

WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_c)

06/09/23 through 06/15/23

Crops (Leafout Date)	#148 Merced			#39 Parlier			#258 Lemon Cove		
	6/9 - 6/15 Water Use	Accum'd Seasonal Water Use	6/16 - 6/22 Estimated ETc	6/9 - 6/15 Water Use	Accum'd Seasonal Water Use	6/16 - 6/22 Estimated ETc	6/9 - 6/15 Water Use	Accum'd Seasonal Water Use	6/16 - 6/22 Estimated ETc
Almonds (3/13) *	1.58	14.98	1.96	1.75	15.98	1.96	1.71	15.25	1.96
Pistachio (4/20) * **	1.71	8.62	2.10	1.92	9.17	2.10	1.86	8.86	2.10
Citrus (2/1)	1.01	14.11	1.26	1.13	15.16	1.26	1.11	14.43	1.26
Raisin Grapes (3/22) (11 ft. row spacing)	1.08	5.66	1.33	1.19	6.01	1.33	1.16	5.85	1.33
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	1.09	5.89	1.42	1.22	6.30	1.42	1.19	6.08	1.42
Walnuts (4/20)	1.35	7.96	1.63	1.48	8.50	1.63	1.45	8.27	1.63
Stone Fruit (3/19)	1.35	10.69	1.75	1.48	11.32	1.75	1.45	10.93	1.75
Past 7 days precipitation (inches)	0.04			0.00			0.04		
Accumulated precipitation (inches) (1/1/2023)	16.33			12.53			15.76		

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 (3/13)	2.4	2.1	1.9	1.7	2.7	2.3	2.1	1.8	2.6	2.3	2.0	1.8
Pistachio (4/20)	2.6	2.3	2.0	1.8	3.0	2.6	2.3	2.0	2.9	2.5	2.2	2.0
Citrus (2/1)	1.6	1.3	1.2	1.1	1.7	1.5	1.3	1.2	1.7	1.5	1.3	1.2
Raisin Grapes (3/22) (11 ft. row spacing)	Assume all grape			1.1	Assume all grape			1.3	Assume all grape			1.2
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	irrigation type is drip			1.1	irrigation type is drip			1.3	irrigation type is drip			1.3
Walnuts (4/20)	2.1	1.8	1.6	1.4	2.3	2.0	1.7	1.6	2.2	1.9	1.7	1.5
Stone Fruit (3/19)	2.1	1.8	1.6	1.4	2.3	2.0	1.7	1.6	2.2	1.9	1.7	1.5

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			
	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds 115 Trees/A	567	496	449	401	638	543	496	425	614	543	472	425
Pistachio 106 Trees/A	648	573	498	448	747	648	573	498	722	623	548	498
Citrus 110 Trees/A	395	321	296	272	420	370	321	296	420	370	321	296
Raisin Grapes 566 Vines/A	Assume all grape			53	Assume all grape			62	Assume all grape			58
Winegrapes 622 Vines/A	irrigation type is drip			48	irrigation type is drip			57	irrigation type is drip			57
Walnuts 76 Trees/A	750	643	572	500	822	715	607	572	786	679	607	536
Stonefruit 172 Trees/A	332	284	253	221	363	316	268	253	347	300	268	237

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)											
06/09/23 through 06/15/23											
Crops (Leafout Date)	#124 Panoche			#2 Five Points			#15 Stratford				
	6/9- 6/15	Accum'd	6/16- 6/22	6/9- 6/15	Accum'd	6/16- 6/22	6/9- 6/15	Accum'd	6/16- 6/22		
	Water	Seasonal	Estimated	Water	Seasonal	Estimated	Water	Seasonal	Estimated		
	Use	Water Use	ETc	Use	Water Use	ETc	Use	Water Use	ETc		
Almonds (3/13) *	1.74	15.68	2.20	1.69	15.68	2.20	1.91	17.38	2.22		
Pistachio (4/20) * **	1.89	9.07	2.31	1.84	9.01	2.31	2.09	10.00	2.33		
Citrus (2/1)	1.13	14.72	1.40	1.08	14.88	1.40	1.21	16.34	1.40		
Raisin Grapes (3/22) (11 ft. row spacing)	1.16	5.57	1.49	1.13	5.62	1.49	1.29	6.15	1.50		
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	1.16	5.83	1.54	1.12	5.85	1.54	1.29	6.45	1.56		
Walnuts (4/20)	1.46	8.32	1.84	1.42	8.25	1.84	1.62	9.23	1.86		
Stone Fruit (3/19)	1.48	11.27	1.96	1.44	11.29	1.96	1.64	12.51	1.98		
Past 7 days precipitation (inches)	0.00			0.00			0.00				
Accumulated precipitation (inches) (1/1/2023)	6.18			7.65			7.90				

Dates in parentheses above, indicate leaf out or starting date for ET accumulation for the specific crop

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	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
System Efficiency >>												
Almonds (3/13)	2.7	2.3	2.0	1.8	2.6	2.3	2.0	1.8	2.9	2.5	2.2	2.0
Pistachio (4/20)	2.9	2.5	2.2	2.0	2.8	2.5	2.2	1.9	3.2	2.8	2.5	2.2
Citrus (2/1)	1.7	1.5	1.3	1.2	1.7	1.4	1.3	1.1	1.9	1.6	1.4	1.3
Raisin Grapes (3/22) (11 ft. row spacing)	Assume all grape			1.2	Assume all grape			1.2	Assume all grape			1.4
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	irrigation type is drip			1.2	irrigation type is drip			1.2	irrigation type is drip			1.4
Walnuts (4/20)	2.2	1.9	1.7	1.5	2.2	1.9	1.7	1.5	2.5	2.2	1.9	1.7
Stone Fruit (3/19)	2.3	2.0	1.7	1.6	2.2	1.9	1.7	1.5	2.5	2.2	1.9	1.7

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PAST WEEKLY APPLIED WATER IN GALLON PER TREE OR VINE												
Crops	#124 Panoche				#2 Five Points				#15 Stratford			
Almonds 115 Trees/A	638	543	472	425	614	543	472	425	685	590	519	472
Pistachio 106 Trees/A	722	623	548	498	698	623	548	473	797	698	623	548
Citrus 110 Trees/A	420	370	321	296	420	346	321	272	469	395	346	321
Raisin Grapes 566 Vines/A	Assume all grape			58	Assume all grape			58	Assume all grape			67
Winegrapes 622 Vines/A	irrigation type is drip			52	irrigation type is drip			52	irrigation type is drip			61
Walnuts 76 Trees/A	786	679	607	536	786	679	607	536	893	786	679	607
Stonefruit 172 Trees/A	363	316	268	253	347	300	268	237	395	347	300	268

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