



Public Hearing Item 21:

Consider Adoption of July – September
2011 Quarterly Water Supply Strategy
and Budget for California American Water

June 20, 2011 Regular Meeting
Staff Contact: Kevan Urquhart




CALIFORNIA AMERICAN WATER QUARTERLY WATER SUPPLY BUDGET: July – September 2011

- Applies to California American Water (CAW) 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.
- Includes the first set of reductions in CAW's diversions from the Carmel River specified in SWRCB Order WR 2009-0060. The next reductions come in Water Year 2012.
- The budgets for October 2010 – March 2011 utilized all Water Project 1 water stored in 2010.



CALIFORNIA AMERICAN WATER QUARTERLY WATER SUPPLY BUDGET: July – September 2011

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- Water Project 1 [Phase 1 ASR] water stored in 2011 will be used next Quarter in the first three months of WY 2012.
 - The water right for Water Project 1 precludes further diversion to storage before December 1, 2011.
 - Assumes a median monthly inflow conditions characteristic of a Wet Water Year Type for the upcoming quarter.
 - Developed cooperatively by staff from MPWMD, CAW, California Department of Fish and Game (CDFG), and the National Marine Fisheries Service (NMFS).

CAW QUARTERLY WATER SUPPLY BUDGET: MAIN SYSTEM PRODUCTION TARGETS

July - September 2011

Proposed Production Values by Source in Acre-Feet

SOURCE/USE	MONTH		
	Jul-11	Aug-11	Sep-11
<u>Source</u>			
San Clemente Reservoir	0	0	0
Carmel Valley Aquifer			
Upper Subunits	0	0	0
Lower Subunits	960	885	753
Seaside Groundwater Basin			
Coastal Subareas	500	570	570
Phase 1 ASR Recovery	0	0	0
Sand City Desalination	<u>25</u>	<u>25</u>	<u>25</u>
Total	1,485	1,480	1,348
<u>Use</u>			
Customer Service	1,485	1,480	1,348
Phase 1 ASR Storage	0	0	0

CAW QUARTERLY WATER SUPPLY BUDGET: LAGUNA SECA SYSTEMS PRODUCTION TARGETS

July - September 2011

Proposed Production Values in Acre-Feet

SOURCE/USE	MONTH		
	Jul-11	Aug-11	Sep-11
<u>Source</u>			
Seaside Groundwater Basin			
Laguna Seca Subarea	30	30	28
Other	<u>0</u>	<u>0</u>	<u>0</u>
Total	30	30	28
<u>Use</u>			
Customer Service	30	30	28



CAW QUARTERLY WATER SUPPLY BUDGET July – September 2011

Recommendation:

- Adopt proposed water supply strategy and budget for CAW's Main and Laguna Seca water distribution systems for the July – September 2011 period.

Draft Low Flow Season Targets

Table 1

2011 Low Flow Memorandum of Agreement & Quarterly Water Budget

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

Assuming Wet [June-September] or Normal Inflow Conditions [October-December] & LPR Drawdown to 995' Elevation = 315 AF

	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	WY 2011
Los Padres Reservoir																
Inflow	557	761	6,101	8,635	10,654	26,150	9,583	3,945	2,062	1,082	652	493	209	481	1,864	70,675
Outflow																
Evaporation	19	11	2	13	13	34	33	36	56	59	60	44	19	11	5	380
Spillage	0	0	5,088	8,007	10,086	25,502	8,955	3,294	1,368	408	0	0	0	0	0	62,708
Release (Fish Ladder)	615	556	615	615	555	615	595	615	595	615	615	595	615	595	615	7,199
Release (Outlet)	213	119	0	0	0	0	0	0	0	0	185	185	234	137	0	702
Release (Notch)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Storage																
Beginning of Month	1,550	1,260	1,335	1,731	1,731	1,731	1,731	1,731	1,731	1,775	1,775	1,567	1,236	577	315	
End of Month	1,260	1,335	1,731	1,731	1,731	1,731	1,731	1,731	1,775	1,775	1,567	1,236	577	315	1,559	
Between Reservoirs																
Inflow	93	177	1,150	2,321	3,930	11,801	4,982	1,902	502	256	148	112	47	118	465	27,374
Outflow																
Evapotranspiration	31	18	16	21	20	37	53	61	63	68	58	53	37	21	16	498
Private Usage	5	2	2	2	2	2	5	7	8	8	8	6	5	2	2	58
San Clemente Reservoir																
Inflow	885	832	6,835	10,920	14,549	37,878	14,474	5,743	2,393	1,202	882	833	854	827	1,062	97,428
Outflow																
Evaporation	4	3	3	5	6	13	14	11	15	12	11	9	4	3	4	106
Spillage	819	770	6,089	10,239	13,932	37,189	13,806	5,056	1,724	0	0	0	0	0	314	89,625
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)	0	0	0	0	0	0	0	0	66	1129	809	765	789	765	0	2,769
Release (Fish Ladder)	0	0	615	615	555	615	595	615	595	0	0	0	0	0	615	4,204
Leakage	61	59	61	61	56	61	59	61	59	61	61	59	61	59	61	724
Total Storage																
Beginning of Month	71	71	71	137	137	137	137	137	137	71	71	71	71	71	70	
End of Month	71	71	137	137	137	137	137	137	71	71	71	71	71	70	137	
Total Release	881	829	6,766	10,915	14,543	37,865	14,460	5,732	2,444	1,190	870	824	850	824	991	97,321
Mean Daily Release in cfs	14.3	13.9	110.1	177.6	261.9	616.0	243.1	93.2	41.1	19.4	14.2	13.9	13.8	13.9	16.1	
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 980 ft and 71 acre-feet at elevation 515 ft, respectively.
2. Projected inflows for the May through September period follow the pattern for WY 2010, a similar WY to 2011 to date, whereas the October through December 2011 period are based on the expectation that unimpaired flows at San Clemente Dam will represent a "Normal" Water Year Type or 50% exceedance values for reconstructed unimpaired monthly historical flows (WY 1902-2009).
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.