

**WEEKLY SOIL MOISTURE LOSS IN INCHES**  
(Estimated Crop Evapotranspiration or ET<sub>c</sub>)  
09/29/23 through 10/05/23

Crops (Leafout Date)	#148 Merced			#39 Parlier			#258 Lemon Cove		
	9/29 - 10/5 Water Use	Accum'd Seasonal Water Use	10/6 - 10/12 Estimated ETc	9/29 - 10/5 Water Use	Accum'd Seasonal Water Use	10/6 - 10/12 Estimated ETc	9/29 - 10/5 Water Use	Accum'd Seasonal Water Use	10/6 - 10/12 Estimated ETc
Almonds (3/13) *	0.93	41.24	0.84	0.89	43.24	0.81	0.85	41.86	0.87
Pistachio (4/20) * **	0.89	35.42	0.78	0.87	37.07	0.76	0.82	36.14	0.82
Citrus (2/1)	0.64	30.64	0.64	0.62	32.32	0.60	0.60	31.21	0.68
Raisin Grapes (3/22) (11 ft. row spacing)	0.69	23.31	0.66	0.66	24.34	0.63	0.63	23.77	0.70
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis) ***	0.77	25.74	0.73	0.75	26.92	0.71	0.71	26.21	0.76
Walnuts (4/20)	0.93	33.91	0.79	0.89	35.48	0.77	0.85	34.62	0.82
Stone Fruit (3/19)	0.84	36.91	0.78	0.83	38.58	0.74	0.78	37.57	0.82
Past 7 days precipitation (inches)	0.00			0.01			0.00		
Accumulated precipitation (inches) (1/1/2023)	19.11			13.14			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)	1.4	1.2	1.1	1.0	1.4	1.2	1.0	0.9	1.3	1.1	1.0	0.9
Pistachio (4/20)	1.4	1.2	1.0	0.9	1.3	1.2	1.0	0.9	1.3	1.1	1.0	0.9
Citrus (2/1)	1.0	0.9	0.8	0.7	1.0	0.8	0.7	0.7	0.9	0.8	0.7	0.6
Raisin Grapes (3/22) (11 ft. row spacing)***	Assume all grape			0.7	Assume all grape			0.7	Assume all grape			0.7
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis) ***	irrigation type is drip			0.8	irrigation type is drip			0.8	irrigation type is drip			0.7
Walnuts (4/20)	1.4	1.2	1.1	1.0	1.4	1.2	1.0	0.9	1.3	1.1	1.0	0.9
Stone Fruit (3/19)	1.3	1.1	1.0	0.9	1.3	1.1	1.0	0.9	1.2	1.0	0.9	0.8

<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			
	Almonds 115 Trees/A	331	283	260	236	331	283	236	213	307	260	236
Pistachio 106 Trees/A	349	299	249	224	324	299	249	224	324	274	249	224
Citrus 110 Trees/A	247	222	197	173	247	197	173	173	222	197	173	148
Raisin Grapes 566 Vines/A	Assume all grape			34	Assume all grape			34	Assume all grape			34
Winegrapes 622 Vines/A	irrigation type is drip			35	irrigation type is drip			35	irrigation type is drip			31
Walnuts 76 Trees/A	500	429	393	357	500	429	357	322	464	393	357	322
Stonefruit 172 Trees/A	205	174	158	142	205	174	158	142	189	158	142	126

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>)

09/29/23 through 10/05/23

Crops (Leafout Date)	#124 Panoche			#2 Five Points			#15 Stratford		
	9/29 - 10/5 Water Use	Accum'd Seasonal Water Use	10/6 - 10/12 Estimated ETc	9/29 - 10/5 Water Use	Accum'd Seasonal Water Use	10/6 - 10/12 Estimated ETc	9/29 - 10/5 Water Use	Accum'd Seasonal Water Use	10/6 - 10/12 Estimated ETc
Almonds (3/13) *	0.99	44.48	0.92	0.95	43.45	1.01	0.98	47.22	0.98
Pistachio (4/20) * **	0.98	38.64	0.88	0.93	37.46	0.97	0.96	40.57	0.94
Citrus (2/1)	0.73	32.93	0.74	0.68	32.43	0.78	0.70	35.19	0.77
Raisin Grapes (3/22 ) (11 ft. row spacing)	0.72	25.02	0.75	0.71	24.34	0.78	0.72	26.27	0.77
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	0.84	27.63	0.81	0.80	26.82	0.88	0.82	29.02	0.86
Walnuts (4/20)	1.00	36.93	0.88	0.96	35.79	0.97	0.99	38.80	0.94
Stone Fruit (3/19)	0.90	40.28	0.84	0.85	39.16	0.90	0.88	42.51	0.87
Past 7 days precipitation (inches)	0.04			0.00			0.06		
Accumulated precipitation (inches) (1/1/2023)	6.40			8.39			8.21		

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 >>												
Almonds (3/13)	1.5	1.3	1.2	1.0	1.5	1.3	1.1	1.0	1.5	1.3	1.2	1.0
Pistachio (4/20)	1.5	1.3	1.2	1.0	1.4	1.2	1.1	1.0	1.5	1.3	1.1	1.0
Citrus (2/1)	1.1	1.0	0.9	0.8	1.0	0.9	0.8	0.7	1.1	0.9	0.8	0.7
Raisin Grapes (3/22 ) (11 ft. row spacing)	Assume all grape			0.8	Assume all grape			0.7	Assume all grape			0.8
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	irrigation type is drip			0.9	irrigation type is drip			0.8	irrigation type is drip			0.9
Walnuts (4/20)	1.5	1.3	1.2	1.1	1.5	1.3	1.1	1.0	1.5	1.3	1.2	1.0
Stone Fruit (3/19)	1.4	1.2	1.1	0.9	1.3	1.1	1.0	0.9	1.4	1.2	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%.

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Crops	#124 Panoche				#2 Five Points				#15 Stratford			
	Almonds 115 Trees/A	354	307	283	236	354	307	260	236	354	307	283
Pistachio 106 Trees/A	374	324	299	249	349	299	274	249	374	324	274	249
Citrus 110 Trees/A	272	247	222	197	247	222	197	173	272	222	197	173
Raisin Grapes 566 Vines/A	Assume all grape			38	Assume all grape			34	Assume all grape			38
Winegrapes 622 Vines/A	irrigation type is drip			39	irrigation type is drip			35	irrigation type is drip			39
Walnuts 76 Trees/A	536	464	429	393	536	464	393	357	536	464	429	357
Stonefruit 172 Trees/A	221	189	174	142	205	174	158	142	221	189	158	142

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