HEALTHY FOOD SYSTEMS • HEALTHY ENVIRONMENTS • HEALTHY COMMUNITIES • HEALTHY CALIFORNIANS

## University of California

**Agriculture and Natural Resources** 



# **UCCE/DWR Weekly Crop** Water Use Report

Making a Difference for California

#### WEEKLY SOIL MOISTURE LOSS IN INCHES (Estimated Crop Evapotranspiration or ET<sub>C</sub>) 08/17/18 through 08/23/18

	1										
Crops (Leafout Date)	#188 Madera II ***			#39 Parlier				#86 Lindcove			
	8/17-8/23	Accum'd	8/24- 8/30	8/17-8/23	Accum'd	8/24- 8/30		8/17-8/23	Accum'd	8/24- 8/30	
	Water	Seasonal	Estimated	Water	Seasonal	Estimated		Water	Seasonal	Estimated	
	Use	Water Use	ETc	Use	Water Use	ETc		Use	Water Use	ETc	
Almonds (3/16) *	1.74	33.48	1.59	1.91	34.79	1.58		1.90	33.70	1.59	
Pistachio (4/21) * **	1.74	24.04	1.59	1.95	25.47	1.58		1.95	24.95	1.59	
Citrus (2/1)	1.04	26.65	0.98	1.17	27.45	0.98		1.15	26.54	0.98	
Raisin Grapes (3/16) (11 ft. row spacing)	1.32	24.02	1.24	1.49	25.04	1.23		1.48	24.33	1.24	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.53	26.13	1.38	1.70	27.31	1.37		1.69	26.60	1.38	
Walnuts (4/4)	1.81	29.12	1.66	2.02	30.55	1.65		2.02	29.72	1.66	
Stone Fruit (3/16)	1.74	27.30	1.59	1.95	28.75	1.58		1.95	28.01	1.59	
Past 7 days precipitation (inches)		0.00			0.00				0.00		
Accumulated precipitation (inches) (1/1/2018)		6.33			4.96				3.32		

Dates in parentheses above, indicate leaf out or starting date for ET accumulation for the specific crop

\* Estimates are for orchard floor conditions where vegetation is managed by some combination 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.

\*\* 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.

\*\*\* CIMIS station #188 Madera II has been taken out of service due to a conversion of the pasture to permanent crops. For the remainder of 2018 irrigation season Historical Average ETo will be used for the weekly report.

P	AST WEEK	ST WEEKLY APPLIED WATER IN INCHES, ADJUSTED FOR EFFICIENCY 1												
Crops		#188 Madera II				#39 Parlier	•							
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%		
Almonds (3/16)	2.7	2.3	2.0	1.8	2.9	2.5	2.2	2.0	2.9	2.5	2.2	2.0		
Pistachio (4/21)	2.7	2.3	2.0	1.8	3.0	2.6	2.3	2.1	3.0	2.6	2.3	2.1		
Citrus (2/1)	1.6	1.4	1.2	1.1	1.8	1.6	1.4	1.2	1.8	1.5	1.4	1.2		
Raisin Grapes (3/16) (11 ft. row spacing)	2.0	1.8	1.6	1.4	2.3	2.0	1.8	1.6	2.3	2.0	1.7	1.6		
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	2.4	2.0	1.8	1.6	2.6	2.3	2.0	1.8	2.6	2.3	2.0	1.8		
Walnuts (4/4)	2.8	2.4	2.1	1.9	3.1	2.7	2.4	2.1	3.1	2.7	2.4	2.1		
Stone Fruit (3/16)	2.7	2.3	2.0	1.8	3.0	2.6	2.3	2.1	3.0	2.6	2.3	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-furrow, 50%-75%.

	PAST W	VEEKLY A	PPLIED W	ATER IN G	ALLON PI	ER TREE C	R VINE					
Crops		#188 Made	ra II			#39 Parlier			#86 Lindcove			
Almonds 115 Trees/A	638	543	472	425	685	590	519	472	685	590	519	472
Pistachio 106 Trees/A	673	573	498	448	747	648	573	523	747	648	573	523
Citrus 110 Trees/A	395	346	296	272	444	395	346	296	444	370	346	296
Raisin Grapes 566 Vines/A	96	86	77	67	110	96	86	77	110	96	82	77
Winegrapes 622 Vines/A	105	87	79	70	114	100	87	79	114	100	87	79
Walnuts 76 Trees/A	1000	857	750	679	1108	965	857	750	1108	965	857	750
Stonefruit 172 Trees/A	426	363	316	284	474	410	363	332	474	410	363	332
For further information concerning all counties receiving this report, contac	t the Fresno C	Co. Farm Ad	visor's office	at (559) 24	1-7526.							

