

October 10, 2011

California American Water – Monterey 511 Forest Lodge Rd, Suite 100 Pacific Grove, CA 93950 amwater.com

Barbara Evoy, Division Chief Division of Water Rights State Water Resources Control Board 1001 I Street Sacramento, CA 95812

Re:

SWRCB Order WR 2009-0060, 4th Quarterly Report for the 2010-2011 Water Year Addressing Operations for the Period of July 1, 2011 to September 30, 2011.

Dear Ms. Evoy:

Pursuant to Condition Six of Order WR 2009-0060, this letter is California American Water's report for the fourth quarter of Water Year 2011 covering the period of July 1, 2011 to September 30, 2011. Each subsection of Condition Six is represented by a separate heading below. For ease of reference, the requirement of each subsection is summarized, followed by the requested information.

## Condition 6(a)

Condition 6(a) requires California American to provide monthly summaries of the quantity of water it diverts from the river.

#### Compliance with Condition 6(a):

Table One summarizes the water diverted from the Carmel River by month, including all water diverted to storage under Permit 20808A. This data is compiled from meter readings that are collected daily from California American Water's pumps, either through an employee manually reading each meter, or through an employee reading the data from the Supervisory Control and Data Acquisition ("SCADA") system. A California American Water employee manually enters those daily readings into a spreadsheet that is provided to the Monterey system General Manager. The spreadsheet is designed to automatically calculate the monthly total from the daily readings. At the end of each month, this daily summary is cross-checked against SCADA information that is separately maintained for each well.

Table One Monthly Carmel River Water Diversions		
Month	Quantity Diverted	
July 2011	670.4 AF	
August 2011	657.9 AF	
September 2011	596.3 AF	
Total	1,924.6 AF	

## Condition 6(b)

Condition 6(b) requires California American Water to provide monthly summaries of the quantity of ASR project water diverted from the river under Permit 20808A and stored in the Seaside groundwater basin. The monthly report is to state the quantity of water beneficially used under Permit 20808A and the current balance of water in storage.

## Compliance with Condition 6(b):

Table Two summarizes by month the quantity of ASR project water diverted from the Carmel River under Permit 20808A. This summary is from a spreadsheet e-mailed to the General Manager for California American Water's Monterey system by a Monterey Peninsula Water Management District employee each business day during the diversion season. This spreadsheet shows the gallons of water injected into each of the two injection wells. California American Water understands that the daily injection data is a manual reading of the meters on the injection pumps by a Monterey Peninsula Water Management District employee. This spreadsheet also contains a formula that estimates the number of acre-feet based on the gallons injected and also totals the daily readings for the month. The information in Table Two is taken directly from this spreadsheet.

The data regarding ASR water recovered is taken from the Quarterly Water Budget developed cooperatively between California American Water, the Monterey Peninsula Water Management District, NOAA Fisheries, and the California Department of Fish and Game, and represents an accounting of water withdrawn from the Seaside Groundwater Basin.

Table Two Monthly Water Diverted to Storage Under Permit 20808A and Storage Balance			
Month ASR Diverted to Storage Beneficial Use Storage Balance			
July 2011	0.0 AF	0.0 AF	1,117.4 AF
August 2011	0.0 AF	0.0 AF	1,117.4 AF
September 2011	0.0 AF	0.0 AF	1,117.4AF
Total	0.0 AF	0.0 AF	

#### Condition 6(c)

Condition 6(c) requires California American Water to provide monthly summaries of the quantity of water being produced by the Sand City desalination plant. The report is also to identify new service connections within Sand City and report the quantity of water being delivered to the new connections. The monthly report is also to specify the quantity of water used to reduce diversions from the river during the reporting period.

## Compliance with Condition 6(c):

Table Three lists the number of new connections in the City of Sand City by month for the reporting period. This information is taken from Attachment One. Attachment One is manually compiled by a California American Water employee from the water connection permits issued by the Monterey Peninsula Water Management District and subsequently provided to California American Water by prospective customers. If a listing on

Attachment One has no "Installed Date," the customer has provided California American Water with the water connection permit, but has not requested a meter to be installed.

Table Three New Connections Within the Sand City by Month	
Month Number of New Connections in Sand City	
July 2011 0	
August 2011	0
September 2011	0

Table Four summarizes by month the quantity of water produced by the Sand City desalination plant, the quantity of water used by new connections, and quantity of water used to reduce river diversions.

