



California American Water – Monterey
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April 28, 2016

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, 2nd Quarterly Report for the 2015-2016 Water Year
Addressing Operations for the Period of January 1, 2016 to March 31, 2016.

Dear Ms. Evoy:

Pursuant to Condition Six of Order WR 2009-0060, this letter is California American Water's report for the 2nd quarter of Water Year 2016 covering the period of January 1, 2016 to March 31, 2016. 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 and Permit 20808C. 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 (AF)
Oct 2015	567.86
Nov 2015	478.76
Dec 2015	527.10
Q1 Total	1573.72
WYTD Total	1573.72
Jan 2016	747.47
Feb 2016	675.15
Mar 2016	885.08
Q2 Total	2307.71
WYTD Total	3881.43
Apr 2016	
May 2016	
Jun 2016	
Q3 Total	
WYTD Total	
Jul 2016	
Aug 2016	
Sep 2016	
Q4 Total	
WYTD Total	

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 Permit 20808C and stored in the Seaside groundwater basin. The monthly report is to state the quantity of water beneficially used under Permit 20808A and Permit 20808C 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 and Permit 20808C. 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 four 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 converts 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 and Storage Balance											
Santa Margarita & Seaside Middle School											
	Well 1 Diverted to Storage (AF)		Well 2 Diverted to Storage (AF)		Well 3 Diverted to Storage (AF)		Well 4 Diverted to Storage (AF)		ASR Recovery (AF)	Month End Storage Balance (AF)	Table #13 (AF)
Month	Permit 20808A	Permit 20808C	Permit 20808A	Permit 20808C	Permit 20808A	Permit 20808C	Permit 20808A	Permit 20808C			Permit 21330
Oct 2015	0	0	0	0	0	0	0	0	0	215.19	0
Nov 2015	0	0	0	0	0	0	0	0	0	215.19	0
Dec 2015	0	0	0	0	0	0	0	0	0	215.19	0
Q1 Total AF	0	0	0	0	0	0	0	0	0	215.19	0
WYTD AF	0	0	0	0	0	0	0	0	0	215.19	0
Jan 2016	25.32	0	47.33	84.21	0	51.99	0	1.74	0	425.79	43.28
Feb 2016	14.07	0	22.10	15.73	0	7.74	0	0	0	485.43	8.46
Mar 2016	72.05	30.99	4.52	166.69	0	99.93	0	2.61	0	862.21	112.44
Q2 Total AF	111.44	30.99	73.95	266.63	0	159.66	0	4.35	0	647.02	164.18
WYTD AF	111.44	30.99	73.95	266.63	0	159.66	0	4.35	0	862.21	164.18
Apr 2016											
May 2016											
Jun 2016											
Q3 Total AF											
WYTD AF											
Jul 2016											
Aug 2016											
Sep 2016											
Q4 Total AF											
WYTD 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. 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		
Month	New Connections	Installed Date
Oct 2015	0	
Nov 2015	0	
Dec 2015	0	
Jan 2016	0	
Feb 2016	0	
Mar 2016	0	
Apr 2016		
May 2016		
Jun 2016		
Jul 2016		
Aug 2016		
Sep 2016		

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 (AF)	Water Used by New Connections (AF)	Water Used to Reduce River Diversions (AF)
Oct 2015	10.94	0.008	10.94
Nov 2015	0.29	0.011	0.28
Dec 2015	0.23	0.016	0.22
Jan 2016	2.22	0.006	2.22
Feb 2016	4.68	0.006	4.68
Mar 2016	15.70	0.011	15.70
Apr 2016			
May 2016			
Jun 2016			
Jul 2016			
Aug 2016			
Sep 2016			

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 Monterey Main System production volumes which consist of Carmel Valley, Seaside, and Sand City production. 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 (AF)	Savings Compared to Base Year (AF)
Oct 08 - Sep 09	1276 (base year)	NA
Nov 14 - Oct 15	445.53	830.47
Dec 14 – Nov 15	221.29	1054.71
Jan 15 - Dec 15	247.27	1028.73
Feb 15 – Jan 16	108.78	1167.22
Mar 15 – Feb 16	163.38	1112.62
Apr 15 – Mar 16	78.68	1197.32
May 15 – Apr 16		
Jun 15 – May 16		
Jul 15 – Jun 16		
Aug 15 – Jul 16		
Sep 15 – Aug 16		
Oct 15 – Sep 16		

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. 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.

