 of which were inspected for change of title compliance and 737 inspections were conducted to verify compliance with Water Permit conditions or were pre-permit inspections to document existing water fixtures. During 2010, 1,349 properties transferred ownership in the District. Two hundred thirty-four of the 902 properties inspected for transfer of title were not previously in the District's database. Properties that triggered change of title requirements that were not inspected were exempt from the inspection process because an inspection had been performed within the past five years.³ Water Permit inspections verify that required retrofits were completed, although most Water Permits issued at this time do not result in significant water savings and are usually the result of offsets (credits) whereby the applicant has installed highly water efficient fixtures to offset new water fixtures.

Monterey Peninsula Water Management District: Ordinances and Rule Changes

During 2010, MPWMD implemented three ordinances that impacted the Conservation Program. The first, Ordinance No. 142 (adopted January 28, 2010) amended and clarified the Expanded Water Conservation and Standby Rationing Plan (Regulation XV). The ordinance primarily amended Rules 165, 166 and 167 to add an appealable mechanism to avoid water rationing if convincing evidence exists to support the possibility that lower stages of Regulation XV would achieve water use reductions sufficient to comply with a Cease and Desist Order. The second, Ordinance No. 144 (adopted August 16, 2010) amended the Rebate Program to add Rebates for Graywater Irrigation Systems and numerous Non-Residential retrofits, increased Rebate amounts for several retrofits and increased the time between retrofit and Rebate application from 90 to 120 days to account for appliance order dates and installation times in remodels. Rebates are only issued for retrofits not required by the District. Finally, the third ordinance made amendments to the Water Permit process (Regulation II) and to the Water Conservation Regulation XIV. The amendments addressed the reduction in outdoor water demand that occurs when a Cistern is installed to supply water for New Construction of a New Structure. The ordinance also made several additional amendments to the Water Permit process and to the Water Conservation regulation, adding clarifications regarding compliance with the State Model Water Efficient Landscape Ordinance. Copies of these ordinances are provided as Attachments 6, 7, and 8.

³ It should be noted that in 2011, MPWMD began tracking voluntary retrofit to High Efficiency Toilets (HET) for properties that remodel, are new construction or that transfer title. A majority of properties appear to be voluntarily installing HET as the toilet preference. MPWMD will report on this trend in the 2011 report.

Rebate Program Modifications in 2010

Ordinance No. 144 (effective September 1, 2010) expanded and amended the Rebate Program to achieve greater water savings. The ordinance added the following Qualifying Devices⁴ to Rule 141, Water Conservation Rebates: High Efficiency Connectionless Steamers (estimated savings of 0.25AFA), High Efficiency Commercial Dishwashers (estimated savings of 0.2 to 0.369 AFA), Dry Vacuum Pumps (estimated savings of 0.64 AFA), Graywater Irrigation Systems (estimated savings fluctuate depending on existing equipment and other variables), Cooling Tower pH/Conductivity Controllers (estimated savings of up to 4 AFA), retrofitting of continuous water flow medical steam sterilizers with water tempering devices (estimated savings of 1.4 AFA), Ultra High Efficiency Toilet (i.e., <1.0 gallons per flush with WaterSense certification through the Environmental Protection Agency) at a flush rate that saves 37 percent more water than a standard High Efficiency Toilet.

Ordinance No. 144 also modified the Rebate amounts for the following Qualifying Devices: The maximum Cistern storage capacity increased from 3,000 to 25,000 gallons, the maximum Lawn Rebate increased from 2,000 to 5,000 square-feet⁵, Pint Urinals increased from \$250 to \$300, Rotating Sprinkler Nozzles increased from \$0.50 to \$4.00 with a minimum purchase of ten sprinkler nozzles, Water Efficient Ice Machines increased from \$450 to \$500 and X-ray film processor recirculation systems increased from \$2,000 to \$3,500.