Table Four Sand City Desalination Facility Monthly Production and Product Allocation			
Month	Sand City Production	Water Used by New Connections	Water Used to Reduce River Diversions
July 2011	25.1 AF	0.0 AF	25.1 AF
August 2011	25.8 AF	0.0 AF	25.8 AF
September 2011	19.0 AF	0.0 AF	19.0 AF

# Condition 6(d)

Condition 6(d) requires California American Water to provide monthly summaries of the quantity of water saved by reducing system losses.

#### Compliance with Condition 6(d):

Water systems typically calculate losses using a 12-month running average to smooth seasonal variations in the data. Table Five lists the 12-month running average for Monterey Main System losses and compares the losses to an October 2008 through September 2009 base period. The 12-month running average is calculated by subtracting the cumulative metered consumption from the production volume shown in Table One. The cumulative metered consumption is based on the individual monthly meter readings and is obtained from a report generated by our accounting system. The Monterey system General Manager calculates the difference from these two numbers to arrive at the monthly system loss, and then calculates the 12-month running average from the monthly data.

Table Five 12-Month Running Average of Unaccounted For Water		
12 Month Period	System Losses	Savings Compared to Base Year
Oct 08 - Sept 09	1,276 AF	(base year)
Aug 10 – Jul11	1,530 AF	-254 AF
Sep 10 – Aug 11	1,463 AF	-187 AF
Oct 10 – Sept 11	1,449 AF	-173 AF

It is difficult to identify the actual components of unaccounted-for-water as it is a combination of system leaks and actual water use not captured by meters. A high priority is being given to identifying and repairing leaks, meter replacement, and infrastructure replacement. Table Six presents information on leaks detected and repaired during the reporting period. Each time a leak is detected, a California American Water repair crew responds to repair the leak. The assigned crew leader prepares a "leak report." The information in Table Six is based on a manual count of the leak reports received by the Monterey system General Manager during the reporting period.

Table Six Total Main and Service Leak Repairs by Month		
Month	Main Leaks	Service Leaks
July 2011	10	21
August 2011	9	35
Sept 2011	13	29

Table Seven summarizes service, main, meter, and hydrant replacements during the reporting period. Please note that service, main, meter and hydrant replacements are performed by both California American Water's forces and contractors. Service replacements are tracked via work orders for various purposes, including accounting and system management. The service replacements are calculated by a California American Water Operations supervisor from these work orders. The quantity of water mains and fire hydrants replaced is compiled by a California American Water Operations supervisor from Engineering Department records, which in turn are based on information from contractors. California American Water maintains records regarding meter replacements for various purposes, including reporting to the California Public Utilities Commission and inventory control. The number of meters replaced was compiled by a California American Water Operations supervisor from these records. To the extent that the data in Table Seven includes contractor reports or data from invoices for contract services, this information: (a) is based on the representations made by our contractors; (b) may include field estimates for the lengths of pipe replaced.

Table Seven Monthly Totals of Water Service, Main, Meter and Fire Hydrant Replacements				
Service   Main   Meter   Fire Hydrant				
July 2011	10	0	400	6
August 2011	27	0	95	1
September 2011	110	5,080	172	2

## Condition 6(e)

Condition 6(e) requires California American Water to provide monthly summaries of reductions in demand for potable water due to conservation actions such as increased rates, the Monterey Peninsula Water Management District's retrofit program, programs to reduce potable water use for outdoor irrigation, and other demand reduction initiatives.

#### Compliance with Condition 6(e):

California American Water implemented a new conservation rate structure effective February 1, 2010. The change in the rate structure is shown in Table Eight. The residential tiered conservation rate structure increases were directed at the top tier users and were designed to promote conservation practices and reduce overall water usage.

Main S	Table Eight Main System Residential Rate Structure Effective 2/1/2010			
Tier				
1	\$0.268	\$0.275	2.6%	
2	\$0.439	\$0.401	-8.6%	
3	\$0.609	\$0.801	31.6%	
4	\$0.800	\$1.603	105.6%	
5	\$1.452	\$2.805	91.9%	

A unit of water equals 10 cubic feet or 75 gallons.

Table Nine compares the five year historical tier 4 and 5 usage with actual use for the reporting period. Tier 4 and 5 usage is almost exclusive outdoor watering. There are several factors that can affect water consumption; including price, weather, and conservation efforts. California American Water assumes that the changes in consumption shown in Table Nine are, in part, a result of the conservation rates and the other conservation activities. Except for savings estimated by the Monterey Peninsula Water Management District for water appliance retrofitting, California American Water cannot attribute specific portions of reduced consumption to rates, weather, or other conservation efforts.

