

WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_c)

10/22/21 through 10/28/21

Crops (Leafout Date)	#148 Merced			#39 Parlier			#258 Lemon Cove		
	10/22 - 10/28 Water Use	Accum'd Seasonal Water Use	10/29 - 11/4 Estimated ETc	10/22 - 10/28 Water Use	Accum'd Seasonal Water Use	10/29 - 11/4 Estimated ETc	10/22 - 10/28 Water Use	Accum'd Seasonal Water Use	10/29 - 11/4 Estimated ETc
Almonds (3/5) *	0.43	46.93	0.48	0.49	49.86	0.46	0.38	46.08	0.47
Pistachio (4/16) * **	0.36	40.76	0.42	0.40	43.56	0.40	0.31	39.95	0.41
Citrus (2/1)	0.35	35.68	0.42	0.39	37.62	0.40	0.31	34.90	0.41
Raisin Grapes (3/12) (11 ft. row spacing)	0.41	33.24	0.51	0.46	35.54	0.47	0.37	32.57	0.49
Winegrapes (3/12) (10 ft. spacing on California Sprawl Trellis) ***	0.48	36.71	0.58	0.55	39.27	0.54	0.43	36.01	0.56
Walnuts (4/5)	0.13	41.15	0.16	0.16	43.85	0.14	0.12	40.41	0.15
Stone Fruit (3/10)	0.37	40.22	0.44	0.43	42.98	0.42	0.35	39.45	0.43
Past 7 days precipitation (inches)	1.47			1.09			1.71		
Accumulated precipitation (inches) (1/1/2021)	8.94			5.04			5.83		

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 (3/5)	0.7	0.6	0.5	0.5	0.8	0.7	0.6	0.5	0.6	0.5	0.4	0.4
Pistachio (4/16)	0.6	0.5	0.4	0.4	0.6	0.5	0.5	0.4	0.5	0.4	0.4	0.3
Citrus (2/1)	0.5	0.5	0.4	0.4	0.6	0.5	0.5	0.4	0.5	0.4	0.4	0.3
Raisin Grapes (3/12) (11 ft. row spacing)***	0.6	0.5	0.5	0.4	0.7	0.6	0.5	0.5	0.6	0.5	0.4	0.4
Winegrapes (3/12) (10 ft. spacing on California Sprawl Trellis) ***	0.7	0.6	0.6	0.5	0.8	0.7	0.6	0.6	0.7	0.6	0.5	0.5
Walnuts (4/5)	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	0.1
Stone Fruit (3/10)	0.6	0.5	0.4	0.4	0.7	0.6	0.5	0.5	0.5	0.5	0.4	0.4

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			
	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds 115 Trees/A	165	142	118	118	189	165	142	118	142	118	94	94
Pistachio 106 Trees/A	149	125	100	100	149	125	125	100	125	100	100	75
Citrus 110 Trees/A	123	123	99	99	148	123	123	99	123	99	99	74
Raisin Grapes 566 Vines/A	29	24	24	19	34	29	24	24	29	24	19	19
Winegrapes 622 Vines/A	31	26	26	22	35	31	26	26	31	26	22	22
Walnuts 76 Trees/A	71	71	71	36	71	71	71	71	71	71	36	36
Stonefruit 172 Trees/A	95	79	63	63	111	95	79	79	79	79	63	63

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)
10/22/21 through 10/28/21

Crops (Leafout Date)	#124 Panoche			#2 Five Points			#15 Stratford		
	10/22- 10/28 Water Use	Accum'd Seasonal Water Use	10/29- 11/4 Estimated ETc	10/22- 10/28 Water Use	Accum'd Seasonal Water Use	10/29- 11/4 Estimated ETc	10/22- 10/28 Water Use	Accum'd Seasonal Water Use	10/29- 11/4 Estimated ETc
Almonds (3/5) *	0.56	53.45	0.50	0.49	54.17	0.55	0.59	55.40	0.54
Pistachio (4/16) * **	0.44	47.08	0.43	0.40	47.24	0.48	0.47	48.63	0.47
Citrus (2/1)	0.43	40.56	0.43	0.40	41.60	0.48	0.46	42.06	0.47
Raisin Grapes (3/12) (11 ft. row spacing)	0.51	38.34	0.54	0.47	38.55	0.57	0.53	39.66	0.56
Winegrapes (3/12) (10 ft. spacing on California Sprawl Trellis)	0.62	42.44	0.62	0.56	42.76	0.69	0.65	43.94	0.68
Walnuts (4/5)	0.18	47.25	0.19	0.16	47.50	0.21	0.18	48.61	0.21
Stone Fruit (3/10)	0.50	46.34	0.48	0.46	46.84	0.55	0.53	48.02	0.54
Past 7 days precipitation (inches)	0.75			0.78			0.73		
Accumulated precipitation (inches) (1/1/2021)	4.60			5.96			3.82		

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	#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 (3/5)	0.9	0.7	0.7	0.6	0.8	0.7	0.6	0.5	0.9	0.8	0.7	0.6
Pistachio (4/16)	0.7	0.6	0.5	0.5	0.6	0.5	0.5	0.4	0.7	0.6	0.6	0.5
Citrus (2/1)	0.7	0.6	0.5	0.5	0.6	0.5	0.5	0.4	0.7	0.6	0.5	0.5
Raisin Grapes (3/12) (11 ft. row spacing)	0.8	0.7	0.6	0.5	0.7	0.6	0.6	0.5	0.8	0.7	0.6	0.6
Winegrapes (3/12) (10 ft. spacing on California Sprawl Trellis)	1.0	0.8	0.7	0.7	0.9	0.7	0.7	0.6	1.0	0.9	0.8	0.7
Walnuts (4/5)	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2
Stone Fruit (3/10)	0.8	0.7	0.6	0.5	0.7	0.6	0.5	0.5	0.8	0.7	0.6	0.6

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			
	213	165	165	142	189	165	142	118	213	189	165	142
Almonds 115 Trees/A	213	165	165	142	189	165	142	118	213	189	165	142
Pistachio 106 Trees/A	174	149	125	125	149	125	125	100	174	149	149	125
Citrus 110 Trees/A	173	148	123	123	148	123	123	99	173	148	123	123
Raisin Grapes 566 Vines/A	38	34	29	24	34	29	29	24	38	34	29	29
Winegrapes 622 Vines/A	44	35	31	31	39	31	31	26	44	39	35	31
Walnuts 76 Trees/A	107	71	71	71	71	71	71	71	107	71	71	71
Stonefruit 172 Trees/A	126	111	95	79	111	95	79	79	126	111	95	95

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