



## Public Hearing Item 7

Consider Adoption of July – September  
2012 Quarterly Water Supply Strategy  
and Budget for California American Water

June 12, 2012 Regular Meeting

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# CALIFORNIA AMERICAN WATER QUARTERLY WATER SUPPLY BUDGET: July - September 2012

- Applies to California American Water (Cal-Am) reservoir and well operations in the Carmel River and Seaside Groundwater Basins.
- Consistent with SWRCB Orders 95-10, 98-04, 2002-02, and 2009-0060, the NMFS Conservation and Settlement Agreements, DWR San Clemente Reservoir Drawdown Project, and Seaside Groundwater Basin adjudication decision.
- The prior budgets for October 2011 – January 2012 utilized all Water Project 1 (Phase 1 ASR) capacity stored in Water Year 2011.
- Stored a total of 132 AF in Water Projects 1 & 2 (ASR) for Water Year 2012, during March – May 2012, which will most likely be recovered in Water Year 2013, during October 2012.



# CALIFORNIA AMERICAN WATER QUARTERLY WATER SUPPLY BUDGET: July - September 2012

- Includes the second set of reductions in Cal-Am's diversions from the Carmel River specified in SWRCB Order WR 2009-0060. Next reductions due in Water Year 2013.
- Includes the second set of reductions in Cal-Am's diversions from Seaside Groundwater Basin as specified in the adjudication, through formal action taken by the Water Master Board. Next reductions due in Water Year 2015.
- Assumes monthly inflow conditions characteristic of a Dry Water Year Type for the rest of 2012, using monthly inflow patterns from 1991.
- Developed cooperatively by staff from MPWMD, Cal-Am, California Department of Fish and Game (CDFG), the National Marine Fisheries Service (NMFS), and the United States Fish and Wildlife Service (USFWS).

# CAL-AM QUARTERLY WATER SUPPLY BUDGET: MAIN SYSTEM PRODUCTION TARGETS

July - September 2012

Proposed Production Values by Source in Acre-Feet

<u>SOURCE/USE</u>	<u>MONTH</u>		
	Jul-12	Aug-12	Sep-12
<b><u>Source</u></b>			
Carmel Valley Aquifer			
Upper Subunits	0	0	0
Lower Subunits (95-10)	850	826	752
Lower Subunits (ASR)	0	0	0
Seaside Groundwater Basin			
Coastal Subareas	520	525	500
Phase 1 ASR Recovery	0	0	0
Sand City Desalination	25	25	25
<b>Total</b>	<b>1395</b>	<b>1376</b>	<b>1277</b>
<b><u>Use</u></b>			
Customer Service	1395	1376	1277
Phase 1 ASR Injection	0	0	0
<b>Total</b>	<b>1395</b>	<b>1376</b>	<b>1277</b>



# CAL-AM QUARTERLY WATER SUPPLY BUDGET: LAGUNA SECA SUBAREA SYSTEMS PRODUCTION TARGETS

**July - September 2012**


## Proposed Production Targets in Acre-Feet

<u>SOURCE/USE</u>	<u>MONTH</u>		
	<u>Apr-12</u>	<u>May-12</u>	<u>Jun-12</u>
<b><u>Source</u></b>			
Seaside Groundwater Basin			
Laguna Seca Subarea	18	18	17
Other	0	0	0
	<hr/>		
<b>Total</b>	<b>18</b>	<b>18</b>	<b>17</b>
<b><u>Use</u></b>			
Customer Service	18	18	17



# RECOMMENDATION

## **CAL-AM QUARTERLY WATER SUPPLY BUDGET: July - September 2012**

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- Adopt proposed water supply strategy and budget for Cal-Am's Main and Laguna Seca water distribution systems for the July - September 2012 period.



