

**WEEKLY SOIL MOISTURE LOSS IN INCHES**  
(Estimated Crop Evapotranspiration or ET<sub>c</sub>)  
09/01/23 through 09/07/23

Crops (Leafout Date)	#148 Merced			#39 Parlier			#258 Lemon Cove		
	9/1 - 9/7 Water Use	Accum'd Seasonal Water Use	9/8 - 9/14 Estimated ET <sub>c</sub>	9/1 - 9/7 Water Use	Accum'd Seasonal Water Use	9/8 - 9/14 Estimated ET <sub>c</sub>	9/1 - 9/7 Water Use	Accum'd Seasonal Water Use	9/8 - 9/14 Estimated ET <sub>c</sub>
Almonds (3/13) *	1.31	36.55	1.42	1.39	38.53	1.36	1.26	37.45	1.27
Pistachio (4/20) * **	1.36	30.84	1.47	1.44	32.46	1.41	1.32	31.84	1.32
Citrus (2/1)	0.91	27.41	1.06	0.94	29.07	1.00	0.87	28.15	0.91
Raisin Grapes (3/22) (11 ft. row spacing)	0.89	20.03	0.97	0.94	21.05	0.92	0.85	20.68	0.84
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis) ***	1.00	22.05	1.09	1.06	23.21	1.04	0.96	22.75	0.96
Walnuts (4/20)	1.40	29.17	1.48	1.46	30.73	1.39	1.34	30.16	1.27
Stone Fruit (3/19)	1.36	32.00	1.49	1.44	33.63	1.43	1.32	32.95	1.34
Past 7 days precipitation (inches)	0.01			0.00			0.00		
Accumulated precipitation (inches) (1/1/2023)	16.41			13.04			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)	2.0	1.7	1.5	1.4	2.1	1.9	1.6	1.5	1.9	1.7	1.5	1.3
Pistachio (4/20)	2.1	1.8	1.6	1.4	2.2	1.9	1.7	1.5	2.0	1.8	1.6	1.4
Citrus (2/1)	1.4	1.2	1.1	1.0	1.4	1.3	1.1	1.0	1.3	1.2	1.0	0.9
Raisin Grapes (3/22) (11 ft. row spacing)***	Assume all grape			0.9	Assume all grape			1.0	Assume all grape			0.9
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			1.0
Walnuts (4/20)	2.2	1.9	1.6	1.5	2.2	1.9	1.7	1.5	2.1	1.8	1.6	1.4
Stone Fruit (3/19)	2.1	1.8	1.6	1.4	2.2	1.9	1.7	1.5	2.0	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			
	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds 115 Trees/A	472	401	354	331	496	449	378	354	449	401	354	307
Pistachio 106 Trees/A	523	448	399	349	548	473	424	374	498	448	399	349
Citrus 110 Trees/A	346	296	272	247	346	321	272	247	321	296	247	222
Raisin Grapes 566 Vines/A	Assume all grape			43	Assume all grape			48	Assume all grape			43
Winegrapes 622 Vines/A	irrigation type is drip			48	irrigation type is drip			48	irrigation type is drip			44
Walnuts 76 Trees/A	786	679	572	536	786	679	607	536	750	643	572	500
Stonefruit 172 Trees/A	332	284	253	221	347	300	268	237	316	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>)

09/01/23 through 09/07/23

Crops (Leafout Date)	#124 Panoche				#2 Five Points				#15 Stratford		
	9/1- 9/7 Water Use	Accum'd Seasonal Water Use	9/8- 9/14 Estimated ETc		9/1- 9/7 Water Use	Accum'd Seasonal Water Use	9/8- 9/14 Estimated ETc		9/1- 9/7 Water Use	Accum'd Seasonal Water Use	9/8- 9/14 Estimated ETc
Almonds (3/13) *	1.41	39.47	1.45		1.30	38.62	1.60		1.41	42.05	1.57
Pistachio (4/20) * **	1.47	33.68	1.50		1.34	32.68	1.65		1.45	35.46	1.62
Citrus (2/1)	0.99	29.49	1.04		0.92	29.11	1.14		1.00	31.63	1.11
Raisin Grapes (3/22 ) (11 ft. row spacing)	0.96	21.49	0.99		0.88	20.94	1.08		0.94	22.62	1.07
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	1.08	23.62	1.11		0.99	22.95	1.24		1.08	24.88	1.22
Walnuts (4/20)	1.50	31.86	1.52		1.37	30.88	1.67		1.49	33.58	1.64
Stone Fruit (3/19)	1.47	35.02	1.52		1.34	34.09	1.67		1.45	37.10	1.64
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.

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

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	65%	75%	85%	95%		65%	75%	85%	95%		65%	75%	85%	95%
System Efficiency >>														
Almonds (3/13)	2.2	1.9	1.7	1.5		2.0	1.7	1.5	1.4		2.2	1.9	1.7	1.5
Pistachio (4/20)	2.3	2.0	1.7	1.5		2.1	1.8	1.6	1.4		2.2	1.9	1.7	1.5
Citrus (2/1)	1.5	1.3	1.2	1.0		1.4	1.2	1.1	1.0		1.5	1.3	1.2	1.1
Raisin Grapes (3/22 ) (11 ft. row spacing)	Assume all grape			1.0		Assume all grape			0.9		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			1.0		irrigation type is drip			1.1
Walnuts (4/20)	2.3	2.0	1.8	1.6		2.1	1.8	1.6	1.4		2.3	2.0	1.8	1.6
Stone Fruit (3/19)	2.3	2.0	1.7	1.5		2.1	1.8	1.6	1.4		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	#124 Panoche					#2 Five Points					#15 Stratford			
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Pistachio 106 Trees/A	573	498	424	374		523	448	399	349		548	473	424	374
Citrus 110 Trees/A	370	321	296	247		346	296	272	247		370	321	296	272
Raisin Grapes 566 Vines/A	Assume all grape			48		Assume all grape			43		Assume all grape			48
Winegrapes 622 Vines/A	irrigation type is drip			48		irrigation type is drip			44		irrigation type is drip			48
Walnuts 76 Trees/A	822	715	643	572		750	643	572	500		822	715	643	572
Stonefruit 172 Trees/A	363	316	268	237		332	284	253	221		347	300	268	237

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