

**WEEKLY SOIL MOISTURE LOSS IN INCHES**

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

09/08/23 through 09/14/23

Crops (Leafout Date)	#148 Merced			#39 Parlier			#258 Lemon Cove		
	9/8 - 9/14 Water Use	Accum'd Seasonal Water Use	9/15 - 9/21 Estimated ET <sub>c</sub>	9/8 - 9/14 Water Use	Accum'd Seasonal Water Use	9/15 - 9/21 Estimated ET <sub>c</sub>	9/8 - 9/14 Water Use	Accum'd Seasonal Water Use	9/15 - 9/21 Estimated ET <sub>c</sub>
Almonds (3/13) *	1.40	37.95	1.29	1.40	39.93	1.24	1.36	38.81	1.11
Pistachio (4/20) * **	1.45	32.29	1.23	1.45	33.91	1.18	1.40	33.24	1.05
Citrus (2/1)	1.03	28.44	0.84	1.04	30.11	0.79	1.01	29.16	0.72
Raisin Grapes (3/22) (11 ft. row spacing)	0.95	20.99	0.88	0.96	22.02	0.83	0.93	21.61	0.77
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis) ***	1.07	23.12	0.99	1.07	24.28	0.95	1.04	23.78	0.84
Walnuts (4/20)	1.46	30.63	1.27	1.45	32.18	1.23	1.41	31.57	1.11
Stone Fruit (3/19)	1.47	33.47	1.38	1.47	35.10	1.33	1.42	34.37	1.20
Past 7 days precipitation (inches)	0.00			0.09			0.00		
Accumulated precipitation (inches) (1/1/2023)	19.11			13.13			16.68		

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.

**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 (3/13)	2.2	1.9	1.6	1.5	2.2	1.9	1.6	1.5	2.1	1.8	1.6	1.4
Pistachio (4/20)	2.2	1.9	1.7	1.5	2.2	1.9	1.7	1.5	2.2	1.9	1.6	1.5
Citrus (2/1)	1.6	1.4	1.2	1.1	1.6	1.4	1.2	1.1	1.6	1.3	1.2	1.1
Raisin Grapes (3/22) (11 ft. row spacing)***	Assume all grape			1.0	Assume all grape			1.0	Assume all grape			1.0
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis) ***	irrigation type is drip			1.1	irrigation type is drip			1.1	irrigation type is drip			1.1
Walnuts (4/20)	2.2	1.9	1.7	1.5	2.2	1.9	1.7	1.5	2.2	1.9	1.7	1.5
Stone Fruit (3/19)	2.3	2.0	1.7	1.5	2.3	2.0	1.7	1.5	2.2	1.9	1.7	1.5

<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			
	519	449	378	354	519	449	378	354	496	425	378	331
Almonds 115 Trees/A	519	449	378	354	519	449	378	354	496	425	378	331
Pistachio 106 Trees/A	548	473	424	374	548	473	424	374	548	473	399	374
Citrus 110 Trees/A	395	346	296	272	395	346	296	272	395	321	296	272
Raisin Grapes 566 Vines/A	Assume all grape			48	Assume all grape			48	Assume all grape			48
Winegrapes 622 Vines/A	irrigation type is drip			48	irrigation type is drip			48	irrigation type is drip			48
Walnuts 76 Trees/A	786	679	607	536	786	679	607	536	786	679	607	536
Stonefruit 172 Trees/A	363	316	268	237	363	316	268	237	347	300	268	237

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> ) 09/08/23 through 09/14/23												
Crops (Leafout Date)	#124 Panoche			#124 Panoche	#2 Five Points			#2 Five Points	#15 Stratford			#15 Stratford
	9/8-9/14 Water Use	Accum'd Seasonal Water Use	9/15-9/21 Estimated ETc		9/8-9/14 Water Use	Accum'd Seasonal Water Use	9/15-9/21 Estimated ETc		9/8-9/14 Water Use	Accum'd Seasonal Water Use	9/15-9/21 Estimated ETc	
Almonds (3/13) *	1.53	41.00	1.34		1.51	40.13	1.46		1.57	43.62	1.42	
Pistachio (4/20) * **	1.58	35.26	1.29		1.56	34.24	1.41		1.62	37.08	1.37	
Citrus (2/1)	1.08	30.57	0.84		1.07	30.18	0.93		1.12	32.75	0.91	
Raisin Grapes (3/22 ) (11 ft. row spacing)	1.05	22.54	0.93		1.03	21.96	1.03		1.06	23.68	0.99	
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	1.18	24.80	1.05		1.16	24.11	1.15		1.22	26.10	1.11	
Walnuts (4/20)	1.60	33.46	1.37		1.56	32.44	1.50		1.63	35.21	1.46	
Stone Fruit (3/19)	1.60	36.62	1.44		1.58	35.67	1.56		1.64	38.74	1.52	
Past 7 days precipitation (inches)	0.00				0.00				0.00			
Accumulated precipitation (inches) (1/1/2023)	6.36				8.39				8.15			

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				#124 Panoche	#2 Five Points				#2 Five Points	#15 Stratford				#15 Stratford
System Efficiency >>	65%	75%	85%	95%		65%	75%	85%	95%		65%	75%	85%	95%	
Almonds (3/13)	2.4	2.0	1.8	1.6		2.3	2.0	1.8	1.6		2.4	2.1	1.8	1.7	
Pistachio (4/20)	2.4	2.1	1.9	1.7		2.4	2.1	1.8	1.6		2.5	2.2	1.9	1.7	
Citrus (2/1)	1.7	1.4	1.3	1.1		1.6	1.4	1.3	1.1		1.7	1.5	1.3	1.2	
Raisin Grapes (3/22 ) (11 ft. row spacing)	Assume all grape			1.1		Assume all grape			1.1		Assume all grape			1.1	
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	irrigation type is drip			1.2		irrigation type is drip			1.2		irrigation type is drip			1.3	
Walnuts (4/20)	2.5	2.1	1.9	1.7		2.4	2.1	1.8	1.6		2.5	2.2	1.9	1.7	
Stone Fruit (3/19)	2.5	2.1	1.9	1.7		2.4	2.1	1.9	1.7		2.5	2.2	1.9	1.7	

<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				#124 Panoche	#2 Five Points				#2 Five Points	#15 Stratford				#15 Stratford
Almonds 115 Trees/A	567	472	425	378		543	472	425	378		567	496	425	401	
Pistachio 106 Trees/A	598	523	473	424		598	523	448	399		623	548	473	424	
Citrus 110 Trees/A	420	346	321	272		395	346	321	272		420	370	321	296	
Raisin Grapes 566 Vines/A	Assume all grape			53		Assume all grape			53		Assume all grape			53	
Winegrapes 622 Vines/A	irrigation type is drip			52		irrigation type is drip			52		irrigation type is drip			57	
Walnuts 76 Trees/A	893	750	679	607		857	750	643	572		893	786	679	607	
Stonefruit 172 Trees/A	395	332	300	268		379	332	300	268		395	347	300	268	

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