

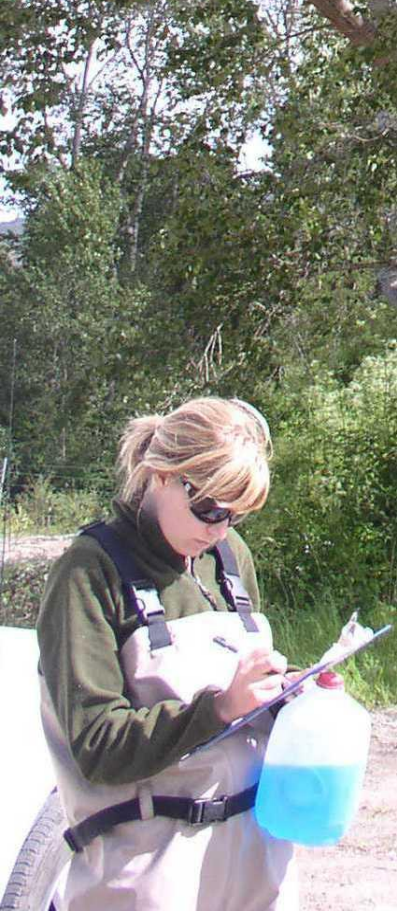


Public Hearing Item 18:

Consider Adoption of July – September 2014 Quarterly Water Supply Strategy and Budget for California American Water

June 23 2014, Regular Meeting

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CALIFORNIA AMERICAN WATER QUARTERLY WATER SUPPLY BUDGET: July - September 2014

- 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.
- Water Projects 1 & 2 (ASR) threshold permit flows allowing diversion have not occurred to date in Water Year 2014.

CALIFORNIA AMERICAN WATER QUARTERLY WATER SUPPLY BUDGET: July - September 2014

- 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.
- 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 Critically Dry Water Year Type through December 2014.
- Assumes full utilization of all legally available native Seaside Coastal groundwater during Water Year 2014.
- Developed cooperatively by MPWMD and Cal-Am on June 10, 2014.

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

July - September 2014

Proposed Production Targets by Source in Acre-Feet

SOURCE/USE	MONTH		
	Jul-14	Aug-14	Sep-14
Source:			
Carmel Valley Aquifer			
Upper Subunits (Service)	0	0	0
Lower Subunits (Service)	1,243	1,100	1,513
ASR Diversion	0	0	0
Seaside Groundwater Basin			
Coastal Subareas	250	200	200
Phase 1 and 2 ASR Recovery	0	0	0
Sand City Desalination	25	25	25
Total:	1,518	1,325	1,738
Use:			
Customer Service	1,518	1,325	1,738
Phase 1 and 2 ASR Storage	0	0	0
Total:	1,518	1,325	1,738

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

July - September 2014

Proposed Production Targets in Acre-Feet

<u>SOURCE/USE</u>	MONTH		
	Jul-14	Aug-14	Sep-14
<u>Source</u>			
Seaside Groundwater Basin			
Laguna Seca Subarea	18	17	16
Other	0	0	0
Total:	18	17	16
<u>Use</u>			
Customer Service	18	17	16

CALIFORNIA AMERICAN WATER QUARTERLY WATER SUPPLY BUDGET: July – September 2014

Recommendation

- Adopt proposed water supply strategy and budget for Cal-Am's Main and Laguna Seca water distribution systems for the fourth and last quarter of Water Year 2014, the July - September 2014 period.

UPDATED 2014 LOW FLOW SEASON TARGETS

Revised Table 1 [Version 3a-2] for EXHIBIT 19-C of 6/23/14

2014 Low Flow Memorandum of Agreement & Quarterly Water Budget

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

Assuming Median Critically Dry Water Year Inflow Proportions Ramped Down from April WY 2014 & LPR Drawdown to 1,000' Elevation = 403 AF

Month Represents Water Year Type of:	Crit. D.	Crit. D.	Crit. D.	Crit. D.	Crit. D.	Crit. D.	Crit. D.	Crit. D.	Crit. D.	Crit. D.	Crit. D.	Crit. D.	Crit. D.	Crit. D.	Crit. D.	Crit. D.
	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	WY 2014
Los Padres Reservoir																
Inflow	136	205	305	244	783	2,736	1,062	447	274	22	1	3	41	222	538	6,218
Outflow																
Evaporation	22	9	4	3	32	36	33	45	54	58	47	44	19	11	5	387
Spillage	0	0	0	0	0	1,704	554	0	0	0	0	0	0	0	0	2,258
Release (Fish Ladder)	248	190	206	206	151	492	476	452	284	330	330	276	229	190	266	3,641
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	669	535	541	636	671	1,271	1,775	1,775	1,725	1,661	1,295	919	602	394	415	
End of Month	535	541	636	671	1,271	1,775	1,775	1,725	1,661	1,295	919	602	394	415	682	
Between Reservoirs																
Inflow	0	0	0	11	91	725	383	95	0	0	0	0	0	0	60	1,305
Outflow																
Evapotranspiration	48	21	15	21	20	37	53	61	78	114	114	78	48	21	15	659
Private Usage	5	2	1	2	2	2	5	7	22	33	33	22	5	2	1	136
San Clemente Reservoir																
Inflow	195	167	190	194	220	2,882	1,355	479	184	183	183	176	176	167	310	6,408
Outflow																
Evaporation	5	2	2	2	6	9	9	11	13	13	11	9	4	3	4	92
Spillage	0	0	0	0	0	2,723	0	0	0	0	0	0	0	1	0	2,724
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)	129	105	126	130	136	0	1,066	471	111	109	110	108	110	104	245	2,601
Release (Fish Ladder)	0	0	0	0	0	44	222	0	0	0	0	0	0	0	0	266
Leakage	61	59	61	61	58	61	59	61	59	61	61	59	61	59	61	725
Total Storage																
Beginning of Month	71	71	71	72	72	93	137	135	71	71	71	71	71	71	71	
End of Month	71	71	72	72	93	137	135	71	71	71	71	71	71	71	71	
Total Release	190	164	187	191	194	2,829	1,347	532	171	170	172	167	172	164	306	6,316
Mean Daily Release in cfs	3.1	2.8	3.0	3.1	3.5	46.0	22.7	8.7	2.9	2.8	2.8	2.8	2.8	2.8	5.0	
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 June - December 2014 period are based on the expectation that unimpaired flows at San Clemente Dam will represent proportional Monthly % flow declines for a median "Critically Dry" Water Year, reconstructed from unimpaired monthly historical flows (WY 1902-2013), and starting from a base of actual May 2014 outflow.
- Projected inflow to San Clemente Reservoir is distributed 100% above Los Padres Dam between June through November.
- 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.