

WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_c)

08/11/23 through 08/17/23

Crops (Leafout Date)	#148 Merced			#39 Parlier			#258 Lemon Cove		
	8/11 - 8/17 Water Use	Accum'd Seasonal Water Use	8/18 - 8/24 Estimated ET _c	8/11 - 8/17 Water Use	Accum'd Seasonal Water Use	8/18 - 8/24 Estimated ET _c	8/11 - 8/17 Water Use	Accum'd Seasonal Water Use	8/18 - 8/24 Estimated ET _c
Almonds (3/13) *	1.66	32.02	1.80	1.79	33.81	1.73	1.76	33.08	1.64
Pistachio (4/20) * **	1.68	26.24	1.80	1.83	27.67	1.73	1.80	27.37	1.66
Citrus (2/1)	1.00	24.52	1.10	1.07	26.10	1.03	1.06	25.38	0.98
Raisin Grapes (3/22) (11 ft. row spacing)	1.09	17.03	1.17	1.18	17.95	1.11	1.16	17.79	1.07
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis) ***	1.24	18.63	1.35	1.34	19.65	1.29	1.33	19.46	1.23
Walnuts (4/20)	1.75	24.41	1.87	1.90	25.79	1.80	1.86	25.54	1.73
Stone Fruit (3/19)	1.68	27.40	1.80	1.83	28.84	1.73	1.80	28.48	1.66
Past 7 days precipitation (inches)	0.00			0.00			0.00		
Accumulated precipitation (inches) (1/1/2023)	16.33			12.53			15.80		

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)	2.6	2.2	2.0	1.7	2.8	2.4	2.1	1.9	2.7	2.3	2.1	1.9
Pistachio (4/20)	2.6	2.2	2.0	1.8	2.8	2.4	2.2	1.9	2.8	2.4	2.1	1.9
Citrus (2/1)	1.5	1.3	1.2	1.1	1.6	1.4	1.3	1.1	1.6	1.4	1.2	1.1
Raisin Grapes (3/22) (11 ft. row spacing)***	Assume all grape			1.1	Assume all grape			1.2	Assume all grape			1.2
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis) ***	irrigation type is drip			1.3	irrigation type is drip			1.4	irrigation type is drip			1.4
Walnuts (4/20)	2.7	2.3	2.1	1.8	2.9	2.5	2.2	2.0	2.9	2.5	2.2	2.0
Stone Fruit (3/19)	2.6	2.2	2.0	1.8	2.8	2.4	2.2	1.9	2.8	2.4	2.1	1.9

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	614	519	472	401	661	567	496	449	638	543	496	449
Pistachio 106 Trees/A	648	548	498	448	698	598	548	473	698	598	523	473
Citrus 110 Trees/A	370	321	296	272	395	346	321	272	395	346	296	272
Raisin Grapes 566 Vines/A	Assume all grape			53	Assume all grape			58	Assume all grape			58
Winegrapes 622 Vines/A	irrigation type is drip			57	irrigation type is drip			61	irrigation type is drip			61
Walnuts 76 Trees/A	965	822	750	643	1036	893	786	715	1036	893	786	715
Stonefruit 172 Trees/A	410	347	316	284	442	379	347	300	442	379	332	300

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)

08/11/23 through 08/17/23

Crops (Leafout Date)	#124 Panoche			#2 Five Points			#15 Stratford		
	8/11 - 8/17 Water Use	Accum'd Seasonal Water Use	8/18- 8/24 Estimated ETc	8/11 - 8/17 Water Use	Accum'd Seasonal Water Use	8/18- 8/24 Estimated ETc	8/11 - 8/17 Water Use	Accum'd Seasonal Water Use	8/18- 8/24 Estimated ETc
Almonds (3/13) *	1.83	34.63	1.78	1.73	33.83	1.95	2.03	37.10	1.93
Pistachio (4/20) * **	1.87	28.71	1.78	1.75	27.79	2.02	2.09	30.38	2.00
Citrus (2/1)	1.10	26.34	1.10	1.03	25.99	1.20	1.24	28.40	1.18
Raisin Grapes (3/22) (11 ft. row spacing)	1.21	18.26	1.16	1.13	17.76	1.30	1.36	19.33	1.28
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	1.38	19.96	1.33	1.29	19.32	1.48	1.55	21.12	1.46
Walnuts (4/20)	1.94	26.72	1.85	1.82	25.82	2.09	2.16	28.33	2.07
Stone Fruit (3/19)	1.87	30.05	1.78	1.75	29.20	2.02	2.09	32.02	2.00
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

* 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 >>												
Almonds (3/13)	2.8	2.4	2.2	1.9	2.7	2.3	2.0	1.8	3.1	2.7	2.4	2.1
Pistachio (4/20)	2.9	2.5	2.2	2.0	2.7	2.3	2.1	1.8	3.2	2.8	2.5	2.2
Citrus (2/1)	1.7	1.5	1.3	1.2	1.6	1.4	1.2	1.1	1.9	1.7	1.5	1.3
Raisin Grapes (3/22) (11 ft. row spacing)	Assume all grape			1.3	Assume all grape			1.2	Assume all grape			1.4
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	irrigation type is drip			1.4	irrigation type is drip			1.4	irrigation type is drip			1.6
Walnuts (4/20)	3.0	2.6	2.3	2.0	2.8	2.4	2.1	1.9	3.3	2.9	2.5	2.3
Stone Fruit (3/19)	2.9	2.5	2.2	2.0	2.7	2.3	2.1	1.8	3.2	2.8	2.5	2.2

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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	661	567	519	449	638	543	472	425	732	638	567
Pistachio 106 Trees/A	722	623	548	498	673	573	523	448	797	698	623	548
Citrus 110 Trees/A	420	370	321	296	395	346	296	272	469	420	370	321
Raisin Grapes 566 Vines/A	Assume all grape			62	Assume all grape			58	Assume all grape			67
Winegrapes 622 Vines/A	irrigation type is drip			61	irrigation type is drip			61	irrigation type is drip			70
Walnuts 76 Trees/A	1072	929	822	715	1000	857	750	679	1179	1036	893	822
Stonefruit 172 Trees/A	458	395	347	316	426	363	332	284	505	442	395	347

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