

WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_c)

07/21/23 through 07/27/23

Crops (Leafout Date)	#148 Merced			#39 Parlier			#258 Lemon Cove		
	7/21- 7/27 Water Use	Accum'd Seasonal Water Use	7/28- 8/3 Estimated ETc	7/21- 7/27 Water Use	Accum'd Seasonal Water Use	7/28- 8/3 Estimated ETc	7/21- 7/27 Water Use	Accum'd Seasonal Water Use	7/28- 8/3 Estimated ETc
Almonds (3/13) *	1.97	26.61	1.97	2.03	28.12	1.89	2.01	27.53	1.85
Pistachio (4/20) * **	2.03	20.73	2.04	2.09	21.81	1.96	2.08	21.66	1.88
Citrus (2/1)	1.21	21.25	1.20	1.24	22.67	1.12	1.22	22.01	1.12
Raisin Grapes (3/22) (11 ft. row spacing)	1.32	13.47	1.32	1.36	14.16	1.25	1.35	14.10	1.22
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	1.50	14.56	1.50	1.55	15.35	1.43	1.53	15.26	1.39
Walnuts (4/20)	2.10	18.69	2.11	2.16	19.72	2.03	2.15	19.64	1.95
Stone Fruit (3/19)	2.03	21.89	2.04	2.09	22.98	1.96	2.08	22.77	1.88
Past 7 days precipitation (inches)	0.00			0.00			0.00		
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 >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/13)	3.0	2.6	2.3	2.1	3.1	2.7	2.4	2.1	3.1	2.7	2.4	2.1
Pistachio (4/20)	3.1	2.7	2.4	2.1	3.2	2.8	2.5	2.2	3.2	2.8	2.4	2.2
Citrus (2/1)	1.9	1.6	1.4	1.3	1.9	1.7	1.5	1.3	1.9	1.6	1.4	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)	3.2	2.8	2.5	2.2	3.3	2.9	2.5	2.3	3.3	2.9	2.5	2.3
Stone Fruit (3/19)	3.1	2.7	2.4	2.1	3.2	2.8	2.5	2.2	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	#148 Merced				#39 Parlier				#258 Lemon Cove			
	708	614	543	496	732	638	567	496	732	638	567	496
Almonds 115 Trees/A	708	614	543	496	732	638	567	496	732	638	567	496
Pistachio 106 Trees/A	772	673	598	523	797	698	623	548	797	698	598	548
Citrus 110 Trees/A	469	395	346	321	469	420	370	321	469	395	346	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	1143	1000	893	786	1179	1036	893	822	1179	1036	893	822
Stonefruit 172 Trees/A	489	426	379	332	505	442	395	347	505	442	379	347

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)

07/21/23 through 07/27/23

Crops (Leafout Date)	#124 Panoche			#2 Five Points			#15 Stratford		
	7/21 - 7/27 Water Use	Accum'd Seasonal Water Use	7/28 - 8/3 Estimated ETc	7/21 - 7/27 Water Use	Accum'd Seasonal Water Use	7/28 - 8/3 Estimated ETc	7/21 - 7/27 Water Use	Accum'd Seasonal Water Use	7/28 - 8/3 Estimated ETc
Almonds (3/13) *	2.19	28.73	1.96	2.12	28.13	2.11	2.30	30.86	2.10
Pistachio (4/20) * **	2.26	22.64	2.03	2.19	21.94	2.18	2.36	23.94	2.17
Citrus (2/1)	1.33	22.76	1.19	1.28	22.55	1.27	1.40	24.58	1.26
Raisin Grapes (3/22) (11 ft. row spacing)	1.47	14.33	1.31	1.44	13.98	1.43	1.53	15.16	1.43
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	1.67	15.48	0.00	1.62	15.01	0.00	1.76	16.35	0.00
Walnuts (4/20)	2.33	20.44	2.10	2.26	19.76	2.25	2.43	21.69	2.24
Stone Fruit (3/19)	2.26	23.98	2.03	2.19	23.35	2.18	2.36	25.58	2.17
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)	3.4	2.9	2.6	2.3	3.3	2.8	2.5	2.2	3.5	3.1	2.7	2.4
Pistachio (4/20)	3.5	3.0	2.7	2.4	3.4	2.9	2.6	2.3	3.6	3.1	2.8	2.5
Citrus (2/1)	2.0	1.8	1.6	1.4	2.0	1.7	1.5	1.3	2.2	1.9	1.6	1.5
Raisin Grapes (3/22) (11 ft. row spacing)	Assume all grape			1.5	Assume all grape			1.5	Assume all grape			1.6
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	irrigation type is drip			1.8	irrigation type is drip			1.7	irrigation type is drip			1.9
Walnuts (4/20)	3.6	3.1	2.7	2.5	3.5	3.0	2.7	2.4	3.7	3.2	2.9	2.6
Stone Fruit (3/19)	3.5	3.0	2.7	2.4	3.4	2.9	2.6	2.3	3.6	3.1	2.8	2.5

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	#124 Panoche				#2 Five Points				#15 Stratford			
	Almonds 115 Trees/A	803	685	614	543	779	661	590	519	826	732	638
Pistachio 106 Trees/A	872	747	673	598	847	722	648	573	897	772	698	623
Citrus 110 Trees/A	494	444	395	346	494	420	370	321	543	469	395	370
Raisin Grapes 566 Vines/A	Assume all grape			72	Assume all grape			72	Assume all grape			77
Winegrapes 622 Vines/A	irrigation type is drip			79	irrigation type is drip			74	irrigation type is drip			83
Walnuts 76 Trees/A	1286	1108	965	893	1251	1072	965	857	1322	1143	1036	929
Stonefruit 172 Trees/A	553	474	426	379	537	458	410	363	568	489	442	395

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