



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

**WEEKLY SOIL MOISTURE LOSS IN INCHES**

(Estimated Crop Evapotranspiration or ET<sub>c</sub>)

04/12/19 through 04/18/19

Crops (Leafout Date)	#148 Merced			#39 Parlier			#258 Lemon Cove		
	4/12 - 4/18 Water Use	Accum'd Seasonal Water Use	4/19 - 4/25 Estimated ETc	4/12 - 4/18 Water Use	Accum'd Seasonal Water Use	4/19 - 4/25 Estimated ETc	4/12 - 4/18 Water Use	Accum'd Seasonal Water Use	4/19 - 4/25 Estimated ETc
Almonds (3/10) *	0.92	3.57	0.96	0.98	3.94	0.96	0.96	3.68	0.94
Pistachio (4/19) * **	0.00	0.00	0.07	0.00	0.00	0.07	0.00	0.00	0.07
Citrus (2/1)	0.88	5.76	0.89	0.93	6.25	0.91	0.92	5.71	0.87
Raisin Grapes (3/16 ) (11 ft. row spacing) ***	0.22	0.54	0.26	0.23	0.57	0.28	0.23	0.54	0.24
Winegrapes (3/16 ) (10 ft. spacing on California Sprawl Trellis) ***	0.29	0.81	0.33	0.31	0.93	0.35	0.30	0.88	0.31
Walnuts (4/15)	0.08	0.08	0.14	0.09	0.09	0.14	0.08	0.08	0.14
Stone Fruit (3/20 )	0.37	1.08	0.47	0.39	1.22	0.47	0.38	1.10	0.47
Past 7 days precipitation (inches)	0.02			0.12			0.19		
Accumulated precipitation (inches) (1/1/2019)	8.82			5.78			8.68		

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.

\*\*\* Raisin Grapes and Winegrapes Irrigation should hold off until midday leaf water potential drops to -1.0 MPa, before that soil moisture reservoir is sufficient to supply the vine water demand. Update will be sent shortly once the county wide leaf water potential reaches approximate -1.0 MPa. Growers should adjust the irrigation start date based on the individual vineyard location and soil type.

**PAST WEEKLY APPLIED WATER IN INCHES, ADJUSTED FOR EFFICIENCY <sup>1</sup>**

Crops	#148 Merced				#39 Parlier				#258 Lemon Cove			
	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/10)	1.4	1.2	1.1	1.0	1.5	1.3	1.2	1.0	1.5	1.3	1.1	1.0
Pistachio (4/19)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Citrus (2/1)	1.4	1.2	1.0	0.9	1.4	1.2	1.1	1.0	1.4	1.2	1.1	1.0
Raisin Grapes (3/16 ) (11 ft. row spacing)***	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Winegrapes (3/16 ) (10 ft. spacing on California Sprawl Trellis) ***	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Walnuts (4/15)	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Stone Fruit (3/20 )	0.6	0.5	0.4	0.4	0.6	0.5	0.5	0.4	0.6	0.5	0.4	0.4

<sup>1</sup> 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	#148 Merced				#39 Parlier				#258 Lemon Cove			
	331	283	260	236	354	307	283	236	354	307	260	236
Almonds 115 Trees/A	331	283	260	236	354	307	283	236	354	307	260	236
Pistachio 106 Trees/A	0	0	0	0	0	0	0	0	0	0	0	0
Citrus 110 Trees/A	346	296	247	222	346	296	272	247	346	296	272	247
Raisin Grapes 566 Vines/A	0	0	0	0	0	0	0	0	0	0	0	0
Winegrapes 622 Vines/A	0	0	0	0	0	0	0	0	0	0	0	0
Walnuts 76 Trees/A	36	36	36	36	36	36	36	36	36	36	36	36
Stonefruit 172 Trees/A	95	79	63	63	95	79	79	63	95	79	63	63

For further information concerning all counties receiving this report, contact the Fresno Co. Farm Advisor's office at (559) 241-7526.



**WEEKLY SOIL MOISTURE LOSS IN INCHES**  
 (Estimated Crop Evapotranspiration or ET<sub>c</sub>)  
 04/12/19 through 04/18/19

Crops (Leafout Date)	#124 Panoche			#2 Five Points				#15 Stratford		
	4/12 - 4/18 Water Use	Accum'd Seasonal Water Use	4/19 - 4/25 Estimated ETc	4/12 - 4/18 Water Use	Accum'd Seasonal Water Use	4/19 - 4/25 Estimated ETc	4/12 - 4/18 Water Use	Accum'd Seasonal Water Use	4/19 - 4/25 Estimated ETc	
Almonds (3/10) *	1.04	3.98	1.13	1.13	4.67	1.17	1.06	4.28	1.17	
Pistachio (4/19) * **	0.00	0.00	0.10	0.00	0.00	0.12	0.00	0.00	0.12	
Citrus (2/1)	0.99	6.29	1.03	1.08	7.41	1.07	1.00	6.55	1.07	
Raisin Grapes (3/16) (11 ft. row spacing) ***	0.25	0.60	0.31	0.28	0.71	0.33	0.27	0.66	0.33	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis) ***	0.34	0.98	0.40	0.38	1.17	0.42	0.34	1.03	0.42	
Walnuts (4/15)	0.09	0.09	0.19	0.11	0.11	0.21	0.09	0.09	0.21	
Stone Fruit (3/20)	0.41	1.22	0.57	0.44	1.41	0.59	0.42	1.35	0.59	
<b>Past 7 days precipitation (inches)</b>		0.05			0.23			0.35		
<b>Accumulated precipitation (inches) (1/1/2019)</b>		4.03			5.45			4.14		

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.

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Crops	#124 Panoche				#2 Five Points				#15 Stratford			
	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
System Efficiency >>												
Almonds (3/10)	1.6	1.4	1.2	1.1	1.7	1.5	1.3	1.2	1.6	1.4	1.2	1.1
Pistachio (4/19)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Citrus (2/1)	1.5	1.3	1.2	1.0	1.7	1.4	1.3	1.1	1.5	1.3	1.2	1.1
Raisin Grapes (3/16) (11 ft. row spacing) ***	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis) ***	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Walnuts (4/15)	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Stone Fruit (3/20)	0.6	0.5	0.5	0.4	0.7	0.6	0.5	0.5	0.6	0.6	0.5	0.4

<sup>1</sup> 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**

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	Almonds 115 Trees/A	378	331	283	260	401	354	307	283	378	331	283
Pistachio 106 Trees/A	0	0	0	0	0	0	0	0	0	0	0	0
Citrus 110 Trees/A	370	321	296	247	420	346	321	272	370	321	296	272
Raisin Grapes 566 Vines/A	0	0	0	0	0	0	0	0	0	0	0	0
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Walnuts 76 Trees/A	36	36	36	36	71	36	36	36	36	36	36	36
Stonefruit 172 Trees/A	95	79	79	63	111	95	79	79	95	95	79	63

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