



**WEEKLY SOIL MOISTURE LOSS IN INCHES**  
 (Estimated Crop Evapotranspiration or ET<sub>c</sub>)  
 05/10/19 through 05/16/19

Crops (Leafout Date)	#148 Merced				#39 Parlier				#258 Lemon Cove		
	5/10 - 5/16 Water Use	Accum'd Seasonal Water Use	5/17 - 5/23 Estimated ETc		5/10 - 5/16 Water Use	Accum'd Seasonal Water Use	5/17 - 5/23 Estimated ETc		5/10 - 5/16 Water Use	Accum'd Seasonal Water Use	5/17 - 5/23 Estimated ETc
Almonds (3/10) *	1.12	8.11	1.46		1.21	8.91	1.46		1.17	8.46	1.40
Pistachio (4/19) * **	0.62	1.83	0.94		0.69	2.00	0.94		0.66	1.91	0.89
Citrus (2/1)	0.92	9.71	1.13		1.00	10.58	1.13		0.96	9.88	1.07
Raisin Grapes (3/16) (11 ft. row spacing)	0.88	3.23	1.13		0.94	3.47	1.13		0.91	3.35	1.07
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	0.78	3.38	1.05		0.86	3.75	1.05		0.82	3.58	1.00
Walnuts (4/15)	0.79	2.43	1.12		0.87	2.69	1.12		0.83	2.57	1.07
Stone Fruit (3/20)	0.69	3.61	0.97		0.74	3.98	0.97		0.72	3.74	0.96
<b>Past 7 days precipitation (inches)</b>	0.85				0.49				0.60		
<b>Accumulated precipitation (inches) (1/1/2018)</b>	9.67				6.27				9.33		

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.

**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)	1.7	1.5	1.3	1.2		1.9	1.6	1.4	1.3		1.8	1.6	1.4	1.2
Pistachio (4/19)	1.0	0.8	0.7	0.7		1.0	0.8	0.7	0.7		1.0	0.8	0.7	0.7
Citrus (2/1)	1.4	1.2	1.1	1.0		1.5	1.3	1.2	1.1		1.5	1.3	1.1	1.0
Raisin Grapes (3/16) (11 ft. row spacing)	1.4	1.2	1.0	0.9		1.4	1.3	1.1	1.0		1.4	1.2	1.1	1.0
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.2	1.0	0.9	0.8		1.3	1.1	1.0	0.9		1.3	1.1	1.0	0.9
Walnuts (4/15)	1.2	1.1	0.9	0.8		1.3	1.2	1.0	0.9		1.3	1.1	1.0	0.9
Stone Fruit (3/20)	1.1	0.9	0.8	0.7		1.1	1.0	0.9	0.8		1.1	1.0	0.8	0.8

<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			
	401	354	307	283		449	378	331	307		425	378	331	283
Almonds 115 Trees/A	401	354	307	283		449	378	331	307		425	378	331	283
Pistachio 106 Trees/A	249	199	174	174		249	199	174	174		249	199	174	174
Citrus 110 Trees/A	346	296	272	247		370	321	296	272		370	321	272	247
Raisin Grapes 566 Vines/A	67	58	48	43		67	62	53	48		67	58	53	48
Winegrapes 622 Vines/A	52	44	39	35		57	48	44	39		57	48	44	39
Walnuts 76 Trees/A	429	393	322	286		464	429	357	322		464	393	357	322
Stonefruit 172 Trees/A	174	142	126	111		174	158	142	126		174	158	126	126

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>)

05/10/19 through 05/16/19

Crops (Leafout Date)	#124 Panoche			#2 Five Points			#15 Stratford		
	5/10 - 5/16 Water Use	Accum'd Seasonal Water Use	5/17 - 5/23 Estimated ETc	5/10 - 5/16 Water Use	Accum'd Seasonal Water Use	5/17 - 5/23 Estimated ETc	5/10 - 5/16 Water Use	Accum'd Seasonal Water Use	5/17 - 5/23 Estimated ETc
Almonds (3/10) *	1.32	9.25	1.59	1.24	9.90	1.64	1.07	9.39	1.65
Pistachio (4/19) * **	0.73	2.13	1.06	0.70	2.06	1.06	0.61	1.99	1.07
Citrus (2/1)	1.10	10.92	1.26	1.02	11.99	1.31	0.90	11.02	1.32
Raisin Grapes (3/16) (11 ft. row spacing)	1.01	3.77	1.26	0.97	3.81	1.31	0.84	3.65	1.32
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	0.93	4.02	1.19	0.88	4.16	1.19	0.77	3.94	1.19
Walnuts (4/15)	0.93	2.81	1.26	0.89	2.77	1.26	0.77	2.66	1.26
Stone Fruit (3/20)	0.82	4.16	1.10	0.76	4.32	1.14	0.68	4.18	1.14
Past 7 days precipitation (inches)	0.19			0.82			2.09		
Accumulated precipitation (inches) (1/1/2019)	4.22			6.34			6.23		

\* 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.

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

Crops	#124 Panoche				#2 Five Points				#15 Stratford			
	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)	2.0	1.8	1.6	1.4	1.9	1.7	1.5	1.3	1.6	1.4	1.3	1.1
Pistachio (4/19)	1.1	1.0	0.9	0.8	1.1	0.9	0.8	0.7	0.9	0.8	0.7	0.6
Citrus (2/1)	1.7	1.5	1.3	1.2	1.6	1.4	1.2	1.1	1.4	1.2	1.1	0.9
Raisin Grapes (3/16) (11 ft. row spacing)	1.6	1.3	1.2	1.1	1.5	1.3	1.1	1.0	1.3	1.1	1.0	0.9
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.4	1.2	1.1	1.0	1.4	1.2	1.1	1.0	1.2	1.0	0.9	0.8
Walnuts (4/15)	1.4	1.2	1.1	1.0	1.4	1.2	1.0	0.9	1.2	1.0	0.9	0.8
Stone Fruit (3/20)	1.3	1.1	1.0	0.9	1.2	1.0	0.9	0.8	1.0	0.9	0.8	0.7

<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	#124 Panoche				#2 Five Points				#15 Stratford			
	Almonds 115 Trees/A	472	425	378	331	449	401	354	307	378	331	307
Pistachio 106 Trees/A	274	249	224	199	274	224	199	174	224	199	174	149
Citrus 110 Trees/A	420	370	321	296	395	346	296	272	346	296	272	222
Raisin Grapes 566 Vines/A	77	62	58	53	72	62	53	48	62	53	48	43
Winegrapes 622 Vines/A	61	52	48	44	61	52	48	44	52	44	39	35
Walnuts 76 Trees/A	500	429	393	357	500	429	357	322	429	357	322	286
Stonefruit 172 Trees/A	205	174	158	142	189	158	142	126	158	142	126	111

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