

**WEEKLY SOIL MOISTURE LOSS IN INCHES**

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

10/15/21 through 10/21/21

Crops (Leafout Date)	#148 Merced				#39 Parlier				#258 Lemon Cove		
	10/15 - 10/21 Water Use	Accum'd Seasonal Water Use	10/22 - 10/28 Estimated ETc		10/15 - 10/21 Water Use	Accum'd Seasonal Water Use	10/22 - 10/28 Estimated ETc		10/15 - 10/21 Water Use	Accum'd Seasonal Water Use	10/22 - 10/28 Estimated ETc
Almonds (3/5) *	0.70	46.50	0.59		0.76	49.37	0.57		0.76	45.70	0.57
Pistachio (4/16) * **	0.62	40.40	0.47		0.67	43.16	0.47		0.67	39.64	0.47
Citrus (2/1)	0.57	35.33	0.46		0.61	37.23	0.44		0.62	34.59	0.44
Raisin Grapes (3/12) (11 ft. row spacing)	0.67	32.83	0.56		0.72	35.08	0.56		0.72	32.20	0.56
Winegrapes (3/12 ) (10 ft. spacing on California Sprawl Trellis) ***	0.77	36.23	0.67		0.83	38.72	0.65		0.83	35.58	0.65
Walnuts (4/5)	0.23	41.02	0.21		0.24	43.69	0.21		0.24	40.29	0.21
Stone Fruit (3/10 )	0.66	39.85	0.53		0.71	42.55	0.51		0.71	39.10	0.51
Past 7 days precipitation (inches)	0.00				0.00				0.22		
Accumulated precipitation (inches) (1/1/2021)	5.62				3.95				4.12		

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 (3/5)	1.1	0.9	0.8	0.7		1.2	1.0	0.9	0.8		1.2	1.0	0.9	0.8
Pistachio (4/16)	1.0	0.8	0.7	0.7		1.0	0.9	0.8	0.7		1.0	0.9	0.8	0.7
Citrus (2/1)	0.9	0.8	0.7	0.6		0.9	0.8	0.7	0.6		1.0	0.8	0.7	0.7
Raisin Grapes (3/12) (11 ft. row spacing)***	1.0	0.9	0.8	0.7		1.1	1.0	0.8	0.8		1.1	1.0	0.8	0.8
Winegrapes (3/12 ) (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 (4/5)	0.4	0.3	0.3	0.2		0.4	0.3	0.3	0.3		0.4	0.3	0.3	0.3
Stone Fruit (3/10 )	1.0	0.9	0.8	0.7		1.1	0.9	0.8	0.7		1.1	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	#148 Merced					#39 Parlier					#258 Lemon Cove			
	260	213	189	165		283	236	213	189		283	236	213	189
Almonds 115 Trees/A	260	213	189	165		283	236	213	189		283	236	213	189
Pistachio 106 Trees/A	249	199	174	174		249	224	199	174		249	224	199	174
Citrus 110 Trees/A	222	197	173	148		222	197	173	148		247	197	173	173
Raisin Grapes 566 Vines/A	48	43	38	34		53	48	38	38		53	48	38	38
Winegrapes 622 Vines/A	52	44	39	35		57	48	44	39		57	48	44	39
Walnuts 76 Trees/A	143	107	107	71		143	107	107	107		143	107	107	107
Stonefruit 172 Trees/A	158	142	126	111		174	142	126	111		174	142	126	111

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>)

10/15/21 through 10/21/21

Crops (Leafout Date)	#124 Panoche			#2 Five Points			#15 Stratford		
	10/15- 10/21 Water Use	Accum'd Seasonal Water Use	10/22- 10/28 Estimated ETc	10/15- 10/21 Water Use	Accum'd Seasonal Water Use	10/22- 10/28 Estimated ETc	10/15- 10/21 Water Use	Accum'd Seasonal Water Use	10/22- 10/28 Estimated ETc
Almonds (3/5) *	0.76	52.89	0.67	0.86	53.68	0.74	0.86	54.81	0.72
Pistachio (4/16) * **	0.67	46.64	0.53	0.76	46.84	0.61	0.76	48.16	0.58
Citrus (2/1)	0.60	40.13	0.53	0.70	41.20	0.57	0.69	41.60	0.56
Raisin Grapes (3/12 ) (11 ft. row spacing)	0.72	37.83	0.60	0.84	38.08	0.68	0.83	39.13	0.65
Winegrapes (3/12) (10 ft. spacing on California Sprawl Trellis)	0.83	41.82	0.74	0.93	42.20	0.81	0.93	43.29	0.79
Walnuts (4/5)	0.24	47.07	0.21	0.28	47.34	0.22	0.27	48.43	0.21
Stone Fruit (3/10)	0.71	45.84	0.60	0.83	46.38	0.68	0.82	47.49	0.65
Past 7 days precipitation (inches)	0.00			0.01			0.00		
Accumulated precipitation (inches) (1/1/2021)	3.83			5.18			3.09		

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	#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 (3/5)	1.2	1.0	0.9	0.8	1.3	1.1	1.0	0.9	1.3	1.1	1.0	0.9
Pistachio (4/16)	1.0	0.9	0.8	0.7	1.2	1.0	0.9	0.8	1.2	1.0	0.9	0.8
Citrus (2/1)	0.9	0.8	0.7	0.6	1.1	0.9	0.8	0.7	1.1	0.9	0.8	0.7
Raisin Grapes (3/12 ) (11 ft. row spacing)	1.1	1.0	0.8	0.8	1.3	1.1	1.0	0.9	1.3	1.1	1.0	0.9
Winegrapes (3/12) (10 ft. spacing on California Sprawl Trellis)	1.3	1.1	1.0	0.9	1.4	1.2	1.1	1.0	1.4	1.2	1.1	1.0
Walnuts (4/5)	0.4	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.4	0.4	0.3	0.3
Stone Fruit (3/10)	1.1	0.9	0.8	0.7	1.3	1.1	1.0	0.9	1.3	1.1	1.0	0.9

<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			
	283	236	213	189	307	260	236	213	307	260	236	213
Almonds 115 Trees/A	283	236	213	189	307	260	236	213	307	260	236	213
Pistachio 106 Trees/A	249	224	199	174	299	249	224	199	299	249	224	199
Citrus 110 Trees/A	222	197	173	148	272	222	197	173	272	222	197	173
Raisin Grapes 566 Vines/A	53	48	38	38	62	53	48	43	62	53	48	43
Winegrapes 622 Vines/A	57	48	44	39	61	52	48	44	61	52	48	44
Walnuts 76 Trees/A	143	107	107	107	143	143	107	107	143	143	107	107
Stonefruit 172 Trees/A	174	142	126	111	205	174	158	142	205	174	158	142

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