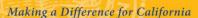
University of California Agriculture and Natural Resources





Weekly Crop ET Update

May 18, 2015

The attached table is our initial release of a weekly crop ET update using current CIMIS weather conditions and in cooperation with the California Department of Water Resources. Also included is the additional calculated water required for different levels of irrigation efficiency / distribution uniformity and a running total for the year. We will be trying to get this out weekly and keep a running posting on my website. Let me know if this is helpful and how you think it could be improved.

WEEKLY SOIL MOISTURE LOSS IN INCHES (Estimated Crop Evapotranspiration or ETc) 04/27/15 through 05/03/15												
Crops (Leafout Date)	#5 Shafter				#125 Arvin-Edison				#146 Belridge			
	Past Week	Accum'd	Next Week's		Past Week	Accum'd	Next Week's		Past Week	Accum'd	Next Week's	
	of Water	Seasonal	Estimated		of Water	Seasonal	Estimated		of Water	Seasonal	Estimated	
	Use	Water Use	ETc		Use	Water Use	ETc		Use	Water Use	ETc	
Almonds (2/25) *	1.66	10.81	1.58		1.85	10.92	1.63		1.71	11.22	1.63	
Pistachio (3/22) * **	1.00	2.96	1.07		1.12	2.98	1.12		1.03	3.05	1.12	
Citrus	1.23	10.25	1.11		1.37	10.50	1.16		1.26	10.65	1.16	
Grapes (3/10) (late season table, 75% cover)	0.72	2.96	0.85		0.82	2.98	0.85		0.75	3.06	0.85	
Winegrapes (3/10) (50% cover) *	1.07	3.60	1.06		1.20	3.61	1.06		1.09	3.71	1.06	
Alfalfa	1.71	14.25	1.55		1.90	14.60	1.60		1.77	14.84	1.60	
Cotton (4/6)	0.25	0.70	0.33		0.30	0.69	0.33		0.28	0.75	0.33	
Past 7 days precipitation (inches)		0.00				0.00				0.00		
Accumulated precipitation (inches)		1.54				2.09				0.40		

Accumulations started on February 10, 2015 or on the approximate leafout date for a specific orchard crop as indicated in parentheses. Criteria for beginning this report are based on the season's last significant rainfall event where the soil moisture profile is estimated to be near its highest level for the new season.

^{**} Very vigorous, non-salt affected peak season pistachio Kc can be as high as 1.19 – resulting in about 8% greater water use than shown in these tables.

