

WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_c)

10/06/23 through 10/12/23

Crops (Leafout Date)	#148 Merced			#39 Parlier			#258 Lemon Cove		
	10/6 - 10/12 Water Use	Accum'd Seasonal Water Use	10/13 - 10/19 Estimated ETc	10/6 - 10/12 Water Use	Accum'd Seasonal Water Use	10/13 - 10/19 Estimated ETc	10/6 - 10/12 Water Use	Accum'd Seasonal Water Use	10/13 - 10/19 Estimated ETc
Almonds (3/13) *	0.88	42.12	0.74	0.89	44.13	0.72	0.91	42.77	0.76
Pistachio (4/20) * **	0.83	36.25	0.69	0.84	37.91	0.69	0.86	37.00	0.72
Citrus (2/1)	0.68	31.32	0.56	0.68	33.00	0.56	0.70	31.91	0.59
Raisin Grapes (3/22) (11 ft. row spacing)	0.69	24.00	0.57	0.70	25.04	0.55	0.71	24.48	0.61
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis) ***	0.77	26.50	0.69	0.78	27.70	0.67	0.79	27.00	0.71
Walnuts (4/20)	0.83	34.74	0.74	0.85	36.33	0.72	0.86	35.48	0.76
Stone Fruit (3/19)	0.79	37.70	0.67	0.79	39.37	0.65	0.83	38.40	0.72
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 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)	1.4	1.2	1.0	0.9	1.4	1.2	1.0	0.9	1.4	1.2	1.1	1.0
Pistachio (4/20)	1.3	1.1	1.0	0.9	1.3	1.1	1.0	0.9	1.3	1.1	1.0	0.9
Citrus (2/1)	1.0	0.9	0.8	0.7	1.0	0.9	0.8	0.7	1.1	0.9	0.8	0.7
Raisin Grapes (3/22) (11 ft. row spacing)***	Assume all grape			0.7	Assume all grape			0.7	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			0.8	irrigation type is drip			0.8
Walnuts (4/20)	1.3	1.1	1.0	0.9	1.3	1.1	1.0	0.9	1.3	1.1	1.0	0.9
Stone Fruit (3/19)	1.2	1.1	0.9	0.8	1.2	1.1	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	#148 Merced				#39 Parlier				#258 Lemon Cove			
	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds 115 Trees/A	331	283	236	213	331	283	236	213	331	283	260	236
Pistachio 106 Trees/A	324	274	249	224	324	274	249	224	324	274	249	224
Citrus 110 Trees/A	247	222	197	173	247	222	197	173	272	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	464	393	357	322	464	393	357	322	464	393	357	322
Stonefruit 172 Trees/A	189	174	142	126	189	174	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.

WEEKLY SOIL MOISTURE LOSS IN INCHES (Estimated Crop Evapotranspiration or ET _c) 10/06/23 through 10/12/23											
Crops (Leafout Date)	#124 Panoche				#2 Five Points				#15 Stratford		
	10/6 - 10/12 Water Use	Accum'd Seasonal Water Use	10/13- 10/19 Estimated ETc		10/6 - 10/12 Water Use	Accum'd Seasonal Water Use	10/13- 10/19 Estimated ETc		10/6 - 10/12 Water Use	Accum'd Seasonal Water Use	10/13- 10/19 Estimated ETc
Almonds (3/13) *	1.03	45.51	0.79		1.02	44.47	0.86		1.08	48.30	0.81
Pistachio (4/20) * **	0.99	39.63	0.77		0.98	38.44	0.85		1.04	41.61	0.80
Citrus (2/1)	0.80	33.73	0.63		0.79	33.22	0.72		0.84	36.03	0.67
Raisin Grapes (3/22) (11 ft. row spacing)	0.80	25.81	0.65		0.80	25.14	0.73		0.84	27.11	0.69
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	0.90	28.53	0.73		0.90	27.72	0.79		0.94	29.96	0.75
Walnuts (4/20)	0.99	37.92	0.79		0.98	36.77	0.86		1.04	39.84	0.81
Stone Fruit (3/19)	0.92	41.20	0.74		0.93	40.09	0.79		0.98	43.49	0.76
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

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** 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			
System Efficiency >>	65%	75%	85%	95%		65%	75%	85%	95%		65%	75%	85%	95%
Almonds (3/13)	1.6	1.4	1.2	1.1		1.6	1.4	1.2	1.1		1.7	1.4	1.3	1.1
Pistachio (4/20)	1.5	1.3	1.2	1.0		1.5	1.3	1.2	1.0		1.6	1.4	1.2	1.1
Citrus (2/1)	1.2	1.1	0.9	0.8		1.2	1.1	0.9	0.8		1.3	1.1	1.0	0.9
Raisin Grapes (3/22) (11 ft. row spacing)	Assume all grape			0.8		Assume all grape			0.8		Assume all grape			0.9
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	irrigation type is drip			0.9		irrigation type is drip			0.9		irrigation type is drip			1.0
Walnuts (4/20)	1.5	1.3	1.2	1.0		1.5	1.3	1.2	1.0		1.6	1.4	1.2	1.1
Stone Fruit (3/19)	1.4	1.2	1.1	1.0		1.4	1.2	1.1	1.0		1.5	1.3	1.2	1.0

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			
Almonds 115 Trees/A	378	331	283	260		378	331	283	260		401	331	307	260
Pistachio 106 Trees/A	374	324	299	249		374	324	299	249		399	349	299	274
Citrus 110 Trees/A	296	272	222	197		296	272	222	197		321	272	247	222
Raisin Grapes 566 Vines/A	Assume all grape			38		Assume all grape			38		Assume all grape			43
Winegrapes 622 Vines/A	irrigation type is drip			39		irrigation type is drip			39		irrigation type is drip			44
Walnuts 76 Trees/A	536	464	429	357		536	464	429	357		572	500	429	393
Stonefruit 172 Trees/A	221	189	174	158		221	189	174	158		237	205	189	158

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