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) 05/04/18 through 05/10/18

Crops (Leafout Date)	#1	#188 Madera II			#39 Parlier				#86 Lindcove			
	5/4 - 5/10	Accum'd	5/11 - 5/17		5/4 - 5/10	Accum'd	5/11 - 5/17		5/4 - 5/10	Accum'd	5/11 - 5/17	
	Water	Seasonal	Estimated		Water	Seasonal	Estimated		Water	Seasonal	Estimated	
	Use	Water Use	ETc		Use	Water Use	ETc		Use	Water Use	ETc	
Almonds (3/16) *	1.37	6.51	1.33		1.32	6.56	1.29		1.24	6.17	1.23	
Pistachio (4/21) * **	0.32	0.55	0.46		0.30	0.53	0.46		0.28	0.50	0.44	
Citrus (2/1)	1.21	8.78	1.12		1.13	8.79	1.08		1.06	8.44	1.05	
Raisin Grapes (3/16) (11 ft. row spacing)	0.83	2.19	0.75		0.80	2.20	0.74		0.74	2.02	0.72	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	0.80	2.55	0.81		0.77	2.51	0.80		0.72	2.37	0.77	
Walnuts (4/4)	1.15	3.24	1.09		1.11	3.21	1.08		1.05	3.02	1.02	
Stone Fruit (3/16)	0.90	3.40	0.93		0.86	3.37	0.90		0.83	3.22	0.87	
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

^{**} 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 INCHE	ES. ADJUSTED FOR EFFICIENCY 1

Crops		#188 Made	ra II			#39 Parlier			#86 Lindcove			
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/16)	2.1	1.8	1.6	1.4	2.0	1.8	1.6	1.4	1.9	1.7	1.5	1.3
Pistachio (4/21)	0.5	0.4	0.4	0.3	0.5	0.4	0.4	0.3	0.5	0.4	0.4	0.3
Citrus (2/1)	1.9	1.6	1.4	1.3	1.7	1.5	1.3	1.2	1.6	1.4	1.2	1.1
Raisin Grapes (3/16) (11 ft. row spacing)	1.3	1.1	1.0	0.9	1.2	1.1	0.9	0.8	1.1	1.0	0.9	0.8
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.2	1.1	0.9	0.8	1.2	1.0	0.9	0.8	1.1	1.0	0.8	0.8
Walnuts (4/4)	1.8	1.5	1.4	1.2	1.7	1.5	1.3	1.2	1.6	1.4	1.2	1.1
Stone Fruit (3/16)	1.4	1.2	1.1	0.9	1.3	1.1	1.0	0.9	1.3	1.1	1.0	0.9

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	APPLIED	WATER IN	GALLON PER	TREE OR VINE

Crops		#188 Made	ra II			#39 Parlier			#86 Lindcove				
Almonds 115 Trees/A	496	425	378	331	472	425	378	331	449	401	354	307	
Pistachio 106 Trees/A	125	100	100	75	125	100	100	75	125	100	100	75	
Citrus 110 Trees/A	469	395	346	321	420	370	321	296	395	346	296	272	
Raisin Grapes 566 Vines/A	62	53	48	43	58	53	43	38	53	48	43	38	
Winegrapes 622 Vines/A	52	48	39	35	52	44	39	35	48	44	35	35	
Walnuts 76 Trees/A	643	536	500	429	607	536	464	429	572	500	429	393	
Stonefruit 172 Trees/A	221	189	174	142	205	174	158	142	205	174	158	142	
For further information concerning all counties receiving this report, contact the Fresno Co. Farm Advisor's office at (559) 241-7526.													

^{*} 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.

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Crops (Leafout Date)	#	#124 Panoche			#2 Five Points			#			
	5/4 - 5/10	Accum'd	5/11 - 5/17		5/4 - 5/10	Accum'd	5/11 - 5/17	5/4 - 5/10	Accum'd	5/11 - 5/17	
	Water	Seasonal	Estimated		Water	Seasonal	Estimated	Water	Seasonal	Estimated	i
	Use	Water Use	ETc		Use	Water Use	ETc	Use	Water Use	ETc	
Almonds (3/16) *	1.32	6.83	1.51		1.54	7.72	1.53	1.46	7.69	1.52	1
Pistachio (4/21) * **	0.30	0.55	0.53		0.35	0.62	0.53	0.33	0.61	0.53	1
Citrus (2/1)	1.16	10.11	1.26		1.34	11.38	1.26	1.26	11.19	1.26	i
Raisin Grapes (3/16) (11 ft. row spacing)	0.75	2.10	0.00		0.87	2.36	0.00	0.83	2.34	0.00	1
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	0.73	2.52	0.00		0.83	2.83	0.00	0.80	2.83	0.00	i
Walnuts (4/4)	1.11	3.27	1.23		1.29	3.69	1.25	1.23	3.69	1.24	1
Stone Fruit (3/16)	0.87	3.56	1.01		1.00	3.99	1.03	0.95	3.95	1.02	
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

^{**} 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 Pano	che		#2 Five Points							
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/16)	2.0	1.8	1.6	1.4	2.4	2.1	1.8	1.6	2.2	1.9	1.7	1.5
Pistachio (4/21)	0.5	0.4	0.4	0.3	0.5	0.5	0.4	0.4	0.5	0.4	0.4	0.3
Citrus (2/1)	1.8	1.5	1.4	1.2	2.1	1.8	1.6	1.4	1.9	1.7	1.5	1.3
Raisin Grapes (3/16) (11 ft. row spacing)	1.2	1.0	0.9	0.8	1.3	1.2	1.0	0.9	1.3	1.1	1.0	0.9
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.1	1.0	0.9	0.8	1.1	1.0	0.9	0.8	1.2	1.1	0.9	0.8
Walnuts (4/4)	1.7	1.5	1.3	1.2	2.0	1.7	1.5	1.4	1.9	1.6	1.4	1.3
Stone Fruit (3/16)	1.3	1.2	1.0	0.9	1.5	1.3	1.2	1.1	1.5	1.3	1.1	1.0

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	che			#2 Five Poi	nts		#15 Stratford			
Almonds 115 Trees/A	472	425	378	331	567	496	425	378	519	449	401	354
Pistachio 106 Trees/A	125	100	100	75	125	125	100	100	125	100	100	75
Citrus 110 Trees/A	444	370	346	296	518	444	395	346	469	420	370	321
Raisin Grapes 566 Vines/A	58	48	43	38	62	58	48	43	62	53	48	43
Winegrapes 622 Vines/A	48	44	39	35	48	44	39	35	52	48	39	35
Walnuts 76 Trees/A	607	536	464	429	715	607	536	500	679	572	500	464
Stonefruit 172 Trees/A	205	189	158	142	237	205	189	174	237	205	174	158
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