

WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_c)

10/14/22 through 10/20/22

Crops (Leafout Date)	#148 Merced			#39 Parlier			#258 Lemon Cove		
	10/14 - 10/20 Water Use	Accum'd Seasonal Water Use	10/21 - 10/27 Estimated ETc	10/14 - 10/20 Water Use	Accum'd Seasonal Water Use	10/21 - 10/27 Estimated ETc	10/14 - 10/20 Water Use	Accum'd Seasonal Water Use	10/21 - 10/27 Estimated ETc
Almonds (3/1) *	0.73	47.66	0.60	0.78	49.31	0.58	0.81	46.02	0.64
Pistachio (4/8) * **	0.65	42.11	0.47	0.70	43.82	0.47	0.74	40.60	0.51
Citrus (2/1)	0.56	35.87	0.47	0.61	37.17	0.45	0.64	34.87	0.51
Raisin Grapes (3/15) (11 ft. row spacing)	0.57	28.53	0.48	0.63	29.71	0.48	0.66	27.54	0.49
Winegrapes (3/15) (10 ft. spacing on California Sprawl Trellis) ***	0.68	31.52	0.58	0.72	32.78	0.56	0.75	30.37	0.61
Walnuts (4/8)	0.31	41.61	0.21	0.33	43.22	0.21	0.36	40.05	0.21
Stone Fruit (3/10)	0.67	41.28	0.54	0.74	42.90	0.52	0.76	39.70	0.58
Past 7 days precipitation (inches)	0.00			0.00			0.00		
Accumulated precipitation (inches) (1/1/2022)	2.90			2.05			2.82		

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 >>												
Almonds (3/1)	1.1	1.0	0.9	0.8	1.2	1.0	0.9	0.8	1.2	1.1	1.0	0.9
Pistachio (4/8)	1.0	0.9	0.8	0.7	1.1	0.9	0.8	0.7	1.1	1.0	0.9	0.8
Citrus (2/1)	0.9	0.7	0.7	0.6	0.9	0.8	0.7	0.6	1.0	0.9	0.8	0.7
Raisin Grapes (3/15) (11 ft. row spacing)***	Assume all grape			0.6	Assume all grape			0.7	Assume all grape			0.7
Winegrapes (3/15) (10 ft. spacing on California Sprawl Trellis) ***	irrigation type is drip			0.7	irrigation type is drip			0.8	irrigation type is drip			0.8
Walnuts (4/8)	0.5	0.4	0.4	0.3	0.5	0.4	0.4	0.3	0.6	0.5	0.4	0.4
Stone Fruit (3/10)	1.0	0.9	0.8	0.7	1.1	1.0	0.9	0.8	1.2	1.0	0.9	0.8

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			
	Almonds 115 Trees/A	260	236	213	189	283	236	213	189	283	260	236
Pistachio 106 Trees/A	249	224	199	174	274	224	199	174	274	249	224	199
Citrus 110 Trees/A	222	173	173	148	222	197	173	148	247	222	197	173
Raisin Grapes 566 Vines/A	Assume all grape			29	Assume all grape			34	Assume all grape			34
Winegrapes 622 Vines/A	irrigation type is drip			31	irrigation type is drip			35	irrigation type is drip			35
Walnuts 76 Trees/A	179	143	143	107	179	143	143	107	214	179	143	143
Stonefruit 172 Trees/A	158	142	126	111	174	158	142	126	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_c)

10/14/22 through 10/20/22

Crops (Leafout Date)	#124 Panoche			#2 Five Points			#15 Stratford		
	10/14- 10/20 Water Use	Accum'd Seasonal Water Use	10/21- 10/27 Estimated ETc	10/14- 10/20 Water Use	Accum'd Seasonal Water Use	10/21- 10/27 Estimated ETc	10/14- 10/20 Water Use	Accum'd Seasonal Water Use	10/21- 10/27 Estimated ETc
Almonds (3/1) *	0.83	52.93	0.66	0.83	54.96	0.72	0.84	56.57	0.71
Pistachio (4/8) * **	0.75	46.56	0.55	0.74	48.16	0.62	0.76	49.75	0.60
Citrus (2/1)	0.68	39.88	0.54	0.66	41.48	0.57	0.68	42.37	0.56
Raisin Grapes (3/15) (11 ft. row spacing)	0.70	31.54	0.53	0.67	32.71	0.59	0.70	33.75	0.57
Winegrapes (3/15) (10 ft. spacing on California Sprawl Trellis)	0.77	34.71	0.65	0.77	35.99	0.70	0.77	37.20	0.69
Walnuts (4/8)	0.37	45.89	0.21	0.36	47.60	0.22	0.39	49.11	0.21
Stone Fruit (3/10)	0.80	45.61	0.62	0.78	47.26	0.69	0.82	48.82	0.67
Past 7 days precipitation (inches)	0.00			0.00			0.00		
Accumulated precipitation (inches) (1/1/2022)	1.25			1.76			1.33		

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	#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 (3/1)	1.3	1.1	1.0	0.9	1.3	1.1	1.0	0.9	1.3	1.1	1.0	0.9
Pistachio (4/8)	1.2	1.0	0.9	0.8	1.1	1.0	0.9	0.8	1.2	1.0	0.9	0.8
Citrus (2/1)	1.0	0.9	0.8	0.7	1.0	0.9	0.8	0.7	1.0	0.9	0.8	0.7
Raisin Grapes (3/15) (11 ft. row spacing)	Assume all grape			0.7	Assume all grape			0.7	Assume all grape			0.7
Winegrapes (3/15) (10 ft. spacing on California Sprawl Trellis)	irrigation type is drip			0.8	irrigation type is drip			0.8	irrigation type is drip			0.8
Walnuts (4/8)	0.6	0.5	0.4	0.4	0.6	0.5	0.4	0.4	0.6	0.5	0.5	0.4
Stone Fruit (3/10)	1.2	1.1	0.9	0.8	1.2	1.0	0.9	0.8	1.3	1.1	1.0	0.9

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			
	307	260	236	213	307	260	236	213	307	260	236	213
Almonds 115 Trees/A	307	260	236	213	307	260	236	213	307	260	236	213
Pistachio 106 Trees/A	299	249	224	199	274	249	224	199	299	249	224	199
Citrus 110 Trees/A	247	222	197	173	247	222	197	173	247	222	197	173
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			35
Walnuts 76 Trees/A	214	179	143	143	214	179	143	143	214	179	179	143
Stonefruit 172 Trees/A	189	174	142	126	189	158	142	126	205	174	158	142

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