#### HEALTHY FOOD SYSTEMS .

HEALTHY ENVIRONMEN

S • HEALTHY COMMUNITIES • HEALTH

### **University** of California

**Agriculture and Natural Resources** 

Making a Difference for California



# UCCE/DWR Weekly Crop Water Use Report

### WEEKLY SOIL MOISTURE LOSS IN INCHES (Estimated Crop Evapotranspiration or ET<sub>C</sub>) 08/17/18 through 08/23/18

Crops (Leafout Date)	#124 Panoche			#	2 Five Poin	ts	#15 Stratford				
	8/17-8/23	Accum'd	8/24- 8/30	8/17-8/23	Accum'd	8/24- 8/30		8/17-8/23	Accum'd	8/24- 8/30	
	Water	Seasonal	Estimated	Water	Seasonal	Estimated		Water	Seasonal	Estimated	
	Use	Water Use	ETc	Use	Water Use	ETc		Use	Water Use	ETc	
Almonds (3/16) *	1.94	36.72	1.71	2.05	38.67	1.85		2.05	38.46	1.87	
Pistachio (4/21) * **	1.98	26.90	1.71	2.11	28.00	1.88		2.12	27.71	1.92	
Citrus (2/1)	1.18	29.77	1.07	1.25	31.71	1.14		1.24	31.39	1.16	
Raisin Grapes (3/16) (11 ft. row spacing)	1.50	25.98	1.29	1.59	27.12	1.43		1.60	26.93	1.45	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.73	28.45	1.50	1.84	29.71	1.64		1.84	29.54	1.66	
Walnuts (4/4)	2.05	32.14	1.78	2.18	33.68	1.95		2.19	33.43	1.99	
Stone Fruit (3/16)	1.98	30.41	1.71	2.11	31.87	1.88		2.12	31.56	1.92	
Past 7 days precipitation (inches)		0.00			0.00				0.00		
Accumulated precipitation (inches) (1/1/2018)		2.56			3.04				1.62		

Dates in parentheses above, indicate leaf out or starting date for ET accumulation for the specific crop

\* Estimates are for orchard floor conditions where vegetation is managed by some combination 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.

\*\* 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.

Р	AST WEEKLY APPLIED WATER IN INCHES, ADJUSTED FOR EFFICIENCY <sup>1</sup>												
Crops	#124 Panoche					#2 Five Poi	ints						
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%	
Almonds (3/16)	3.0	2.6	2.3	2.0	3.2	2.7	2.4	2.2	3.2	2.7	2.4	2.2	
Pistachio (4/21)	3.0	2.6	2.3	2.1	3.2	2.8	2.5	2.2	3.3	2.8	2.5	2.2	
Citrus (2/1)	1.8	1.6	1.4	1.2	1.9	1.7	1.5	1.3	1.9	1.7	1.5	1.3	
Raisin Grapes (3/16) (11 ft. row spacing)	2.3	2.0	1.8	1.6	2.4	2.1	1.9	1.7	2.5	2.1	1.9	1.7	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	2.7	2.3	2.0	1.8	2.8	2.5	2.2	1.9	2.8	2.5	2.2	1.9	
Walnuts (4/4)	3.2	2.7	2.4	2.2	3.4	2.9	2.6	2.3	3.4	2.9	2.6	2.3	
Stone Fruit (3/16)	3.0	2.6	2.3	2.1	3.2	2.8	2.5	2.2	3.3	2.8	2.5	2.2	

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-furrow, 50%-75%.

	PAST V	VEEKLY A	PPLIED W.	ATER IN G	ALLON PI	ER TREE C	OR VINE						
Crops	#124 Panoche #2 Five Points									#15 Stratford			
Almonds 115 Trees/A	708	614	543	472	756	638	567	519	756	638	567	519	
Pistachio 106 Trees/A	747	648	573	523	797	698	623	548	822	698	623	548	
Citrus 110 Trees/A	444	395	346	296	469	420	370	321	469	420	370	321	
Raisin Grapes 566 Vines/A	110	96	86	77	115	101	91	82	120	101	91	82	
Winegrapes 622 Vines/A	118	100	87	79	122	109	96	83	122	109	96	83	
Walnuts 76 Trees/A	1143	965	857	786	1215	1036	929	822	1215	1036	929	822	
Stonefruit 172 Trees/A	474	410	363	332	505	442	395	347	521	442	395	347	
For further information concerning all counties receiving this report, contact	the Fresno C	Co. Farm Ad	visor's office	at (559) 24	1-7526.								