There were several other changes made to MPWMD Rule 141 (Water Conservation Rebates) by Ordinance No. 144. The ordinance added an eligibility condition for Cistern Rebates that the Site must have sufficient roof area to provide the runoff to fill the Cisterns after “first flush” during a normal Water Year. In a significant addition to the program, the Graywater Irrigation System Rebate was added with specific Conditions of Approval that must be met prior to approval of the Rebate. The Rebate application process was amended to increase the time for which an application can be submitted from 90 days to 120 days from the date of purchase of Qualifying Devices to accommodate purchasers of Qualifying Devices that may purchase but not install the device for more than 90 days due to circumstances beyond their control. Finally, the ordinance amended the rule’s limitation of twenty (20) toilets on Non-Residential Qualifying Properties to provide an exception for Qualifying Properties owned and operated by a California Non-Profit Corporations.

In recommending the proposed Rebates, staff researched other water efficiency Rebate Programs and reviewed the water savings and cost per acre-foot of water savings (cost/benefit). The Non-Residential Rebates adopted in Ordinance No. 244 were all highly cost-effective. The Rebate amounts and water savings were supported through extensive research and documentation. Rebates adopted are comparable to Rebates offered by other agencies. The proposed Rebates were reviewed by California American Water and provided as a courtesy to the Division of Ratepayer Advocates prior to consideration. The Rebates adopted in Ordinance No. 144 are

⁴ “Qualifying Devices” are fixtures and/or retrofits that meet the criteria to qualify for a Rebate.

⁵ The Lawn Rebate portion of the Rebate Program was revised in April 2011 by Ordinance No. 148 and now includes a prequalification process and stringent application guidelines. Additional amendments to the Rebate Program are anticipated before January 2012. All amendments are provided to Division of Ratepayer Advocates prior to adoption.

proposed and recommended for continued funding in California American Water's pending 2012-2014 General Rate Case.

Monterey Peninsula Water Management District 2011 Program Goals

In 2011, MPWMD will continue to focus its efforts to develop and implement regulations and strategies to reduce outdoor consumption. The current efforts of MPWMD and California American Water have been quite successful in reducing upper tier (i.e., Tier 4 and Tier 5) water use. Outdoor water use continues to receive recognition as the most likely place to achieve significant water savings on the Monterey Peninsula. MPWMD will also begin focusing efforts on educating the CII sectors about efficiency measures beyond toilet retrofits, including communication of the District's July 1, 2010, requirement for installation of water efficient pre-rinse spray valves. Table 5 depicts MPWMD's planned programs for 2011.

Table 7. MPWMD: Summary of 2011 Program Goals

Program	Funding	Budget	Implementation Plan	Timeline
CLIA training	CAW	\$5,000	Fall CLIA training in conjunction with another outdoor efficiency workshop	November 2011
CII Water Use Factor Update	MPWMD /CAW	\$18,500	Complete edits, adopt report and implement revised water use factors	By June 2011
School Retrofit Grant Program	CAW	\$225,000	Initiate retrofits in Monterey Unified School District schools and San Carlos School	By December 2011
Rebate Program	CAW	\$230,000	Continue and expand rebate program to rebate for cost-effective retrofits. MPWMD to provide administration. Wrap up program upon exhaustion of funds	May 2011
Super Saver Recognition	CAW	\$5,000	Recognize at least ten unique and extraordinary water conservation efforts on websites (MPWMD and Joint website) and in newspapers	By December 2011
Sponsor and/or participate in community water efficiency events	MPWMD	\$ 5,000	Provide sponsorship and staff outreach at local water efficiency-related events and conferences	Through Dec 2011
Water efficiency training and education	MPWMD	\$6,250	Sponsor Green Gardener, Laundry to Landscape and other outdoor water efficiency workshops	Through Dec 2011
Linen and Towel Program	MPWMD	\$0	Continue supporting program with existing inventory	Through Dec 2011
Water Wise Gardening for Monterey County (Garden Soft)	MPWMD /CAW	\$5,250	Annual license for web-based software.	April 2011
Conservation devices and publications	CAW	\$50,000	Purchase water conservation and efficiency devices and materials to provide to customers free or at reduced charge	As needed
CIMIS stations	MPWMD	\$500	Install CIMIS stations in ET Zone 1	June 2011
Revise landscape regulations to address small lots	MPWMD	Staff	Continue Technical Advisory Subcommittee meetings to ultimately develop and recommend amendments to local landscape regulations for new construction on small urban lots	By December 2011
Adopt revisions to Lawn Rebate program	MPWMD	Staff	Adopt revision to Regulation XIV to address shortcomings in current program	April 2011
Review and amend Rebate amounts	MPWMD	Staff	Adopt amendments to Rebate amounts (if needed) following review by Board Water Demand Committee.	September 2011

