

**WEEKLY SOIL MOISTURE LOSS IN INCHES**

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

10/13/23 through 10/19/23

Crops (Leafout Date)	#148 Merced			#39 Parlier			#258 Lemon Cove		
	10/13 - 10/19 Water Use	Accum'd Seasonal Water Use	10/20 - 10/26 Estimated ET <sub>c</sub>	10/13 - 10/19 Water Use	Accum'd Seasonal Water Use	10/20 - 10/26 Estimated ET <sub>c</sub>	10/13 - 10/19 Water Use	Accum'd Seasonal Water Use	10/20 - 10/26 Estimated ET <sub>c</sub>
Almonds (3/13) *	0.79	42.91	0.61	0.76	44.89	0.58	0.80	43.57	0.65
Pistachio (4/20) * **	0.76	37.01	0.56	0.72	38.63	0.53	0.79	37.79	0.60
Citrus (2/1)	0.62	31.94	0.49	0.58	33.58	0.46	0.66	32.57	0.53
Raisin Grapes (3/22) (11 ft. row spacing)	0.65	24.64	0.48	0.60	25.64	0.48	0.68	25.16	0.51
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis) ***	0.73	27.23	0.60	0.71	28.41	0.57	0.74	27.74	0.63
Walnuts (4/20)	0.79	35.53	0.36	0.76	37.09	0.35	0.80	36.28	0.39
Stone Fruit (3/19)	0.74	38.44	0.56	0.70	40.07	0.53	0.75	39.15	0.60
Past 7 days precipitation (inches)	0.00			0.00			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)	1.2	1.1	0.9	0.8	1.2	1.0	0.9	0.8	1.2	1.1	0.9	0.8
Pistachio (4/20)	1.2	1.0	0.9	0.8	1.1	1.0	0.8	0.8	1.2	1.1	0.9	0.8
Citrus (2/1)	1.0	0.8	0.7	0.7	0.9	0.8	0.7	0.6	1.0	0.9	0.8	0.7
Raisin Grapes (3/22) (11 ft. row spacing)***	Assume all grape			0.7	Assume all grape			0.6	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			0.7	irrigation type is drip			0.8
Walnuts (4/20)	1.2	1.1	0.9	0.8	1.2	1.0	0.9	0.8	1.2	1.1	0.9	0.8
Stone Fruit (3/19)	1.1	1.0	0.9	0.8	1.1	0.9	0.8	0.7	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			
	283	260	213	189	283	236	213	189	283	260	213	189
Almonds 115 Trees/A	283	260	213	189	283	236	213	189	283	260	213	189
Pistachio 106 Trees/A	299	249	224	199	274	249	199	199	299	274	224	199
Citrus 110 Trees/A	247	197	173	173	222	197	173	148	247	222	197	173
Raisin Grapes 566 Vines/A	Assume all grape			34	Assume all grape			29	Assume all grape			34
Winegrapes 622 Vines/A	irrigation type is drip			35	irrigation type is drip			31	irrigation type is drip			35
Walnuts 76 Trees/A	429	393	322	286	429	357	322	286	429	393	322	286
Stonefruit 172 Trees/A	174	158	142	126	174	142	126	111	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>)  
10/13/23 through 10/19/23

Crops (Leafout Date)	#124 Panoche			#2 Five Points			#15 Stratford		
	10/13- 10/19 Water Use	Accum'd Seasonal Water Use	10/20- 10/26 Estimated ETc	10/13- 10/19 Water Use	Accum'd Seasonal Water Use	10/20- 10/26 Estimated ETc	10/13- 10/19 Water Use	Accum'd Seasonal Water Use	10/20- 10/26 Estimated ETc
Almonds (3/13) *	0.78	46.29	0.68	0.90	45.37	0.73	0.85	49.15	0.72
Pistachio (4/20) * **	0.77	40.40	0.64	0.89	39.33	0.69	0.84	42.45	0.68
Citrus (2/1)	0.64	34.37	0.55	0.73	33.95	0.59	0.71	36.74	0.57
Raisin Grapes (3/22 ) (11 ft. row spacing)	0.66	26.48	0.54	0.74	25.88	0.61	0.72	27.83	0.59
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	0.72	29.26	0.66	0.82	28.54	0.71	0.78	30.74	0.70
Walnuts (4/20)	0.78	38.70	0.41	0.90	37.67	0.45	0.85	40.69	0.43
Stone Fruit (3/19)	0.73	41.93	0.64	0.84	40.93	0.69	0.79	44.28	0.68
Past 7 days precipitation (inches)	0.00			0.00			0.00		
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)	1.2	1.0	0.9	0.8	1.4	1.2	1.1	0.9	1.3	1.1	1.0	0.9
Pistachio (4/20)	1.2	1.0	0.9	0.8	1.4	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	1.1	1.0	0.9	0.8	1.1	0.9	0.8	0.7
Raisin Grapes (3/22 ) (11 ft. row spacing)	Assume all grape			0.7	Assume all grape			0.8	Assume all grape			0.8
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	irrigation type is drip			0.8	irrigation type is drip			0.9	irrigation type is drip			0.8
Walnuts (4/20)	1.2	1.0	0.9	0.8	1.4	1.2	1.1	0.9	1.3	1.1	1.0	0.9
Stone Fruit (3/19)	1.1	1.0	0.9	0.8	1.3	1.1	1.0	0.9	1.2	1.1	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	#124 Panoche				#2 Five Points				#15 Stratford			
	Almonds 115 Trees/A	283	236	213	189	331	283	260	213	307	260	236
Pistachio 106 Trees/A	299	249	224	199	349	299	249	224	324	274	249	224
Citrus 110 Trees/A	247	222	197	173	272	247	222	197	272	222	197	173
Raisin Grapes 566 Vines/A	Assume all grape			34	Assume all grape			38	Assume all grape			38
Winegrapes 622 Vines/A	irrigation type is drip			35	irrigation type is drip			39	irrigation type is drip			35
Walnuts 76 Trees/A	429	357	322	286	500	429	393	322	464	393	357	322
Stonefruit 172 Trees/A	174	158	142	126	205	174	158	142	189	174	142	126

For further information concerning all counties receiving this report, contact the Fresno Co. Farm Advisor's office at (559) 241-7526.