

**WEEKLY SOIL MOISTURE LOSS IN INCHES**

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

09/10/21 through 09/16/21

Crops (Leafout Date)	#148 Merced				#39 Parlier				#258 Lemon Cove		
	9/10 - 9/16 Water Use	Accum'd Seasonal Water Use	9/17 - 9/23 Estimated ETc		9/10 - 9/16 Water Use	Accum'd Seasonal Water Use	9/17 - 9/23 Estimated ETc		9/10 - 9/16 Water Use	Accum'd Seasonal Water Use	9/17 - 9/23 Estimated ETc
Almonds (3/5) *	1.47	41.61	1.29		1.53	44.41	1.22		1.30	41.23	1.23
Pistachio (4/16) * **	1.38	35.99	1.16		1.44	38.71	1.09		1.21	35.62	1.10
Citrus (2/1)	1.10	31.90	0.83		1.13	33.76	0.76		0.94	31.44	0.77
Raisin Grapes (3/12) (11 ft. row spacing)	1.18	28.61	1.02		1.22	30.81	0.95		1.03	28.34	0.96
Winegrapes (3/12 ) (10 ft. spacing on California Sprawl Trellis) ***	1.33	31.49	1.16		1.39	33.93	1.09		1.16	31.17	1.10
Walnuts (4/5)	1.30	37.85	1.09		1.35	40.55	1.02		1.14	37.46	1.03
Stone Fruit (3/10 )	1.54	34.74	1.37		1.60	37.37	1.30		1.37	34.41	1.31
Past 7 days precipitation (inches)	0.00				0.00				0.00		
Accumulated precipitation (inches) (1/1/2021)	5.54				3.66				3.90		

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)	2.3	2.0	1.7	1.5		2.4	2.0	1.8	1.6		2.0	1.7	1.5	1.4
Pistachio (4/16)	2.1	1.8	1.6	1.5		2.2	1.9	1.7	1.5		1.9	1.6	1.4	1.3
Citrus (2/1)	1.7	1.5	1.3	1.2		1.7	1.5	1.3	1.2		1.4	1.3	1.1	1.0
Raisin Grapes (3/12) (11 ft. row spacing)***	1.8	1.6	1.4	1.2		1.9	1.6	1.4	1.3		1.6	1.4	1.2	1.1
Winegrapes (3/12 ) (10 ft. spacing on California Sprawl Trellis) ***	2.0	1.8	1.6	1.4		2.1	1.9	1.6	1.5		1.8	1.5	1.4	1.2
Walnuts (4/5)	2.0	1.7	1.5	1.4		2.1	1.8	1.6	1.4		1.8	1.5	1.3	1.2
Stone Fruit (3/10 )	2.4	2.1	1.8	1.6		2.5	2.1	1.9	1.7		2.1	1.8	1.6	1.4

<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			
	543	472	401	354		567	472	425	378		472	401	354	331
Almonds 115 Trees/A	543	472	401	354		567	472	425	378		472	401	354	331
Pistachio 106 Trees/A	523	448	399	374		548	473	424	374		473	399	349	324
Citrus 110 Trees/A	420	370	321	296		420	370	321	296		346	321	272	247
Raisin Grapes 566 Vines/A	86	77	67	58		91	77	67	62		77	67	58	53
Winegrapes 622 Vines/A	87	79	70	61		92	83	70	65		79	65	61	52
Walnuts 76 Trees/A	715	607	536	500		750	643	572	500		643	536	464	429
Stonefruit 172 Trees/A	379	332	284	253		395	332	300	268		332	284	253	221

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>)  
09/10/21 through 09/16/21

Crops (Leafout Date)	#124 Panoche			#2 Five Points			#15 Stratford		
	9/10- 9/16 Water Use	Accum'd Seasonal Water Use	9/17 - 9/23 Estimated ETc	9/10- 9/16 Water Use	Accum'd Seasonal Water Use	9/17 - 9/23 Estimated ETc	9/10- 9/16 Water Use	Accum'd Seasonal Water Use	9/17 - 9/23 Estimated ETc
Almonds (3/5) *	1.57	47.29	1.35	1.73	47.77	1.48	1.75	48.80	1.43
Pistachio (4/16) * **	1.48	41.58	1.21	1.62	41.47	1.34	1.64	42.68	1.29
Citrus (2/1)	1.11	36.23	0.84	1.23	37.03	0.92	1.24	37.34	0.89
Raisin Grapes (3/12 ) (11 ft. row spacing)	1.26	33.01	1.07	1.37	32.98	1.20	1.38	33.93	1.15
Winegrapes (3/12) (10 ft. spacing on California Sprawl Trellis)	1.43	36.40	1.21	1.57	36.44	1.34	1.59	37.42	1.29
Walnuts (4/5)	1.38	43.49	1.14	1.51	43.60	1.26	1.53	44.65	1.22
Stone Fruit (3/10)	1.64	40.01	1.42	1.80	40.21	1.55	1.82	41.23	1.50
Past 7 days precipitation (inches)	0.00			0.00			0.00		
Accumulated precipitation (inches) (1/1/2021)	3.83			4.72			3.06		

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)	2.4	2.1	1.8	1.7	2.7	2.3	2.0	1.8	2.7	2.3	2.1	1.8
Pistachio (4/16)	2.3	2.0	1.7	1.6	2.5	2.2	1.9	1.7	2.5	2.2	1.9	1.7
Citrus (2/1)	1.7	1.5	1.3	1.2	1.9	1.6	1.4	1.3	1.9	1.7	1.5	1.3
Raisin Grapes (3/12 ) (11 ft. row spacing)	1.9	1.7	1.5	1.3	2.1	1.8	1.6	1.4	2.1	1.8	1.6	1.5
Winegrapes (3/12) (10 ft. spacing on California Sprawl Trellis)	2.2	1.9	1.7	1.5	2.4	2.1	1.8	1.7	2.4	2.1	1.9	1.7
Walnuts (4/5)	2.1	1.8	1.6	1.5	2.3	2.0	1.8	1.6	2.4	2.0	1.8	1.6
Stone Fruit (3/10)	2.5	2.2	1.9	1.7	2.8	2.4	2.1	1.9	2.8	2.4	2.1	1.9

<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			
	Almonds 115 Trees/A	567	496	425	401	638	543	472	425	638	543	496
Pistachio 106 Trees/A	573	498	424	399	623	548	473	424	623	548	473	424
Citrus 110 Trees/A	420	370	321	296	469	395	346	321	469	420	370	321
Raisin Grapes 566 Vines/A	91	82	72	62	101	86	77	67	101	86	77	72
Winegrapes 622 Vines/A	96	83	74	65	105	92	79	74	105	92	83	74
Walnuts 76 Trees/A	750	643	572	536	822	715	643	572	857	715	643	572
Stonefruit 172 Trees/A	395	347	300	268	442	379	332	300	442	379	332	300

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