

**WEEKLY SOIL MOISTURE LOSS IN INCHES**

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

10/27/23 through 11/02/23

Crops (Leafout Date)	#148 Merced			#39 Parlier			#258 Lemon Cove		
	10/27 - 11/2 Water Use	Accum'd Seasonal Water Use	11/3 - 11/9 Estimated ETc	10/27 - 11/2 Water Use	Accum'd Seasonal Water Use	11/3 - 11/9 Estimated ETc	10/27 - 11/2 Water Use	Accum'd Seasonal Water Use	11/3 - 11/9 Estimated ETc
Almonds (3/13) *	0.51	44.00	0.37	0.55	46.05	0.35	0.59	44.71	0.40
Pistachio (4/20) * **	0.48	38.04	0.37	0.49	39.69	0.35	0.54	38.84	0.40
Citrus (2/1)	0.44	32.84	0.37	0.48	34.54	0.35	0.52	33.54	0.40
Raisin Grapes (3/22) (11 ft. row spacing)	0.47	25.59	0.37	0.48	26.61	0.36	0.52	26.12	0.40
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis) ***	0.54	28.35	0.43	0.59	29.58	0.42	0.63	28.90	0.46
Walnuts (4/20)	0.34	36.23	0.18	0.35	37.80	0.18	0.38	36.99	0.18
Stone Fruit (3/19)	0.50	39.49	0.42	0.55	41.19	0.42	0.60	40.26	0.42
Past 7 days precipitation (inches)	0.00			0.00			0.00		
Accumulated precipitation (inches) (1/1/2023)	16.45			13.14			16.74		

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)	0.8	0.7	0.6	0.5	0.8	0.7	0.6	0.6	0.9	0.8	0.7	0.6
Pistachio (4/20)	0.7	0.6	0.6	0.5	0.8	0.7	0.6	0.5	0.8	0.7	0.6	0.6
Citrus (2/1)	0.7	0.6	0.5	0.5	0.7	0.6	0.6	0.5	0.8	0.7	0.6	0.5
Raisin Grapes (3/22) (11 ft. row spacing)***	Assume all grape			0.5	Assume all grape			0.5	Assume all grape			0.5
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis) ***	irrigation type is drip			0.6	irrigation type is drip			0.6	irrigation type is drip			0.7
Walnuts (4/20)	0.5	0.5	0.4	0.4	0.5	0.5	0.4	0.4	0.6	0.5	0.4	0.4
Stone Fruit (3/19)	0.8	0.7	0.6	0.5	0.8	0.7	0.6	0.6	0.9	0.8	0.7	0.6

<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			
	189	165	142	118	189	165	142	142	213	189	165	142
Almonds 115 Trees/A	189	165	142	118	189	165	142	142	213	189	165	142
Pistachio 106 Trees/A	174	149	149	125	199	174	149	125	199	174	149	149
Citrus 110 Trees/A	173	148	123	123	173	148	148	123	197	173	148	123
Raisin Grapes 566 Vines/A	Assume all grape			24	Assume all grape			24	Assume all grape			24
Winegrapes 622 Vines/A	irrigation type is drip			26	irrigation type is drip			26	irrigation type is drip			31
Walnuts 76 Trees/A	179	179	143	143	179	179	143	143	214	179	143	143
Stonefruit 172 Trees/A	126	111	95	79	126	111	95	95	142	126	111	95

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>)

10/27/23 through 11/02/23

Crops (Leafout Date)	#124 Panoche			#2 Five Points			#15 Stratford		
	10/27- 11/2 Water Use	Accum'd Seasonal Water Use	11/3- 11/9 Estimated ETc	10/27- 11/2 10/30- 11/5 Use	Accum'd Seasonal Water Use	11/3- 11/9 Estimated ETc	10/27- 11/2 Water Use	Accum'd Seasonal Water Use	11/3- 11/9 Estimated ETc
Almonds (3/13) *	0.62	47.60	0.40	0.65	46.79	0.46	0.61	50.46	0.46
Pistachio (4/20) * **	0.55	41.60	0.40	0.57	40.62	0.42	0.54	43.64	0.42
Citrus (2/1)	0.54	35.49	0.40	0.56	35.14	0.42	0.53	37.85	0.42
Raisin Grapes (3/22 ) (11 ft. row spacing)	0.53	27.58	0.40	0.55	27.07	0.46	0.52	28.93	0.45
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	0.64	30.57	0.46	0.66	29.94	0.52	0.63	32.05	0.51
Walnuts (4/20)	0.40	39.53	0.18	0.41	38.54	0.23	0.39	41.52	0.22
Stone Fruit (3/19)	0.61	43.19	0.42	0.64	42.29	0.47	0.60	45.53	0.46
Past 7 days precipitation (inches)	0.00			0.00			0.00		
Accumulated precipitation (inches) (1/1/2023)	6.46			8.39			8.28		

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 (3/13)	1.0	0.8	0.7	0.7	1.0	0.9	0.8	0.7	0.9	0.8	0.7	0.6
Pistachio (4/20)	0.8	0.7	0.6	0.6	0.9	0.8	0.7	0.6	0.8	0.7	0.6	0.6
Citrus (2/1)	0.8	0.7	0.6	0.6	0.9	0.7	0.7	0.6	0.8	0.7	0.6	0.6
Raisin Grapes (3/22 ) (11 ft. row spacing)	Assume all grape			0.6	Assume all grape			0.6	Assume all grape			0.5
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	irrigation type is drip			0.7	irrigation type is drip			0.7	irrigation type is drip			0.7
Walnuts (4/20)	0.6	0.5	0.5	0.4	0.6	0.5	0.5	0.4	0.6	0.5	0.5	0.4
Stone Fruit (3/19)	0.9	0.8	0.7	0.6	1.0	0.9	0.8	0.7	0.9	0.8	0.7	0.6

<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			
	236	189	165	165	236	213	189	165	213	189	165	142
Almonds 115 Trees/A	236	189	165	165	236	213	189	165	213	189	165	142
Pistachio 106 Trees/A	199	174	149	149	224	199	174	149	199	174	149	149
Citrus 110 Trees/A	197	173	148	148	222	173	173	148	197	173	148	148
Raisin Grapes 566 Vines/A	Assume all grape			29	Assume all grape			29	Assume all grape			24
Winegrapes 622 Vines/A	irrigation type is drip			31	irrigation type is drip			31	irrigation type is drip			31
Walnuts 76 Trees/A	214	179	179	143	214	179	179	143	214	179	179	143
Stonefruit 172 Trees/A	142	126	111	95	158	142	126	111	142	126	111	95

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