Table Nine Tier 4 and 5 Average Historical Usage (WY 2005 through WY 2009) compared to WY 2010		
Month Historical 2011		
Usage		
July 2011	108.6 AF	60.4 AF
August 2011	111.3 AF	67.5 AF
Sept 2011	97.9 AF	68.1 AF

Table Ten reports the estimated annual water savings from retrofit programs. The monthly rebate costs are dependent on the number and type of water conserving appliances. Examples of rebates include High Efficiency Toilet (\$200), High Efficiency Dishwasher (\$125), High Efficiency Washer (\$250), High Efficiency Urinal (\$200), Cistern Water Tank (\$25 per 100 gallon storage capacity), Cooling Tower Conductivity Controller (\$1,000), and X-ray Film Processor Recirculation System (\$2,000). This information was

specifically requested from the Monterey Peninsula Water Management District by California American Water's Monterey system General Manager for the purposes of this report. The data provided by the Monterey Peninsula Water Management District and reported in Table Seven included the retrofit expenditures and estimated water savings in acre-feet by month. No retrofit rebate funds are available until January 2012.

Table Ten Total Retrofit Rebate Payments and Estimated Water Savings by Month		
Month	Cost	Annual Savings
July 2011	\$0	0 AF
August 2011	\$0	0 AF
September 2011	\$0	0 AF
Total \$0 0 AF		

The Monterey Peninsula Water Management District and California American Water conduct water conservation audits for homes, businesses and landscape accounts. Table Eleven shows the total number of audits conducted in the reporting period. The information in Table Ten was reported to the Monterey system General Manager by California American Water's local Conservation Manager, who manages the conservation contract with the Monterey Peninsula Water Management District.

Table Eleven Total Water Conservation Audits By Month		
Month	Number of Audits	
July 2011	18	
August 2011 42		
September 2011 64		
Total 124		

Both the Monterey Peninsula Water Management District and California American Water use contractors to perform some audits. Accordingly, the data in Table Eleven is based, in part, on: (a) representations by those contractors as to the work performed; and (b) information provided by the Monterey Peninsula Water Management District.

The Monterey Peninsula Water Management District and California American Water conducted the following conservation programs and workshops during the reporting period:

- California American Water approved and increased up to \$50,000 a landscape grant
  for the City of Monterey to remove turf and high water use sprinklers and replace with
  low volume drip and drought tolerant plants for its Shoreline Park and Window by the
  Bay along Del Monte Avenue and Fisherman's Wharf. The contract is in the final
  stages awaiting signatures from the City of Monterey and then the project will begin.
- CAW approved a \$60,000 landscape grant for the City of Seaside which includes the
  removal of 29,000 square feet of turf and the installation of cinder, and an upgraded
  more efficient irrigation controller for the Cutino Park baseball field. The new irrigation
  controller will also be able to detect leaks for all city parks. The City of Seaside is in
  the process of reviewing the contract, and once signed will begin their project.

- California American Water gave a water conservation presentation to the Carmel Foundation, a local organization serving seniors. The presentation covered ways of using less water indoors and out and explained the need for restricted water use on the Monterey Peninsula. Low flow water saving devices and educational materials were also distributed to members
- CAW continues to work with the City of Pacific Grove to approve their proposal for a \$20,000 landscape grant to remove turf from its Lovers Point Park, upgrade the old style inefficient sprinklers to efficient sprinklers that save water, and replace irrigation controllers to smart controllers that monitor rainfall and temperature for some of City's other parks
- CAW had met with a representative from Irrometer who promotes and installs soil
  moisture sensors. The City of Monterey volunteered and one site has been fitted
  with the sensor for testing purposes.
- CAW finalized its plan for its new Rain Sensor Program which is scheduled to start in October. Residential customers who are high water users and also non residential customers that have dedicated irrigation meters have been selected as potential candidates for this free program, which includes the rain sensor and free installation. Rain sensor or rain switches are devices that are connected to an irrigation system that causes the system to shut down in the event of rainfall.
- CAW is requiring twenty eight non residential customers to complete commercial
  audits to establish annual water allotments to be used as a basis for billing per the
  CPUC tariff. Commercial audits have been scheduled and six of them are complete.
- CAW completed several residential and commercial audits and met with customers on site to discuss recommendations for possible fixture replacement, potential water savings, payback periods, and rebates.
- CAW conservation staff collected on site commercial survey data for new non residential customers to establish an allotment that is used as a basis for monthly billing, and also dedicated irrigation metered customers.
- California American Water and the Monterey Peninsula Water Management District as members of the Water Awareness Committee (WAC's) participated as judges in WAC's hosting its 7<sup>th</sup> annual water wise landscape design awards at the Monterey County Fair. The landscape displays were judged based on landscape water conserving practices.
- CAW promoted its Water Wise House call program by including a bill insert in its
  August bills describing the program and the potential water savings. Many
  customers have called the Conservation Department to schedule water wise house
  calls
- CAW's statewide conservation staff for all districts met in San Francisco to share its
  knowledge on water conserving practices, residential and commercial audits,
  rebates, the effectiveness of conservation programs and Best Management Practices
  quidelines from the California Urban Water Conservation Council

