



## Public Hearing Item 15:

Consider Adoption of April – June 2012  
Quarterly Water Supply Strategy and  
Budget for California American Water

March 19, 2012 Regular Meeting

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# CALIFORNIA AMERICAN WATER QUARTERLY WATER SUPPLY BUDGET: April – June 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 budget for October – December 2011 utilized all Water Project 1 (Phase 1 ASR) capacity stored in Water Year 2011.
- The budget for April – June 2012 plans for the storage of any available water to both Water Projects 1 & 2 (ASR).

# CALIFORNIA AMERICAN WATER QUARTERLY WATER SUPPLY BUDGET: April – June 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 long-term median (1902-2011) monthly inflow conditions characteristic of a Critically Dry Water Year Type, for the rest of WY 2012.
- Developed cooperatively by staff from MPWMD, Cal-Am, California Department of Fish and Game (CDFG), and the National Marine Fisheries Service (NMFS).

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

**April - June 2012**

## Proposed Production Values by Source in Acre-Feet

<u>SOURCE/USE</u>	<u>MONTH</u>		
	Apr-12	May-12	Jun-12
<b><u>Source</u></b>			
Carmel Valley Aquifer			
Upper Subunits	0	0	0
Lower Subunits (95-10)	594	749	868
Lower Subunits (ASR)	100	50	0
Seaside Groundwater Basin			
Coastal Subareas	363	450	450
Phase 1 ASR Recovery	0	0	0
Sand City Desalination	25	25	25
<b>Total</b>	<b>1082</b>	<b>1274</b>	<b>1343</b>
<b><u>Use</u></b>			
Customer Service	982	1224	1343
Phase 1 ASR Injection	100	50	0
<b>Total</b>	<b>1082</b>	<b>1274</b>	<b>1343</b>

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

**April - June 2012**

## **Proposed Production Targets in Acre-Feet**

<b><u>SOURCE/USE</u></b>	<b>MONTH</b>		
	<b>Apr-12</b>	<b>May-12</b>	<b>Jun-12</b>
<b><u>Source</u></b>			
Seaside Groundwater Basin			
Laguna Seca Subarea	10	14	16
Other	0	0	0
<b>Total</b>	<b>10</b>	<b>14</b>	<b>16</b>
<b><u>Use</u></b>			
Customer Service	10	14	16



## **CAL-AM QUARTERLY WATER SUPPLY BUDGET: April - June 2012**

### **Recommendation:**

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



# Draft 2012 Low Flow Season Targets

**DRAFT EXHIBIT 15-C, TABLE 1 [Version 3a]**

**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 Critically Dry Water Year Inflow Conditions [March-December 2012] & 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	2,541	1,388	658	316	75	61	47	52	189	483	10,784
Outflow																
Evaporation	9	6	2	18	13	34	33	36	50	57	60	44	19	11	5	362
Spillage	0	0	0	792	617	1,834	760	7	0	0	0	0	0	0	0	4,010
Release (Fish Ladder)	615	595	615	615	575	615	595	615	415	290	290	277	351	336	474	6,111
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	1,626	1,354	1,065	791	473	315	
End of Month	1,114	1,149	1,065	1,731	1,716	1,775	1,775	1,775	1,626	1,354	1,065	791	473	315	319	
<b>Between Reservoirs</b>																
Inflow	143	325	292	588	513	679	411	234	138	94	77	69	54	124	142	3,563
Outflow																
Evapotranspiration	37	21	16	21	20	37	53	61	63	68	58	53	37	70	16	507
Private Usage	5	2	2	2	2	2	5	7	8	8	8	6	5	2	2	58
<b>San Clemente Reservoir</b>																
Inflow	1,149	1,150	1,105	1,972	1,683	3,088	1,708	788	482	307	301	288	363	388	598	14,020
Outflow																
Evaporation	4	0	2	4	2	13	14	11	16	14	11	9	4	3	4	100
Spillage	0	0	426	1,278	996	2,399	1,040	101	0	0	0	0	0	0	0	6,241
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	472	232	228	219	298	325	532	3,326
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>3,075</b>	<b>1,694</b>	<b>777</b>	<b>532</b>	<b>293</b>	<b>290</b>	<b>279</b>	<b>359</b>	<b>385</b>	<b>593</b>	<b>13,922</b>
Mean Daily Release in cfs	18.6	19.3	17.9	31.8	28.3	50.0	28.5	12.6	8.9	4.8	4.7	4.7	5.8	6.5	9.7	
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:**

1. The minimum pool requirements at Los Padres and San Clemente Reservoirs are 105 acre-feet at elevation 980ft and 71 acre-feet at elevation 515 ft, respectively.
2. Projected inflows for the March through December 2012 period are based on the expectation that unimpaired flows at San Clemente Dam will represent a "Critically Dry" Water Year Type or 87.5% exceedance values for reconstructed unimpaired monthly historical flows (WY 1902-2011).
3. Projected inflow to San Clemente Reservoir is distributed 80% above Los Padres Dam and 20% between Los Padres and San Clemente Dams.
4. 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).
5. 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.
6. Numbers in **Bold** type are final reported numbers, and those in *Italics* are future estimates.