

**WEEKLY SOIL MOISTURE LOSS IN INCHES**

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

05/17/19 through 05/23/19

Crops (Leafout Date)	#148 Merced				#39 Parlier				#258 Lemon Cove		
	5/17 - 5/23 Water Use	Accum'd Seasonal Water Use	5/24 - 5/30 Estimated ETc		5/17 - 5/23 Water Use	Accum'd Seasonal Water Use	5/24 - 5/30 Estimated ETc		5/17 - 5/23 Water Use	Accum'd Seasonal Water Use	5/24 - 5/30 Estimated ETc
Almonds (3/10) *	0.90	9.01	1.60		0.99	9.90	1.61		0.74	9.20	1.57
Pistachio (4/19) * **	0.58	2.41	1.13		0.63	2.63	1.14		0.49	2.40	1.12
Citrus (2/1)	0.70	10.41	1.13		0.76	11.34	1.14		0.57	10.45	1.12
Raisin Grapes (3/16) (11 ft. row spacing)	0.73	3.96	1.26		0.81	4.28	1.27		0.62	3.97	1.23
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	0.67	4.05	1.19		0.75	4.50	1.19		0.56	4.14	1.16
Walnuts (4/15)	0.68	3.11	1.18		0.75	3.44	1.19		0.56	3.13	1.18
Stone Fruit (3/20)	0.62	4.23	1.12		0.67	4.65	1.13		0.51	4.25	1.09
<b>Past 7 days precipitation (inches)</b>	1.21				0.85				0.77		
<b>Accumulated precipitation (inches) (1/1/2018)</b>	10.88				7.12				10.10		

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)	1.4	1.2	1.1	0.9		1.5	1.3	1.2	1.0		1.1	1.0	0.9	0.8
Pistachio (4/19)	0.9	0.8	0.7	0.6		0.9	0.8	0.7	0.6		0.9	0.8	0.7	0.6
Citrus (2/1)	1.1	0.9	0.8	0.7		1.2	1.0	0.9	0.8		0.9	0.8	0.7	0.6
Raisin Grapes (3/16) (11 ft. row spacing)	1.1	1.0	0.9	0.8		1.2	1.1	1.0	0.9		1.0	0.8	0.7	0.7
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.0	0.9	0.8	0.7		1.2	1.0	0.9	0.8		0.9	0.7	0.7	0.6
Walnuts (4/15)	1.0	0.9	0.8	0.7		1.2	1.0	0.9	0.8		0.9	0.7	0.7	0.6
Stone Fruit (3/20)	1.0	0.8	0.7	0.7		1.0	0.9	0.8	0.7		0.8	0.7	0.6	0.5

<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	213		354	307	283	236		260	236	213	189
Almonds 115 Trees/A	331	283	260	213		354	307	283	236		260	236	213	189
Pistachio 106 Trees/A	224	199	174	149		224	199	174	149		224	199	174	149
Citrus 110 Trees/A	272	222	197	173		296	247	222	197		222	197	173	148
Raisin Grapes 566 Vines/A	53	48	43	38		58	53	48	43		48	38	34	34
Winegrapes 622 Vines/A	44	39	35	31		52	44	39	35		39	31	31	26
Walnuts 76 Trees/A	357	322	286	250		429	357	322	286		322	250	250	214
Stonefruit 172 Trees/A	158	126	111	111		158	142	126	111		126	111	95	79

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>)

05/17/19 through 05/23/19

Crops (Leafout Date)	#124 Panoche				#2 Five Points				#15 Stratford		
	5/17 - 5/23 Water Use	Accum'd Seasonal Water Use	5/24 - 5/30 Estimated ETc		5/17 - 5/23 Water Use	Accum'd Seasonal Water Use	5/24 - 5/30 Estimated ETc		5/17 - 5/23 Water Use	Accum'd Seasonal Water Use	5/24 - 5/30 Estimated ETc
Almonds (3/10) *	0.98	10.23	1.71		1.09	10.99	1.81		0.86	10.25	1.81
Pistachio (4/19) * **	0.65	2.78	1.25		0.71	2.77	1.34		0.57	2.56	1.34
Citrus (2/1)	0.77	11.69	1.28		0.84	12.83	1.33		0.68	11.70	1.33
Raisin Grapes (3/16) (11 ft. row spacing)	0.78	4.55	1.37		0.87	4.68	1.47		0.69	4.34	1.47
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	0.73	4.75	1.30		0.82	4.98	1.33		0.65	4.59	1.33
Walnuts (4/15)	0.75	3.56	1.32		0.84	3.61	1.39		0.66	3.32	1.39
Stone Fruit (3/20)	0.68	4.84	1.23		0.75	5.07	1.26		0.59	4.77	1.26
<b>Past 7 days precipitation (inches)</b>	0.45				0.56				0.64		
<b>Accumulated precipitation (inches) (1/1/2018)</b>	4.67				6.90				6.87		

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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**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 >>														
Almonds (3/10)	1.5	1.3	1.2	1.0		1.7	1.5	1.3	1.1		1.3	1.1	1.0	0.9
Pistachio (4/19)	1.0	0.9	0.8	0.7		1.1	0.9	0.8	0.7		0.9	0.8	0.7	0.6
Citrus (2/1)	1.2	1.0	0.9	0.8		1.3	1.1	1.0	0.9		1.0	0.9	0.8	0.7
Raisin Grapes (3/16) (11 ft. row spacing)	1.2	1.0	0.9	0.8		1.3	1.2	1.0	0.9		1.1	0.9	0.8	0.7
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		1.0	0.9	0.8	0.7
Walnuts (4/15)	1.2	1.0	0.9	0.8		1.3	1.1	1.0	0.9		1.0	0.9	0.8	0.7
Stone Fruit (3/20)	1.0	0.9	0.8	0.7		1.2	1.0	0.9	0.8		0.9	0.8	0.7	0.6

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**PAST WEEKLY APPLIED WATER IN GALLON PER TREE OR VINE**

Crops	#124 Panoche					#2 Five Points					#15 Stratford			
Almonds 115 Trees/A	354	307	283	236		401	354	307	260		307	260	236	213
Pistachio 106 Trees/A	249	224	199	174		274	224	199	174		224	199	174	149
Citrus 110 Trees/A	296	247	222	197		321	272	247	222		247	222	197	173
Raisin Grapes 566 Vines/A	58	48	43	38		62	58	48	43		53	43	38	34
Winegrapes 622 Vines/A	48	44	39	35		48	44	39	35		44	39	35	31
Walnuts 76 Trees/A	429	357	322	286		464	393	357	322		357	322	286	250
Stonefruit 172 Trees/A	158	142	126	111		189	158	142	126		142	126	111	95

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