

WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_c)

08/04/23 through 08/10/23

Crops (Leafout Date)	#148 Merced			#39 Parlier			#258 Lemon Cove		
	8/4 - 8/10 Water Use	Accum'd Seasonal Water Use	8/11 - 8/17 Estimated ET _c	8/4 - 8/10 Water Use	Accum'd Seasonal Water Use	8/11 - 8/17 Estimated ET _c	8/4 - 8/10 Water Use	Accum'd Seasonal Water Use	8/11 - 8/17 Estimated ET _c
Almonds (3/13) *	1.84	30.36	1.93	1.89	32.02	1.93	1.83	31.32	1.91
Pistachio (4/20) * **	1.87	24.56	2.00	1.95	25.84	1.97	1.89	25.57	1.95
Citrus (2/1)	1.11	23.52	1.16	1.14	25.03	1.19	1.12	24.32	1.17
Raisin Grapes (3/22) (11 ft. row spacing)	1.21	15.95	1.28	1.26	16.77	1.28	1.22	16.63	1.27
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis) ***	1.39	17.39	1.46	1.43	18.31	1.46	1.39	18.13	1.45
Walnuts (4/20)	1.94	22.66	2.07	2.02	23.89	2.04	1.95	23.68	2.02
Stone Fruit (3/19)	1.87	25.72	2.00	1.95	27.01	1.97	1.89	26.68	1.95
Past 7 days precipitation (inches)	0.00			0.00			0.04		
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)	2.8	2.5	2.2	1.9	2.9	2.5	2.2	2.0	2.8	2.4	2.2	1.9
Pistachio (4/20)	2.9	2.5	2.2	2.0	3.0	2.6	2.3	2.1	2.9	2.5	2.2	2.0
Citrus (2/1)	1.7	1.5	1.3	1.2	1.8	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			1.3	Assume all grape			1.3	Assume all grape			1.3
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis) ***	irrigation type is drip			1.5	irrigation type is drip			1.5	irrigation type is drip			1.5
Walnuts (4/20)	3.0	2.6	2.3	2.0	3.1	2.7	2.4	2.1	3.0	2.6	2.3	2.1
Stone Fruit (3/19)	2.9	2.5	2.2	2.0	3.0	2.6	2.3	2.1	2.9	2.5	2.2	2.0

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	#148 Merced				#39 Parlier				#258 Lemon Cove			
	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds 115 Trees/A	661	590	519	449	685	590	519	472	661	567	519	449
Pistachio 106 Trees/A	722	623	548	498	747	648	573	523	722	623	548	498
Citrus 110 Trees/A	420	370	321	296	444	370	321	296	420	370	321	296
Raisin Grapes 566 Vines/A	Assume all grape			62	Assume all grape			62	Assume all grape			62
Winegrapes 622 Vines/A	irrigation type is drip			65	irrigation type is drip			65	irrigation type is drip			65
Walnuts 76 Trees/A	1072	929	822	715	1108	965	857	750	1072	929	822	750
Stonefruit 172 Trees/A	458	395	347	316	474	410	363	332	458	395	347	316

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)
08/04/23 through 08/10/23

Crops (Leafout Date)	#124 Panoche			#2 Five Points			#15 Stratford		
	8/4 - 8/10 Water Use	Accum'd Seasonal Water Use	8/11 - 8/17 Estimated ETc	8/4 - 8/10 Water Use	Accum'd Seasonal Water Use	8/11 - 8/17 Estimated ETc	8/4 - 8/10 Water Use	Accum'd Seasonal Water Use	8/11 - 8/17 Estimated ETc
Almonds (3/13) *	1.99	32.80	2.01	1.96	32.10	2.12	2.01	35.07	2.16
Pistachio (4/20) * **	2.05	26.84	2.08	2.02	26.04	2.19	2.08	28.29	2.23
Citrus (2/1)	1.21	25.24	1.20	1.19	24.96	1.30	1.24	27.16	1.34
Raisin Grapes (3/22) (11 ft. row spacing)	1.33	17.05	1.35	1.30	16.63	1.41	1.33	17.97	1.45
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	1.51	18.58	1.53	1.49	18.03	1.62	1.54	19.58	1.66
Walnuts (4/20)	2.12	24.78	2.15	2.09	24.00	2.26	2.14	26.17	2.30
Stone Fruit (3/19)	2.05	28.18	2.08	2.02	27.45	2.19	2.08	29.93	2.23
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.

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

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	732	638	543	496	708	614	543	496	732	638	567
Pistachio 106 Trees/A	797	673	598	548	772	673	598	523	797	698	598	548
Citrus 110 Trees/A	469	395	346	321	444	395	346	321	469	420	370	321
Raisin Grapes 566 Vines/A	Assume all grape			67	Assume all grape			67	Assume all grape			67
Winegrapes 622 Vines/A	irrigation type is drip			70	irrigation type is drip			70	irrigation type is drip			70
Walnuts 76 Trees/A	1179	1000	893	786	1143	1000	893	786	1179	1036	893	822
Stonefruit 172 Trees/A	505	426	379	347	489	426	379	332	505	442	379	347

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