

**WEEKLY SOIL MOISTURE LOSS IN INCHES**

(Estimated Crop Evapotranspiration or ET<sub>c</sub>)

06/23/23 through 06/29/23

Crops (Leafout Date)	#148 Merced				#39 Parlier				#258 Lemon Cove		
	6/23 - 6/29 Water Use	Accum'd Seasonal Water Use	6/30- 7/6 Estimated ETc		6/23 - 6/29 Water Use	Accum'd Seasonal Water Use	6/30- 7/6 Estimated ETc		6/23 - 6/29 Water Use	Accum'd Seasonal Water Use	6/30- 7/6 Estimated ETc
Almonds (3/13) *	1.81	18.64	2.10		1.87	19.84	2.03		1.86	19.09	2.03
Pistachio (4/20) * **	1.90	12.50	2.17		1.97	13.27	2.10		1.96	12.94	2.10
Citrus (2/1)	1.12	16.39	1.26		1.18	17.60	1.26		1.16	16.85	1.26
Raisin Grapes (3/22) (11 ft. row spacing)	1.22	8.15	1.43		1.27	8.63	1.37		1.28	8.46	1.37
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	1.34	8.57	1.55		1.39	9.11	1.49		1.38	8.88	1.49
Walnuts (4/20)	1.58	11.09	1.84		1.65	11.81	1.77		1.64	11.56	1.77
Stone Fruit (3/19)	1.63	14.00	2.00		1.66	14.77	1.93		1.65	14.35	1.93
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 <sup>1</sup>**

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	2.4	2.1	1.9		2.9	2.5	2.2	2.0		2.9	2.5	2.2	2.0
Pistachio (4/20)	2.9	2.5	2.2	2.0		3.0	2.6	2.3	2.1		3.0	2.6	2.3	2.1
Citrus (2/1)	1.7	1.5	1.3	1.2		1.8	1.6	1.4	1.2		1.8	1.5	1.4	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			1.4		irrigation type is drip			1.5		irrigation type is drip			1.4
Walnuts (4/20)	2.4	2.1	1.9	1.7		2.5	2.2	1.9	1.7		2.5	2.2	1.9	1.7
Stone Fruit (3/19)	2.5	2.2	1.9	1.7		2.6	2.2	2.0	1.7		2.5	2.2	1.9	1.7

<sup>1</sup> 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	567	496	449		685	590	519	472		685	590	519	472
Pistachio 106 Trees/A	722	623	548	498		747	648	573	523		747	648	573	523
Citrus 110 Trees/A	420	370	321	296		444	395	346	296		444	370	346	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			61		irrigation type is drip			65		irrigation type is drip			61
Walnuts 76 Trees/A	857	750	679	607		893	786	679	607		893	786	679	607
Stonefruit 172 Trees/A	395	347	300	268		410	347	316	268		395	347	300	268

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<sub>c</sub>)

06/23/23 through 06/29/23

Crops (Leafout Date)	#124 Panoche			#2 Five Points			#15 Stratford		
	6/23 - 6/29 Water Use	Accum'd Seasonal Water Use	6/30- 7/6 Estimated ETc	6/23 - 6/29 Water Use	Accum'd Seasonal Water Use	6/30- 7/6 Estimated ETc	6/23 - 6/29 Water Use	Accum'd Seasonal Water Use	6/30- 7/6 Estimated ETc
Almonds (3/13) *	1.98	19.77	2.17	1.87	19.55	2.24	2.04	21.56	2.24
Pistachio (4/20) * **	2.09	13.41	2.24	1.96	13.09	2.31	2.15	14.42	2.31
Citrus (2/1)	1.23	17.29	1.33	1.15	17.30	1.40	1.26	18.95	1.40
Raisin Grapes (3/22 ) (11 ft. row spacing)	1.33	8.33	1.43	1.26	8.23	1.49	1.37	8.96	1.49
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	1.44	8.76	1.55	1.33	8.59	1.61	1.47	9.42	1.61
Walnuts (4/20)	1.75	11.85	1.91	1.63	11.54	1.98	1.80	12.83	1.98
Stone Fruit (3/19)	1.78	14.95	2.10	1.66	14.74	2.24	1.82	16.25	2.24
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 <sup>1</sup>**

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

<sup>1</sup> 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			
	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds 115 Trees/A	708	614	543	496	685	590	519	472	732	638	567	496
Pistachio 106 Trees/A	797	698	623	548	747	648	573	523	822	722	623	573
Citrus 110 Trees/A	469	395	346	321	444	370	346	296	469	420	370	321
Raisin Grapes 566 Vines/A	Assume all grape			67	Assume all grape			62	Assume all grape			67
Winegrapes 622 Vines/A	irrigation type is drip			65	irrigation type is drip			61	irrigation type is drip			65
Walnuts 76 Trees/A	965	822	750	643	893	786	679	607	1000	857	750	679
Stonefruit 172 Trees/A	426	379	332	300	410	347	316	268	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.