

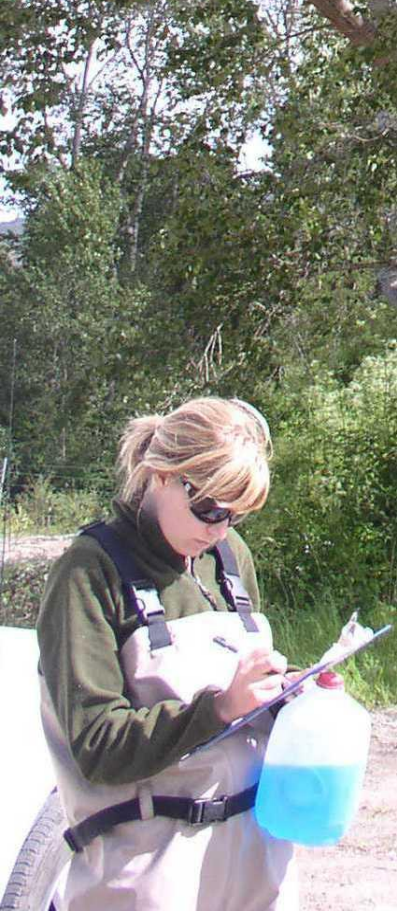


Public Hearing Item 14:

**Consider Adoption of April – June 2013
Quarterly Water Supply Strategy and
Budget for California American Water**

March 18, 2013, Regular Meeting

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CALIFORNIA AMERICAN WATER QUARTERLY WATER SUPPLY BUDGET: April - June 2013

- 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.
- Stored a total of 131 AF in Water Projects 1 & 2 (ASR) for Water Year 2012, during March – May 2012, which was already recovered in Water Year 2013, during October 2012.
- Includes the third 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 2015.



CALIFORNIA AMERICAN WATER QUARTERLY WATER SUPPLY BUDGET: April – June 2013

- Continues the second set of reductions in Cal-Am's diversions from Seaside Groundwater Basin made in Water Year 2012 as specified in the adjudication, through formal action taken by the Water Master Board. Next reductions due in Water Year 2015.
- Assumes mean monthly inflow conditions characteristic of a Below Normal Water Year Type through September 2013.
- Assumes full utilization of all legally available native Seaside Coastal groundwater during Water Year 2013, and the remaining 218 AF of water stored during nine years of ASR Phase 1 testing.
- Developed cooperatively by staff from MPWMD, Cal-Am, California Department of Fish and Wildlife (CDFW), and the National Marine Fisheries Service (NMFS).

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

April - June 2013

Proposed Production Targets by Source in Acre-Feet

SOURCE/USE	MONTH		
	Apr-13	May-13	Jun-13
<u>Source</u>			
Carmel Valley Aquifer			
Upper Subunits	0	0	0
Lower Subunits (95-10)	1,052	1,048	1,137
Lower Subunits (ASR)	260	145	0
Seaside Groundwater Basin			
Coastal Subareas	0	250	250
Phase 1 ASR Recovery	0	0	0
Sand City Desalination	25	25	25
Total	1,337	1,468	1,412
<u>Use</u>			
Customer Service	1,077	1,323	1,412
Phase 1 ASR Injection	260	145	0
Total	1,337	1,468	1,412

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

April - June 2013

Proposed Production Targets in Acre-Feet

<u>SOURCE/USE</u>	<u>MONTH</u>		
	Apr-13	May-13	Jun-13
<u>Source</u>			
Seaside Groundwater Basin			
Laguna Seca Subarea	10	14	16
Other	0	0	0
Total	10	14	16
<u>Use</u>			
Customer Service	10	14	16

CALIFORNIA AMERICAN WATER QUARTERLY WATER SUPPLY BUDGET: April – June 2013

Recommendation

- Adopt proposed water supply strategy and budget for Cal-Am's Main and Laguna Seca water distribution systems for the third quarter of Water Year 2013, the April - June 2013 period.

UPDATED 2013 LOW FLOW SEASON TARGETS

EXHIBIT 14-C, TABLE 1 [Version 1a]

2013 [Initial 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 Below Normal Water Year Inflow Conditions [March-December 2013] & LPR Drawdown to 995' Elevation = 315 AF

Month Represents Water Year Type of:	Normal	Dry	Wet	Below N.	Crit. D.	Below N.	Below N.	Below N.	Below N.	Below N.	Below N.	Below N.	Below N.	Below N.	Below N.	Below N.	WY 2013
	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-12	Sep-13	Oct-13	Nov-13	Dec-13		
Los Padres Reservoir																	
Inflow	186	523	10,433	4,703	1,895	6,379	3,170	1,729	664	191	102	64	104	409	1,214	30,039	
Outflow																	
Evaporation	18	6	2	18	13	34	33	36	50	57	60	44	19	11	5	371	
Spillage	0	0	8,962	4,070	1,307	5,731	2,542	1,035	19	0	0	0	0	0	0	23,666	
Release (Fish Ladder)	322	292	615	615	575	615	595	615	595	409	433	422	411	398	615	6,102	
Release (Outlet)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Release (Notch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Total Storage																	
Beginning of Month	806	652	877	1,731	1,731	1,731	1,731	1,731	1,775	1,775	1,500	1,109	707	381	381		
End of Month	652	877	1,731	1,731	1,731	1,731	1,731	1,775	1,775	1,500	1,109	707	381	381	975		
Between Reservoirs																	
Inflow	0	134	2,494	1,544	812	1,625	842	491	224	110	76	64	63	123	320	8,416	
Outflow																	
Evapotranspiration	4	21	16	21	20	37	53	61	63	68	58	53	37	21	16	474	
Private Usage	5	2	2	2	2	2	5	7	8	8	8	6	5	2	2	58	
San Clemente Reservoir																	
Inflow	313	403	12,052	6,206	2,672	7,931	3,921	2,073	767	442	443	428	432	498	917	37,651	
Outflow																	
Evaporation	4	0	2	4	2	13	14	11	16	14	11	9	4	3	4	100	
Spillage	0	0	11,311	5,526	2,037	7,242	3,253	1,385	97	0	0	0	0	144	236	30,853	
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)	249	341	0	0	0	0	0	0	65	367	370	359	367	291	615	1,751	
Release (Fish Ladder)	0	0	615	615	575	615	595	615	595	0	0	0	0	0	0	4,224	
Leakage	61	59	61	61	58	61	59	61	59	61	61	59	61	59	61	725	
Total Storage																	
Beginning of Month	72	71	73	137	137	137	137	137	137	71	71	71	71	71	71		
End of Month	71	73	137	137	137	137	137	137	71	71	71	71	71	71	71		
Total Release	310	400	11,987	6,202	2,670	7,918	3,907	2,062	817	428	432	419	428	495	913	37,553	
Mean Daily Release in cfs	5.0	6.7	195.0	100.9	46.4	128.8	65.7	33.5	13.7	7.0	7.0	7.0	7.0	8.3	14.8		
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 2013 period are based on the expectation that unimpaired flows at San Clemente Dam will represent median flows for a "Below Normal" Water Year Type or 62.5% exceedance values for reconstructed unimpaired monthly historical flows (WY 1902-2012).
- 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.