		PAST WEEKLY APPLIED WATER IN INCHES, ADJUSTED FOR EFFICIENCY												
	#5 Shafter				#125 Arvin-Edison				#146 Belridge					
65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%			
2.6	2.2	2.0	1.7	2.8	2.5	2.2	1.9	2.6	2.3	2.0	1.8			
1.6	1.3	1.2	1.1	1.7	1.5	1.3	1.2	1.6	1.4	1.2	1.1			
1.9	1.6	1.4	1.3	2.1	1.8	1.6	1.4	1.9	1.7	1.5	1.3			
1.2	1.0	0.8	0.8	1.3	1.1	1.0	0.9	1.2	1.0	0.9	0.8			
1.6	1.4	1.3	1.1	1.8	1.6	1.4	1.3	1.6	1.5	1.3	1.1			
2.7	2.3	2.0	1.8	2.9	2.5	2.2	2.0	2.7	2.4	2.1	1.9			
0.4	0.3	0.3	0.3	0.5	0.4	0.4	0.3	0.4	0.4	0.3	0.3			
	2.6 1.6 1.9 1.2 1.6 2.7 0.4	65% 75% 2.6 2.2 1.6 1.3 1.9 1.6 1.2 1.0 1.6 1.4 2.7 2.3 0.4 0.3	65% 75% 85% 2.6 2.2 2.0 1.6 1.3 1.2 1.9 1.6 1.4 1.2 1.0 0.8 1.6 1.4 1.3 2.7 2.3 2.0 0.4 0.3 0.3	65% 75% 85% 95% 2.6 2.2 2.0 1.7 1.6 1.3 1.2 1.1 1.9 1.6 1.4 1.3 1.2 1.0 0.8 0.8 1.6 1.4 1.3 1.1 2.7 2.3 2.0 1.8 0.4 0.3 0.3 0.3	65% 75% 85% 95% 65% 2.6 2.2 2.0 1.7 2.8 1.6 1.3 1.2 1.1 1.7 1.9 1.6 1.4 1.3 2.1 1.2 1.0 0.8 0.8 1.3 1.6 1.4 1.3 1.1 1.8 2.7 2.3 2.0 1.8 2.9 0.4 0.3 0.3 0.3 0.5	65% 75% 85% 95% 65% 75% 2.6 2.2 2.0 1.7 2.8 2.5 1.6 1.3 1.2 1.1 1.7 1.5 1.9 1.6 1.4 1.3 2.1 1.8 1.2 1.0 0.8 0.8 1.3 1.1 1.6 1.4 1.3 1.1 1.8 1.6 2.7 2.3 2.0 1.8 2.9 2.5 0.4 0.3 0.3 0.3 0.5 0.4	65% 75% 85% 95% 65% 75% 85% 2.6 2.2 2.0 1.7 2.8 2.5 2.2 1.6 1.3 1.2 1.1 1.7 1.5 1.3 1.9 1.6 1.4 1.3 2.1 1.8 1.6 1.2 1.0 0.8 0.8 1.3 1.1 1.0 1.6 1.4 1.3 1.1 1.8 1.6 1.4 2.7 2.3 2.0 1.8 2.9 2.5 2.2 0.4 0.3 0.3 0.3 0.5 0.4 0.4	65% 75% 85% 95% 65% 75% 85% 95% 2.6 2.2 2.0 1.7 2.8 2.5 2.2 1.9 1.6 1.3 1.2 1.1 1.7 1.5 1.3 1.2 1.9 1.6 1.4 1.3 2.1 1.8 1.6 1.4 1.2 1.0 0.8 0.8 1.3 1.1 1.0 0.9 1.6 1.4 1.3 1.1 1.8 1.6 1.4 1.3 2.7 2.3 2.0 1.8 2.9 2.5 2.2 2.0 0.4 0.3 0.3 0.3 0.5 0.4 0.4 0.3	65% 75% 85% 95% 65% 75% 85% 95% 65% 2.6 2.2 2.0 1.7 2.8 2.5 2.2 1.9 2.6 1.6 1.3 1.2 1.1 1.7 1.5 1.3 1.2 1.6 1.9 1.6 1.4 1.3 2.1 1.8 1.6 1.4 1.9 1.2 1.0 0.8 0.8 1.3 1.1 1.0 0.9 1.2 1.6 1.4 1.3 1.1 1.8 1.6 1.4 1.3 1.6 2.7 2.3 2.0 1.8 2.9 2.5 2.2 2.0 2.7 0.4 0.3 0.3 0.3 0.5 0.4 0.4 0.3 0.4	65% 75% 85% 95% 65% 75% 85% 95% 65% 75% 2.6 2.2 2.0 1.7 2.8 2.5 2.2 1.9 2.6 2.3 1.6 1.3 1.2 1.1 1.7 1.5 1.3 1.2 1.6 1.4 1.9 1.6 1.4 1.3 2.1 1.8 1.6 1.4 1.9 1.7 1.2 1.0 0.8 0.8 1.3 1.1 1.0 0.9 1.2 1.0 1.6 1.4 1.3 1.1 1.8 1.6 1.4 1.3 1.6 1.5 2.7 2.3 2.0 1.8 2.9 2.5 2.2 2.0 2.7 2.4 0.4 0.3 0.3 0.3 0.5 0.4 0.4 0.3 0.4 0.4	65% 75% 85% 95% 65% 75% 85% 95% 65% 75% 85% 2.6 2.2 2.0 1.7 2.8 2.5 2.2 1.9 2.6 2.3 2.0 1.6 1.3 1.2 1.1 1.7 1.5 1.3 1.2 1.6 1.4 1.2 1.9 1.6 1.4 1.3 2.1 1.8 1.6 1.4 1.9 1.7 1.5 1.2 1.0 0.8 0.8 1.3 1.1 1.0 0.9 1.2 1.0 0.9 1.6 1.4 1.3 1.1 1.8 1.6 1.4 1.3 1.6 1.5 1.3 2.7 2.3 2.0 1.8 2.9 2.5 2.2 2.0 2.7 2.4 2.1			

¹ The amount of water required by a specific irrigation system to satisfy evapotranspiration. Typical ranges in irrigation system efficiency are: Drip, 80%-95%; Micro-sprinkler, 80%-90%; Sprinkler, 70%-85%; and Border-furous 50%-75%.

For further information concerning all counties receiving this report, contact the Kern Co. Farm Advisor's office at (661) 868-6218.

Blake Sanden, Irrigation and Agronomy Farm Advisor 661-868-6218 or <u>blsanden@ucdavis.edu</u>

Disclaimer: The University of California prohibits discrimination or harassment of any person on the basis of race, color, national origin, religion, sex, gender identity, pregnancy (including childbirth, and medical conditions related to pregnancy or childbirth), physical or mental disability, medical condition (cancer-related or genetic characteristics), ancestry, marital status, age, sexual orientation, citizenship, or status as a covered veteran (covered veterans are special disabled veterans, recently separated veterans, Vietnam era veterans, or any other veterans who served on active duty during a war or in a campaign or expedition for which a campaign badge has been authorized) in any of its programs or activities. University policy is intended to be consistent with the provisions of applicable State and Federal laws. Inquiries regarding the University's nondiscrimination policies may be directed to the Affirmative Action/Staff Personnel Services Director, University of California, Agriculture and Natural Resources, 1111 Franklin Street, 6th Floor, Oakland, CA 94607, (510) 987-0996.

Discussion of research findings necessitates using trade names. This does not constitute product nedestances, in it is not not go and in long or garden and the state of the product nedestances. The product is not listed would not be suitable for use. Some research results included involve use of chemicals which are currently registered for use, or may involve use which would be considered out of label. These results are reported but are not a recommendation from the University of California for use. Consult the label and use it as the basis of all recommendations.

^{*} Estimates are for orchard floor conditions where vegetation is managed by some tombination of strip applications of herbicides, frequent mowing or tillage, and by mid and late season shading and water stress. Weekly estimates of soil moisture loss can be as much as 25 percent higher in orchards where cover crops are planted and managed more intensively for maximum growth.

* Winegrapes irrigated at 50% of ETo starting June 1 to end of September.