- District staff presented on Landscape Regulations at the September U.S. Green Building Council's meeting (Northern California Chapter) The panel focused on local and state wide regulations, and included examples of gray water, rainwater and storm water projects.
- Three televised reports on the Monterey Peninsula's conservation program were given during this reporting period. Every presentation included suggestions on ways customers can reduce outdoor water use and information about practices that are considered and enforced as "water waste."
- MPWMD and CAW sponsored a "Laundry to Landscape" training at the District
  offices on June 25, 2011. The class taught participants how to redirect their clothes
  washer waste water for landscape irrigation.

## Condition 6(f)

Condition 6(f) requires California American Water to provide monthly summaries identifying all new service connections. The report is to include the California American Water account number, the service address, the name of each authority granting any approval required for connecting to California American Water's system and the name of each authority granting any approval required before commencing construction; the issuer of each approval and the date of each approval shall be separately listed for each service address.

## Compliance with Condition 6(f):

In compliance with Monterey Peninsula Water Management District regulations, California American Water does not connect new customers unless the prospective customer provides California American Water with a water connection permit issued by the Monterey Peninsula Water Management District.

Attachment One is a list of all new connections authorized by the Monterey Peninsula Water Management District Attachment One is being provided under separate cover as it contains confidential customer account information. California American Water requests the State Water Resources Control Board maintain this information as confidential. As discussed in Section 6(c) above, Attachment One is compiled by California American Water employees from the water connection permits issued by the Monterey Peninsula Water Management District and provided to California American Water by prospective customers. Prospective customers may elect to have a meter installed shortly after presentation of the water connection permit, or may request the meter at a later date. This report includes prospective customers who have presented California American Water with a water connection permit, even if that customer has not requested a meter to be immediately installed. If the customer has provided California American Water with the water connection permit, but has not requested a meter to be installed, the entry on Attachment One has no "Installed Date."

The new connection count does not include emergency fire service connections or the splitting of master meter connections into individual accounts, as neither of these activities increases water use.

#### Condition 6(g)

Condition 6(g) requires California American Water to provide monthly summaries identifying existing service addresses that receive an increased supply of water due to a change in zoning or use. The report is to include Cal-Am account number, the service address and the name of each authority authorizing a change of use or of zoning and the date of such change.

#### Compliance with Condition 6(g):

Attachment Two is a list of permits issued by the Monterey Peninsula Water Management District authorizing changes to existing service addresses that will result in an increased use of water through a change in zoning or use. Attachment Two is being provided under separate cover as it contains confidential customer account information. California American Water requests the State Water Resources Control Board maintain this information as confidential. Although not clearly a "change in zoning or use," Attachment Three includes permits issued for additions to, or remodeling of, an existing service address where that addition or remodel has been determined by the Monterey Peninsula Water Management District to result in increased water consumption. California American Water requested this information from the Monterey Peninsula Water Management District specifically for this report. The Monterey Peninsula Water Management District provided a spreadsheet that the data from which is included in Attachment Two. This spreadsheet tracks the information by Assessor's Parcel Number. A California American Water employee correlated California American Water's records to the Monterey Peninsula Water Management District's spreadsheet based on Assessor's Parcel Number to obtain the California American Water account number and service address. Other than California American Water account number and service location, all data in Attachment Two was compiled or calculated by the Monterey Peninsula Water Management District. Where there were clear clerical errors in data entry, California American Water corrected those errors in compiling this report.

#### Conclusion

This concludes our report for the fourth quarter of Water Year 2011. Should you or your staff have any questions please call me at (831) 646-3214.

## Compliance with Condition 6(h)

I declare under penalty of perjury, under the laws of the State of California, that all statements contained in this report and any accompanying documents are true and correct, with full knowledge that all statements made in this report are subject to investigation and that any false or dishonest statements may be grounds for prosecution.

Sincerely,

Craig E. Anthony General Manager Central Division

California American Water

Attachments