

# Survey of Current Carmel River Conditions

January 2014

## Recorded Rainfall at San Clemente Dam - 2014



#### Water Year Types by Rainfall At San Clemente Dam Since 1922



### Unimpaired Streamflow at San Clemente Dam - 2014



#### Water Year Types by Unimpaired Streamflow At San Clemente Dam Since 1902



#### Comparison of Ten "Worst First Quarter" Water Years Based on Precipitation



#### Groundwater Storage in Carmel Valley Alluvial Aquifer And Monthly Rainfall – 1987 to Present



### **Current Rationing Plan: The Seven Stages**

Stage	Trigger	Ramifications
1	We're always in it	Certain users are subject to landscape budgets; Everyone is subject to certain conservation rules.
2	When Cal-Am exceeds limits on a YTD basis	Enforcement of Landscape Budgets
3	Monthly monitoring of Cal-Am production versus limits; Varies as Water Year moves onward	After any month from December through September, could cause implementation of "Emergency Rate Schedule" based on a variety of triggers.
4	Same as #3, but adds Physical Storage and "Legally Ordered Reduction in Supply" triggers	Landscape irrigators get more notice; Water Wasters (High Users) get enforced; Public outreach; Voluntary 15%
5	Enhanced Monthly, Physical, & Legally-Ordered Triggers	Starts Rationing 16%-35%; Proportional reduction based on use by class in prior year; Commercial ration based on factors; Residential capped at 35 gallons per person per day; <i>Alternate Water ration (variance) may be</i> <i>determined based on BMP compliance for the type of use</i>
6	More	36%-50% BMP variances granted under Stage 5 may be affected
7	More	Severe Rationing (>50%)

### Actual vs Target Production for Cal-Am: Oct 2013 – Feb 2014 (All Values in Acre-Feet)

	Cormol	Seaside G	roundwater	Water F	rojects		
	Carmer	B	asin			MPWRS	
Year-to-Date	River		Laguna	ASR	Sand		
Values	Basin	Coastal	Seca	Projects	City	Total	
Target	3,208	1,169	48	0	125	4,549	
Actual	2,885	1,302	137	0	69	4,394	
Difference	322	-133	-90	0	56	156	

#### Notes;

- 1. "Sand City" refers to the Sand City Desalination Facility, which pumps brackish water from the Seaside Groundwater Basin as source water. The Sand City values refer to yield from the facility.
- 2. "ASR Projects" refers to the Phase 1 and 2 Aquifer Storage and Recovery (ASR) Project and the values refer to the amount of stored water recovered for customer service.
- 3. "MPWRS" refers to Monterey Peninsula Water Resource System.
- 4. Carmel River Basin Target reflects assumed annual production of 300 AF from Sand City.
- 5. Production numbers are estimated pending finalization of CAW production data.
- 6. Carmel River Basin target represents quarterly adjustments based on differences between budgeted values and actual production from other sources.

#### Cal-Am Production versus Rule 162 Target (Stage 2/3 Trigger) Current Water Year 2014



Usable Storage versus Stage 4/5/6/7 Triggers Current Water Year 2014

Total Usable Storage March 1 = 26,420 AF

Total Usable Storage May 1, if No Rain = 24,542 AF

otal	23,690	19,072	13,657	8,400
	15%	20%	35%	50%
	4	5	6	7
	Wa	ater Ration	ning Stage	
	RE		ON MAY 1	
	ORAGE			

Rationing Trigger Unlikely to be Tripped.....