CLIA Training

MPWMD will sponsor the annual CLIA training during the Fall of 2011. Outreach for the program will include information about the State Model Water Efficient Landscape Ordinance. The ordinance, adopted by MPWMD in 2010, requires the services of CLIA.

CII Water Use Factor Update

California American Water and MPWMD agreed to “review and revise, as needed, commercial water use factors used in relation to Regulation XV” and Rule 14.1.1 as part of the settlement agreement on Phase I issues in A.07-12-010. The project (CII Water Use Factor Update) involves a study to verify the accuracy of the water use factors used to establish allotments.

California American Water has used the District’s Non-Residential Water Use Factors to establish baseline allotments for its customers since the tiered rates were implemented in 2000. The factors are used by the District to estimate potential water demand for new and expanding water uses when a Water Permit is issued. The factors are based on regional consumption averages by type of use and are utilized by multiplying measurements such as square-footage, restaurant seats, hotel rooms, etc. by the factor to obtain the theoretical water consumption of a project. The factors used by MPWMD and California American Water were last updated in 1991 and are out of date as they do not account for current water efficiency technology.

A&N Technical Services, Inc. received a contract in January 2010 to complete the study, with \$50,000 from MPWMD’s budget and \$1,560 from California American Water’s. A&N Technical Services has previous experience with the District and has a team of professionals with broad experience in the application of statistical modeling, conservation-oriented water rate design, demand estimation and environmental policy. Members of the technical staff have worked on projects for California American Water, the American Water Works Association Research Foundation, the United States Bureau of Reclamation, the United States Environmental Protection Agency, California Urban Water Agencies, the California Urban Water Conservation Council, and the California State Legislature.

School Retrofit Program

The School Retrofit Program is designed to grant money to educational facilities on the Monterey Peninsula to achieve cost-effective water-saving retrofits that might otherwise not occur due to budget constraints or conflicting funding priorities. During 2011, MPWMD will assist MPUSD and San Carlos School with achieving water saving retrofits. Other schools that are planning and implementing school gardens will be contacted regarding the potential for rainwater harvesting as a source of water for the gardens.

Rebate Program

Funding for the Rebate Program is expected to be expended by May 2011. MPWMD will notify the local retailers/wholesalers of plumbing and other Qualifying Devices as the program is completed. MPWMD is tracking Rebate expenditures on a daily basis. At the completion of the

program, new applications will be returned to applicants pending renewed funding in the 2012-2014 GRC.

Super Saver Recognition

This program recognizes people and businesses that have done something extraordinary or taken extraordinary measures to conserve water in their home or business. During 2011, MPWMD will collaborate with California American Water to solicit and identify individuals, groups, businesses and other entities who have undertaken unique and/or significant conservation efforts. These people will be recognized through public acknowledgment in print and web media.

Sponsor and/or Participate in Community Water Efficiency Events

During 2011, MPWMD will be a sponsor of the Water Awareness Day event at Del Monte Shopping Center, including manning a booth that features information about MPWMD's conservation programs and requirements and information about the Mitigation Program that includes fish rescues, river restoration and erosion control projects and groundwater monitoring and stream flow measuring. MPWMD will also highlight the Aquifer Storage and Recovery Project. Other outreach events planned for 2011 include the City of Monterey's Cutting Day, the City of Pacific Grove's Good Old Days, Earth Day at Monterey Peninsula College and the Naval Postgraduate School, the Community Open House at the Pebble Beach Community Services District, Monterey County Fair and the Green Building Expo. During these events, MPWMD collaborates with California American Water to provide regulatory information about conservation programs, whereas California American Water provides information about rates and other programs specific to its business. This effort has proven to be an excellent communication forum with many positive comments from the public.

