

WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_c)

10/20/23 through 10/26/23

Crops (Leafout Date)	#148 Merced			#39 Parlier			#258 Lemon Cove		
	10/20 - 10/26 Water Use	Accum'd Seasonal Water Use	10/27 - 11/2 Estimated ETc	10/20 - 10/26 Water Use	Accum'd Seasonal Water Use	10/27 - 11/2 Estimated ETc	10/20 - 10/26 Water Use	Accum'd Seasonal Water Use	10/27 - 11/2 Estimated ETc
Almonds (3/13) *	0.58	43.49	0.47	0.61	45.50	0.47	0.55	44.12	0.52
Pistachio (4/20) * **	0.55	37.56	0.46	0.57	39.20	0.44	0.51	38.30	0.49
Citrus (2/1)	0.46	32.40	0.42	0.48	34.06	0.42	0.45	33.02	0.45
Raisin Grapes (3/22) (11 ft. row spacing)	0.48	25.13	0.45	0.49	26.14	0.43	0.44	25.60	0.48
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis) ***	0.57	27.80	0.51	0.59	28.99	0.49	0.53	28.27	0.56
Walnuts (4/20)	0.36	35.89	0.32	0.36	37.45	0.30	0.33	36.61	0.35
Stone Fruit (3/19)	0.55	38.99	0.46	0.57	40.64	0.44	0.51	39.66	0.52
Past 7 days precipitation (inches)	0.02			0.00			0.06		
Accumulated precipitation (inches) (1/1/2023)	19.15			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 ¹

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)	0.9	0.8	0.7	0.6	0.9	0.8	0.7	0.6	0.8	0.7	0.6	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	0.5
Citrus (2/1)	0.7	0.6	0.5	0.5	0.7	0.6	0.6	0.5	0.7	0.6	0.5	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			0.6
Walnuts (4/20)	0.6	0.5	0.4	0.4	0.6	0.5	0.4	0.4	0.5	0.4	0.4	0.3
Stone Fruit (3/19)	0.8	0.7	0.6	0.6	0.9	0.8	0.7	0.6	0.8	0.7	0.6	0.5

¹ 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			
	213	189	165	142	213	189	165	142	189	165	142	142
Almonds 115 Trees/A	213	189	165	142	213	189	165	142	189	165	142	142
Pistachio 106 Trees/A	199	174	149	149	224	199	174	149	199	174	149	125
Citrus 110 Trees/A	173	148	123	123	173	148	148	123	173	148	123	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			26
Walnuts 76 Trees/A	214	179	143	143	214	179	143	143	179	143	143	107
Stonefruit 172 Trees/A	126	111	95	95	142	126	111	95	126	111	95	79

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_c)

10/20/23 through 10/26/23

Crops (Leafout Date)	#124 Panoche			#2 Five Points			#15 Stratford		
	10/20- 10/26 Water Use	Accum'd Seasonal Water Use	10/27- 11/2 Estimated ET _c	10/20- 10/26 Water Use	Accum'd Seasonal Water Use	10/27- 11/2 Estimated ET _c	10/20- 10/26 Water Use	Accum'd Seasonal Water Use	10/27- 11/2 Estimated ET _c
Almonds (3/13) *	0.69	46.98	0.52	0.77	46.14	0.59	0.70	49.85	0.58
Pistachio (4/20) * **	0.65	41.05	0.49	0.72	40.05	0.52	0.65	43.10	0.51
Citrus (2/1)	0.58	34.95	0.45	0.63	34.58	0.52	0.58	37.32	0.51
Raisin Grapes (3/22) (11 ft. row spacing)	0.58	27.06	0.48	0.64	26.52	0.50	0.58	28.41	0.49
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	0.67	29.93	0.56	0.73	29.27	0.62	0.67	31.42	0.61
Walnuts (4/20)	0.43	39.13	0.35	0.46	38.13	0.38	0.44	41.13	0.37
Stone Fruit (3/19)	0.65	42.58	0.52	0.72	41.65	0.59	0.65	44.93	0.58
Past 7 days precipitation (inches)	0.06			0.00			0.07		
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.

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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)	1.1	0.9	0.8	0.7	1.2	1.0	0.9	0.8	1.1	0.9	0.8	0.7
Pistachio (4/20)	1.0	0.9	0.8	0.7	1.1	1.0	0.8	0.8	1.0	0.9	0.8	0.7
Citrus (2/1)	0.9	0.8	0.7	0.6	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			0.6	Assume all grape			0.7	Assume all grape			0.6
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	irrigation type is drip			0.7	irrigation type is drip			0.8	irrigation type is drip			0.7
Walnuts (4/20)	0.7	0.6	0.5	0.5	0.7	0.6	0.5	0.5	0.7	0.6	0.5	0.5
Stone Fruit (3/19)	1.0	0.9	0.8	0.7	1.1	1.0	0.8	0.8	1.0	0.9	0.8	0.7

¹ 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			
	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds 115 Trees/A	260	213	189	165	283	236	213	189	260	213	189	165
Pistachio 106 Trees/A	249	224	199	174	274	249	199	199	249	224	199	174
Citrus 110 Trees/A	222	197	173	148	247	197	173	173	222	197	173	148
Raisin Grapes 566 Vines/A	Assume all grape			29	Assume all grape			34	Assume all grape			29
Winegrapes 622 Vines/A	irrigation type is drip			31	irrigation type is drip			35	irrigation type is drip			31
Walnuts 76 Trees/A	250	214	179	179	250	214	179	179	250	214	179	179
Stonefruit 172 Trees/A	158	142	126	111	174	158	126	126	158	142	126	111

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