



## **Public Hearing Item 15:**

**Consider Adoption of October – December 2017 Quarterly Water Supply Strategy and Budget for California American Water**

September 18, 2017, Regular Meeting

Staff Contacts: Kevan Urquhart & Jonathan Lear



# CALIFORNIA AMERICAN WATER QUARTERLY WATER SUPPLY BUDGET: October - December 2017

- Consistent with SWRCB Orders 95-10, 98-04, 2002-02, and 2016-0016, Seaside Groundwater Basin adjudication decision, and District Rule 160 targets.
- Assumes Water Projects 1 & 2 (ASR) permits will not allow additional diversion until December. Diversions to date in the last Water Year 2017 stored 2,345 AF & intend to recover ~1,488 AF.
- Assumes mean monthly inflow conditions characteristic of a Wet Water Year Type (WYT) through September, than a Normal WYT through December 2017.

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- Includes ongoing level of reductions in Carmel River System diversions per Order WR 2016-0016, and the latest triennial reductions from the Seaside Basin per the adjudication.
- Assumes full utilization of all legally available native Seaside Basin groundwater during Water Year 2018.
- Assumes none of the remaining 857 acre-feet of ASR storage from WY 2017 will be used in the first quarter of WY 2018.
- Developed cooperatively by MPWMD, Cal-Am, California Department of Fish and Wildlife (CDFW), and the National Marine Fisheries Service (NMFS), on September 12, 2017.

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

## October to December 2017 Proposed Production Targets for the Main System in Acre Feet

<u>SOURCE/USE</u>	<u>MONTH</u>		
	<u>Oct-17</u>	<u>Nov-17</u>	<u>Dec-17</u>
<b><u>Source</u></b>			
Carmel Valley Aquifer			
Upper Subunits (95-10)	0	0	100
Lower Subunits (95-10)	446	281	419
Lower Subunits (ASR)	0	0	145
Upper & Lower (Table 13)	0	0	24
<b>Total</b>	<b>446</b>	<b>281</b>	<b>688</b>
Seaside Groundwater Basin			
Coastal Subareas	350	350	100
ASR Recovery	0	0	0
Sand City Desalination	25	25	25
<b>Total</b>	<b>375</b>	<b>375</b>	<b>125</b>
<b><u>Use</u></b>			
Customer Service (95-10 & SGB)	821	656	644
ASR Injection	0	0	145
Customer Service (Table 13)	0	0	24
<b>Total</b>	<b>821</b>	<b>656</b>	<b>813</b>

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

## October to December 2017 Proposed Production Targets for the Satellite Systems in Acre Feet

<u>SOURCE/USE</u>	<u>MONTH</u>		
	<u>Oct-17</u>	<u>Nov-17</u>	<u>Dec-17</u>
<b><u>Source</u></b>			
Seaside Groundwater Basin			
Laguna Seca Subarea	0	0	0
Other	0	0	0
<b><u>Use</u></b>			
Customer Service	0	0	0



## 2017 Low Flow MOA Update

Table 1 [Version 1g] - 9/12/17

2017 Low Flow Memorandum of Agreement & Quarterly Water Budget

Los Padres Reservoir: Release Schedule (All Values in Acre-Feet, except Cubic-Feet-per-Second as indicated)

Assuming July-September Flows at 92% of WYs 2010-2011, Then Median Normal WYT Flows for October-December, and Drawdown No Lower Than 1000' Elevation = 378 AF (New 2017 Tables)

Month Represents Water Year Type of:	Wet	Normal	BelowNorm	ExtWet	ExtWet	AboveNorm	AboveNorm	ExtWet	ExtWet	ExtWet	ExtWet	AboveNorm	Normal	Normal	Normal	Normal
	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	WY 2017
<b>Los Padres Reservoir</b>																
Estimated Inflow	518	804	2,760	41,973	46,035	13,060	9,837	4,461	2,300	1,196	735	480	333	752	2,324	124,159
Evaporation	20	5	2	16	16	34	21	42	50	46	49	44	19	11	2	345
Outflow as @ BLP Gage																
Spillage	0	0	1,233	41,035	45,186	12,104	8,923	3,497	1,357	0	0	0	0	0	85	113,335
Combined Release (Ladder/Trap/980')	445	549	922	922	833	922	893	922	893	1,150	908	832	860	832	982	10,191
Actual Mean Daily in CFS @ BLP Gage	7.2	8.9	35.0	682.4	748.4	211.8	159.6	71.9	37.8	18.7	14.8	14.0	14.0	14.0	17.4	
Targeted Min. Mean Daily Flow in CFS	7	10	15	n/a	n/a	n/a	n/a	n/a	n/a	n/a	15.0	14.0	14.0	14.0	14.0	
Total Storage																
Beginning of Month	869	922	1,172	1,775	1,775	1,775	1,775	1,775	1,775	1,667	1,667	1,445	1,049	503	412	
End of Month	922	1,172	1,775	1,775	1,775	1,775	1,775	1,775	1,775	1,667	1,445	1,049	503	412	1,667	
<b>Between Reservoirs</b>																
Net Inflow from Tributaries	116	278	653	26,966	29,138	7,305	3,586	2,271	970	450	242	49	18	84	581	72,024
All Estimated Losses (Div. + E.T.)	0	0	0	0	0	0	0	0	0	0	58	53	37	21	16	111
<b>Sleepy Hollow Weir</b>																
Total Estimated Release	561	827	2,808	68,923	75,157	20,331	13,402	6,690	3,220	1,600	1,092	828	841	895	1,632	195,439
Estimated Mean Daily Flow in CFS	9.1	13.9	45.7	1120.9	1353.3	330.7	225.2	108.8	54.1	26.0	17.8	13.9	13.7	15.0	26.5	

Notes:

1. The minimum pool requirement at Los Padres Reservoir is 105 acre-feet at elevation 980 ft.
2. Projected inflows for the July - September 2017 period are based on actual 2010 flows reduced 8%.
3. Projected inflows for the October - December 2017 period are derived from the median flows @ Sleepy Hollow Weir for a Normal WYT based on 1902-2015 data.
4. Inflows are apportioned Above and Below LPD, as actually occurred in July - September 2010, then 95/5% in October, 90/10% in November, and 80/20% in December.
5. Estimated evaporation from LPR in July-December are actual measured values from 2010.
6. 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 2016-0016.
7. Numbers in **Bold** type are final reported numbers, and those in *Italics* are future estimates.
8. LPR storage values based on preliminary results from the 2017 Bathymetric Survey of LPR, beginning July 1, 2017; max capacity @ 1039.78' = 1,667 AF.

# CALIFORNIA AMERICAN WATER QUARTERLY WATER SUPPLY BUDGET: October - December 2016

## Recommendation

- Adopt proposed water supply strategy and budget for Cal-Am's Main and Laguna Seca water distribution systems for the first quarter of Water Year 2018, the October - December 2017 period.