# Draft 2012 Low Flow Season Targets

EXHIBIT 7-C, TABLE 1 [Version 4a]

2012 [Draft] Low Flow Memorandum of Agreement & Quarterly Water Budget

Carmel River Reservoirs: Diversion and Release Schedule (All Values in Acre-Feet, except as indicated)

Assuming Dry Water Year Inflow Conditions For June-December 2012 That Parallel 1991 & LPR Drawdown to 995' Elevation = 315 AF

	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	WY 2012
<b>Los Padres Reservoir</b>																
Inflow	780	889	749	2,091	1,189	2,848	3,986	1,428	473	173	135	124	112	209	669	14,865
Outflow																
Evaporation	9	6	2	18	13	30	31	55	50	57	60	44	19	11	5	375
Spillage	0	0	0	792	617	2,144	3,360	758	8	0	0	0	0	0	0	7,679
Release (Fish Ladder)	615	595	615	615	575	615	595	615	415	413	423	407	410	369	474	6,497
Release (Outlet)	433	253	216	0	0	0	0	0	0	0	0	0	0	0	0	902
Release (Notch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Storage																
Beginning of Month	1,390	1,114	1,149	1,065	1,731	1,716	1,775	1,775	1,775	1,775	1,478	1,130	803	486	315	
End of Month	1,114	1,149	1,065	1,731	1,716	1,775	1,775	1,775	1,775	1,478	1,130	803	486	315	505	
<b>Between Reservoirs</b>																
Inflow	143	325	292	588	513	1,015	1,506	558	177	105	85	79	65	72	184	5,386
Outflow																
Evapotranspiration	37	21	16	21	20	21	21	37	63	68	58	53	37	21	16	436
Private Usage	5	2	2	2	2	2	2	5	8	8	8	6	5	2	2	53
<b>San Clemente Reservoir</b>																
Inflow	1,149	1,150	1,105	1,972	1,683	3,751	5,438	1,889	529	441	442	428	433	418	640	19,976
Outflow																
Evaporation	4	0	2	4	2	5	7	15	16	14	11	9	4	3	4	89
Spillage	0	0	426	1,278	996	3,070	4,777	1,198	0	0	0	0	0	0	0	11,745
Diversion (Filter Plant)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Release (Valve)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Release (Six Ports)	1,084	1,091	0	0	0	0	0	0	519	366	369	359	368	355	574	3,788
Release ( Fish Ladder)	0	0	615	615	575	615	595	615	0	0	0	0	0	0	0	3,629
Leakage	61	59	61	61	58	61	59	61	59	61	61	59	61	59	61	726
Total Storage																
Beginning of Month	71	71	71	71	85	137	137	137	137	71	71	71	71	71	71	
End of Month	71	71	71	85	137	137	137	137	71	71	71	71	71	71	71	
<b>Total Release</b>	<b>1,146</b>	<b>1,150</b>	<b>1,103</b>	<b>1,954</b>	<b>1,629</b>	<b>3,746</b>	<b>5,431</b>	<b>1,874</b>	<b>579</b>	<b>427</b>	<b>431</b>	<b>419</b>	<b>429</b>	<b>415</b>	<b>635</b>	<b>19,888</b>
Mean Daily Release in cfs	18.6	19.3	17.9	31.8	28.3	60.9	91.3	30.5	9.7	7.0	7.0	7.0	7.0	7.0	10.3	
Mean Daily Diversion in cfs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Mean Daily Diversion in cfs (Russell Wells)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	

**Notes:**

- The minimum pool requirements at Los Padres and San Clemente Reservoirs are 105 acre-feet at elevation 980 ft and 71 acre-feet at elevation 515 ft, respectively.
- Projected inflows for the March through December 2012 period are based on the expectation that unimpaired flows at San Clemente Dam will represent a "Dry" Water Year Type, and specifically using the inflow recession seen in 1991.
- Projected inflow to San Clemente Reservoir is distributed 80% above Los Padres Dam and 20% between Los Padres and San Clemente Dams.
- Estimated evaporation from LPR/SCR is based on average monthly reservoir surface area and gross monthly evaporation rates developed by the US Army Corps of Engineers (1981).
- Releases and diversions are consistent with terms of the 2001 and 2006 Conservation Agreements between the NMFS and Cal-Am and with the conditions in SWRCB Order Nos. 95-10, 98-04, 2002-0002, and 2009-0060.
- Numbers in **Bold** type are final reported numbers, and those in *Italics* are future estimates.