

WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_c)

06/30/23 through 07/06/23

Crops (Leafout Date)	#148 Merced				#39 Parlier				#258 Lemon Cove		
	6/30- 7/6 Water Use	Accum'd Seasonal Water Use	7/7- 7/13 Estimated ETc		6/30- 7/6 Water Use	Accum'd Seasonal Water Use	7/7- 7/13 Estimated ETc		6/30- 7/6 Water Use	Accum'd Seasonal Water Use	7/7- 7/13 Estimated ETc
Almonds (3/13) *	2.08	20.72	2.10		2.16	22.00	2.02		2.21	21.30	2.03
Pistachio (4/20) * **	2.15	14.65	2.17		2.23	15.50	2.09		2.28	15.22	2.10
Citrus (2/1)	1.28	17.67	1.26		1.32	18.92	1.25		1.36	18.21	1.26
Raisin Grapes (3/22) (11 ft. row spacing)	1.39	9.54	1.43		1.44	10.06	1.36		1.47	9.93	1.37
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	1.53	10.10	1.55		1.60	10.71	1.48		1.64	10.52	1.49
Walnuts (4/20)	1.82	12.91	1.96		1.90	13.71	1.88		1.95	13.51	1.89
Stone Fruit (3/19)	1.99	15.99	2.03		2.07	16.84	1.95		2.15	16.50	1.96
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)	3.2	2.8	2.4	2.2		3.3	2.9	2.5	2.3		3.4	2.9	2.6	2.3
Pistachio (4/20)	3.3	2.9	2.5	2.3		3.4	3.0	2.6	2.3		3.5	3.0	2.7	2.4
Citrus (2/1)	2.0	1.7	1.5	1.3		2.0	1.8	1.6	1.4		2.1	1.8	1.6	1.4
Raisin Grapes (3/22) (11 ft. row spacing)	Assume all grape			1.5		Assume all grape			1.5		Assume all grape			1.5
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	irrigation type is drip			1.6		irrigation type is drip			1.7		irrigation type is drip			1.7
Walnuts (4/20)	2.8	2.4	2.1	1.9		2.9	2.5	2.2	2.0		3.0	2.6	2.3	2.1
Stone Fruit (3/19)	3.1	2.7	2.3	2.1		3.2	2.8	2.4	2.2		3.3	2.9	2.5	2.3

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			
	756	661	567	519		779	685	590	543		803	685	614	543
Almonds 115 Trees/A	756	661	567	519		779	685	590	543		803	685	614	543
Pistachio 106 Trees/A	822	722	623	573		847	747	648	573		872	747	673	598
Citrus 110 Trees/A	494	420	370	321		494	444	395	346		518	444	395	346
Raisin Grapes 566 Vines/A	Assume all grape			72		Assume all grape			72		Assume all grape			72
Winegrapes 622 Vines/A	irrigation type is drip			70		irrigation type is drip			74		irrigation type is drip			74
Walnuts 76 Trees/A	1000	857	750	679		1036	893	786	715		1072	929	822	750
Stonefruit 172 Trees/A	489	426	363	332		505	442	379	347		521	458	395	363

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) 06/30/23 through 07/06/23												
Crops (Leafout Date)	#124 Panoche				#2 Five Points				#15 Stratford			
	6/30- 7/6 Water Use	Accum'd Seasonal Water Use	7/7- 7/13 Estimated ETc		6/30- 7/6 Water Use	Accum'd Seasonal Water Use	7/7- 7/13 Estimated ETc		6/30- 7/6 Water Use	Accum'd Seasonal Water Use	7/7- 7/13 Estimated ETc	
Almonds (3/13) *	2.35	22.12	2.13		2.25	21.80	2.17		2.43	23.99	2.23	
Pistachio (4/20) * **	2.42	15.83	2.20		2.32	15.41	2.24		2.50	16.92	2.30	
Citrus (2/1)	1.43	18.72	1.29		1.37	18.67	1.33		1.47	20.42	1.39	
Raisin Grapes (3/22) (11 ft. row spacing)	1.58	9.91	1.43		1.51	9.74	1.43		1.63	10.59	1.48	
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	1.73	10.49	1.57		1.65	10.23	1.61		1.79	11.20	1.66	
Walnuts (4/20)	2.09	13.94	1.99		1.99	13.53	2.03		2.15	14.98	2.09	
Stone Fruit (3/19)	2.34	17.29	2.06		2.21	16.95	2.10		2.42	18.67	2.22	
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)	3.6	3.1	2.8	2.5		3.5	3.0	2.6	2.4		3.7	3.2	2.9	2.6
Pistachio (4/20)	3.7	3.2	2.8	2.5		3.6	3.1	2.7	2.4		3.8	3.3	2.9	2.6
Citrus (2/1)	2.2	1.9	1.7	1.5		2.1	1.8	1.6	1.4		2.3	2.0	1.7	1.5
Raisin Grapes (3/22) (11 ft. row spacing)	Assume all grape			1.7		Assume all grape			1.6		Assume all grape			1.7
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)	3.2	2.8	2.5	2.2		3.1	2.7	2.3	2.1		3.3	2.9	2.5	2.3
Stone Fruit (3/19)	3.6	3.1	2.8	2.5		3.4	2.9	2.6	2.3		3.7	3.2	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			
	850	732	661	590		826	708	614	567		874	756	685	614
Almonds 115 Trees/A	850	732	661	590		826	708	614	567		874	756	685	614
Pistachio 106 Trees/A	922	797	698	623		897	772	673	598		947	822	722	648
Citrus 110 Trees/A	543	469	420	370		518	444	395	346		568	494	420	370
Raisin Grapes 566 Vines/A	Assume all grape			82		Assume all grape			77		Assume all grape			82
Winegrapes 622 Vines/A	irrigation type is drip			79		irrigation type is drip			74		irrigation type is drip			83
Walnuts 76 Trees/A	1143	1000	893	786		1108	965	822	750		1179	1036	893	822
Stonefruit 172 Trees/A	568	489	442	395		537	458	410	363		584	505	442	395

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