Month	Main Leaks	Service Leaks
Oct 2015	16	26
Nov 2015	29	30
Dec 2015	25	13
Jan 2016	13	19
Feb 2016	13	17
Mar 2016	5	18
Apr 2016		
May 2016		
Jun 2016		
Jul 2016		
Aug 2016		
Sep 2016		

Table Seven summarizes service, main, meter, and hydrant replacements. 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.

Month	Service Replacements Number	Main Replacements Feet	Meter Replacements Number	Fire Hydrant Replacements Number
Oct 2015	6	947	274	3
Nov 2015	4	0	149	4
Dec 2015	3	1150	71	5
Jan 2016	8	29	71	2
Feb 2016	8	58	78	3
Mar 2016	5	65	44	3
Apr 2016				
May 2016				
Jun 2016				
Jul 2016				
Aug 2016				
Sep 2016				

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.

Table Eight Main System Residential Rate Structure Effective			
Tier	Old Rates Per Unit February 2009	Current Rates Per 100 Gallons March 2016	Percent Change
1	\$0.2298	\$0.6469	181.51%
2	\$0.4596	\$1.3614	196.20%
3	\$0.6894	\$3.5128	409.55%
4	\$0.9192	\$7.1343	676.15%
5	\$1.8385	\$9.2429	402.74%

A unit of water is equal to 100 gallons.

Table Nine compares the five year historical tier 4 and 5 usage with actual use. 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 - WY 2009) compared to WY 2016		
Month	Historical Usage (AF)	WY 15-16 (AF)
Oct	91.3	27.03
Nov	92.4	20.47
Dec	64.7	11.08
Jan	43.1	9.76
Feb	37.0	12.3
Mar	31.5	15.47
Apr	44.7	
May	46.2	
Jun	83.4	
Jul	108.6	
Aug	111.3	
Sep	97.9	

Table Ten reports the estimated annual water savings from the Monterey district retrofit program. The monthly rebate costs are dependent on the number and type of water conserving appliances. Examples of rebates include High Efficiency Toilet, High Efficiency Dishwasher, High Efficiency Washer, High Efficiency Urinal, Cistern Water Tank, Cooling Tower Conductivity Controller, and X-ray Film Processor Recirculation System. 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 Ten included the retrofit expenditures and estimated water savings in acre-feet by month.

Table Ten		
Total Retrofit Rebate Payments and Estimated Water Savings by Month		
Month	Cost (\$)	Annual Savings (AF)
Oct 2015	60,624	2.81
Nov 2015	42,159	2.46
Dec 2015	38,621	1.40
Q1 Total	141,404	6.67
Jan 2016	\$60,586	2.632
Feb 2016	\$64,839	2.887
Mar 2016	\$44,964	1.853
Q2 Total	\$170,389	7.372
Apr 2016		
May 2016		
Jun 2016		
Q3 Total		
Jul 2016		
Aug 2016		
Sep 2016		
Q4 Total		

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. The information in Table Eleven 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
Oct 2015	66
Nov 2015	37
Dec 2015	44
Q1 Total	147
Jan 2016	28
Feb 2016	28
Mar 2016	34
Q2 Total	90
Apr 2016	
May 2016	
Jun 2016	
Q3 Total	
Jul 2016	
Aug 2016	
Sep 2016	
Q4 Total	

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 (CAW) in conjunction with the Monterey Peninsula Water Management District (MPWMD), continues to offer and provide conservation programs to its customers, including residential water audits, landscape water audits and water budgets, a rebate program, residential plumbing retrofit program, large landscape workshop program, and a public program.

California American Water Activities:

- 87 Residential Water Audits
- 107 High Low Service Order Inspections
- 2 Commercial Audits
- 11 Rain Sensor Installations
- California American Water's Conservation and Customer Service staff delivered
- 77 Violation door hangers for customers to repair their leaks within 72 hours.
- 2 Conservation Meetings with the MPWMD

Monterey Peninsula Water Management District Activities:

No activities to report per MPWMD

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 the California American Water account number, the service address and the name of each authority authorizing the change of use or 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 Two 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 2nd quarter of Water Year 2016. Should you or your staff have any questions please call me at your earliest convenience at (831) 646-3291.

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,



Eric Sabolsice
General Manager
Central Division
California American Water

Attachments (2)