### 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  $ET_C$ ) 07/06/18 through 07/12/18

Crops (Leafout Date)	#18	#188 Madera II ***				#39 Parlier		7	#86 Lindcov	e
	7/6- 7/12	Accum'd	7/13- 7/19		7/6- 7/12	Accum'd	7/13- 7/19	7/6-7/12	Accum'd	7/13- 7/19
	Water	Seasonal	Estimated		Water	Seasonal	Estimated	Water	Seasonal	Estimated
	Use	Water Use	ETc		Use	Water Use	ETc	Use	Water Use	ETc
Almonds (3/16) *	1.95	22.40	1.96		2.07	22.71	1.95	1.92	21.80	1.96
Pistachio (4/21) * **	2.09	12.77	2.03		2.18	13.03	2.02	2.05	12.67	2.03
Citrus (2/1)	1.25	19.96	1.19		1.30	20.08	1.18	1.21	19.33	1.19
Raisin Grapes (3/16) (11 ft. row spacing)	1.60	15.46	1.54		1.65	15.59	1.53	1.54	15.00	1.54
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.81	16.31	1.75		1.89	16.49	1.74	1.78	15.95	1.75
Walnuts (4/4)	1.88	17.63	1.90		1.98	17.89	1.89	1.85	17.22	1.90
Stone Fruit (3/16)	1.74	16.48	1.80		1.85	16.71	1.79	1.73	16.13	1.80
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

\*\*\* 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.

l l	'AST WEEK	LY APPLI	ED WATER	K IN INCHI	ES, ADJUS	<u>TED FOR E</u>	FFICIENC	CY 1				
Crops	#188 Madera II					#39 Parlier			#86 Lindcove			
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/16)	3.0	2.6	2.3	2.1	3.2	2.8	2.4	2.2	3.0	2.6	2.3	2.0
Pistachio (4/21)	3.2	2.8	2.5	2.2	3.4	2.9	2.6	2.3	3.2	2.7	2.4	2.2
Citrus (2/1)	1.9	1.7	1.5	1.3	2.0	1.7	1.5	1.4	1.9	1.6	1.4	1.3
Raisin Grapes (3/16) (11 ft. row spacing)	2.5	2.1	1.9	1.7	2.5	2.2	1.9	1.7	2.4	2.1	1.8	1.6
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	2.8	2.4	2.1	1.9	2.9	2.5	2.2	2.0	2.7	2.4	2.1	1.9
Walnuts (4/4)	2.9	2.5	2.2	2.0	3.0	2.6	2.3	2.1	2.8	2.5	2.2	1.9
Stone Fruit (3/16)	2.7	2.3	2.0	1.8	2.8	2.5	2.2	1.9	2.7	2.3	2.0	1.8

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 WEEKLY APPLIED WATER IN GALLON PER TREE OR VINE												
Crops	#188 Madera II					#39 Parlier	•					
Almonds 115 Trees/A	708	614	543	496	756	661	567	519	708	614	543	472
Pistachio 106 Trees/A	797	698	623	548	847	722	648	573	797	673	598	548
Citrus 110 Trees/A	469	420	370	321	494	420	370	346	469	395	346	321
Raisin Grapes 566 Vines/A	120	101	91	82	120	106	91	82	115	101	86	77
Winegrapes 622 Vines/A	122	105	92	83	127	109	96	87	118	105	92	83
Walnuts 76 Trees/A	1036	893	786	715	1072	929	822	750	1000	893	786	679
Stonefruit 172 Trees/A	426	363	316	284	442	395	347	300	426	363	316	284
For further information concerning all counties receiving this report, contact	the Fresno C	Co. Farm Ad	visor's office	at (559) 24	1-7526.				•			

<sup>\*</sup> 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.

<sup>\*\*</sup> 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.

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  $ET_C$ ) 07/06/18 through 07/12/18

Crops (Leafout Date)	#124 Panoche				#2 Five Points			#15 Stratford				
	7/6-7/12	Accum'd	7/13- 7/19		7/6-7/12	Accum'd	7/13- 7/19		7/6-7/12	Accum'd	7/13- 7/19	
	Water	Seasonal	Estimated		Water	Seasonal	Estimated		Water	Seasonal	Estimated	
	Use	Water Use	ETc		Use	Water Use	ETc		Use	Water Use	ETc	
Almonds (3/16) *	2.44	24.13	2.03		2.47	25.28	2.13		2.46	25.42	2.17	
Pistachio (4/21) * **	2.54	13.97	2.10		2.57	14.25	2.20		2.55	14.35	2.24	
Citrus (2/1)	1.51	22.09	1.26		1.51	23.57	1.29		1.51	23.46	1.33	
Raisin Grapes (3/16) (11 ft. row spacing)	1.91	16.15	1.61		1.95	16.67	1.64		1.93	16.76	1.68	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	2.19	17.17	1.82		2.21	17.67	1.92		2.20	17.84	1.96	
Walnuts (4/4)	2.31	18.99	1.97		2.33	19.68	2.07		2.32	19.83	2.11	
Stone Fruit (3/16)	2.17	17.84	1.87		2.19	18.45	1.97		2.18	18.54	2.01	
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

<sup>\*\*</sup> 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 1													
Crops	#124 Panoche					#2 Five Poi	nts						
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%	
Almonds (3/16)	3.8	3.3	2.9	2.6	3.8	3.3	2.9	2.6	3.8	3.3	2.9	2.6	
Pistachio (4/21)	3.9	3.4	3.0	2.7	4.0	3.4	3.0	2.7	3.9	3.4	3.0	2.7	
Citrus (2/1)	2.3	2.0	1.8	1.6	2.3	2.0	1.8	1.6	2.3	2.0	1.8	1.6	
Raisin Grapes (3/16) (11 ft. row spacing)	2.9	2.5	2.2	2.0	3.0	2.6	2.3	2.1	3.0	2.6	2.3	2.0	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	3.4	2.9	2.6	2.3	3.4	2.9	2.6	2.3	3.4	2.9	2.6	2.3	
Walnuts (4/4)	3.6	3.1	2.7	2.4	3.6	3.1	2.7	2.5	3.6	3.1	2.7	2.4	
Stone Fruit (3/16)	3.3	2.9	2.6	2.3	3.4	2.9	2.6	2.3	3.4	2.9	2.6	2.3	

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 WEEKLY APPLIED WATER IN GALLON PER TREE OR VINE												
Crops		#124 Panoo		#2 Five Poi	nts							
Almonds 115 Trees/A	897	779	685	614	897	779	685	614	897	779	685	614
Pistachio 106 Trees/A	972	847	747	673	996	847	747	673	972	847	747	673
Citrus 110 Trees/A	568	494	444	395	568	494	444	395	568	494	444	395
Raisin Grapes 566 Vines/A	139	120	106	96	144	125	110	101	144	125	110	96
Winegrapes 622 Vines/A	148	127	114	100	148	127	114	100	148	127	114	100
Walnuts 76 Trees/A	1286	1108	965	857	1286	1108	965	893	1286	1108	965	857
Stonefruit 172 Trees/A	521	458	410	363	537	458	410	363	537	458	410	363
For further information concerning all counties receiving this report, contact	the Fresno C	Co. Farm Ad	visor's office	at (559) 24	1-7526.				•			

<sup>\*</sup> 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.