Water Efficiency Training and Education

During 2011, MPWMD will be sponsoring a Monterey Bay Green Gardener Certification Program titled, "Ocean Friendly Landscaping." This is part of a continuing education series offers professional development and practical training in ecological landscaping methods, with a special emphasis on low-impact development (LID) practices that conserve water and energy and that reduce pesticide, nutrient, and sediment non-point source pollution from urban landscapes. The target audience of the Ocean Friendly Landscaping series includes Green Gardener alumni, landscape industry professionals or those aspiring to work in the landscape industry, and the general public with an interest in ecological horticulture.

MPWMD is also coordinating Laundry to Landscape graywater irrigation training. During 2011, a minimum of two Laundry to Landscape trainings will be provided for the public at no charge. Classes are presented through Ecology Action of Santa Cruz, the same trainer for the final Laundry to Landscape training in 2010. Sherry Lee Bryant of Ecology Action is a dynamic and entertaining trainer, and Sherry will be working with MPWMD again in 2011 with an exciting class on how to use washing machine graywater to irrigate the landscape. Advanced graywater system installation training will be scheduled in the future.

Linen and Towel Program

Mirror clings promoting water conservation were printed and distributed in 2010. MPWMD will continue to support distribution of mirror clings and other visitor-serving commercial signage that promotes water conservation during 2011. MPWMD will also be working with the Monterey County Hospitality Association and Chambers of Commerce during 2011 to educate the industry about the Linen and Towel Program and the MPWMD requirements for these programs, and will provide information about future rebate opportunities and conservation requirements.

Water Wise Gardening for Monterey County (Garden Soft)

MPWMD will continue to ensure that the web license is renewed during 2011. Funding for this software exceeds the amount available through the Conservation Surcharge.

Conservation Devices and Publications

MPWMD will be purchasing water conservation equipment and publications during 2011 that supports the community conservation effort. Purchases of equipment are done in consultation with California American Water. Both California American Water and MPWMD purchase give-away devices at the same price. The two agencies coordinate to ensure that sufficient stock is available to meet the demand of the customers.

CIMIS Stations

MPWMD has been delayed in completing the installation of CIMIS Stations at Laguna Seca Golf Ranch and the Pacific Grove Golf Course due to interruptions in signing the agreements. The agreements are acceptable and are expected to be signed in 2011. Completion of the installation of two new CIMIS stations is anticipated by October of 2011.

Revise Landscape Regulations to Address Small Lots

MPWMD's Technical Advisory Committee (TAC) has created a subcommittee to develop standardized landscape requirements for new construction that is not subject to the State's Model Water Efficiency Landscape Ordinance. In addition, the subcommittee is considering ways to incorporate storm water management into the regulations. The committee anticipates having a recommendation for MPWMD's Board of Directors before the end of the year.

Adopt Revisions to Lawn Rebate Program

After the first full year of the Lawn Removal Rebate program, it has become apparent that the program requires adjustment and further clarification. Based on field experiences and administration issues, and in consultation with other water agencies with Lawn Rebate Programs, MPWMD will consider and adopt an ordinance to implement additional regulation on the Lawn Rebate program. Information about amendments to the Rebate program will be provided in the 2011 report.

Review and Amend Rebate Amounts

In 2011, MPWMD will review the Rebate amounts and amend the Rebate program revisions to ensure maximum water savings. Rebates for High Efficiency Clothes Washers, High Efficiency Toilets and Lawn removals will be considered. MPWMD action on amendments to the Rebate Program is expected by October 2011.