

WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_c)

09/03/21 through 09/09/21

Crops (Leafout Date)	#148 Merced			#39 Parlier			#258 Lemon Cove		
	9/3 - 9/9 Water Use	Accum'd Seasonal Water Use	9/10 - 9/16 Estimated ETc	9/3 - 9/9 Water Use	Accum'd Seasonal Water Use	9/10 - 9/16 Estimated ETc	9/3 - 9/9 Water Use	Accum'd Seasonal Water Use	9/10 - 9/16 Estimated ETc
Almonds (3/5) *	1.62	40.14	1.41	1.69	42.88	1.33	1.64	39.93	1.35
Pistachio (4/16) * **	1.61	34.61	1.32	1.68	37.27	1.24	1.63	34.41	1.26
Citrus (2/1)	1.10	30.80	1.05	1.13	32.63	0.97	1.11	30.50	0.99
Raisin Grapes (3/12) (11 ft. row spacing)	1.26	27.43	1.13	1.31	29.59	1.05	1.27	27.31	1.07
Winegrapes (3/12) (10 ft. spacing on California Sprawl Trellis) ***	1.44	30.16	1.27	1.50	32.54	1.19	1.46	30.01	1.21
Walnuts (4/5)	1.44	36.55	1.24	1.50	39.20	1.16	1.46	36.32	1.18
Stone Fruit (3/10)	1.65	33.20	1.48	1.72	35.77	1.40	1.67	33.04	1.42
Past 7 days precipitation (inches)	0.00			0.00			0.00		
Accumulated precipitation (inches) (1/1/2021)	5.54			3.66			3.90		

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	#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 (3/5)	2.5	2.2	1.9	1.7	2.6	2.3	2.0	1.8	2.5	2.2	1.9	1.7
Pistachio (4/16)	2.5	2.1	1.9	1.7	2.6	2.2	2.0	1.8	2.5	2.2	1.9	1.7
Citrus (2/1)	1.7	1.5	1.3	1.2	1.7	1.5	1.3	1.2	1.7	1.5	1.3	1.2
Raisin Grapes (3/12) (11 ft. row spacing)***	1.9	1.7	1.5	1.3	2.0	1.7	1.5	1.4	2.0	1.7	1.5	1.3
Winegrapes (3/12) (10 ft. spacing on California Sprawl Trellis) ***	2.2	1.9	1.7	1.5	2.3	2.0	1.8	1.6	2.2	1.9	1.7	1.5
Walnuts (4/5)	2.2	1.9	1.7	1.5	2.3	2.0	1.8	1.6	2.2	1.9	1.7	1.5
Stone Fruit (3/10)	2.5	2.2	1.9	1.7	2.6	2.3	2.0	1.8	2.6	2.2	2.0	1.8

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	590	519	449	401	614	543	472	425	590	519	449	401
Pistachio 106 Trees/A	623	523	473	424	648	548	498	448	623	548	473	424
Citrus 110 Trees/A	420	370	321	296	420	370	321	296	420	370	321	296
Raisin Grapes 566 Vines/A	91	82	72	62	96	82	72	67	96	82	72	62
Winegrapes 622 Vines/A	96	83	74	65	100	87	79	70	96	83	74	65
Walnuts 76 Trees/A	786	679	607	536	822	715	643	572	786	679	607	536
Stonefruit 172 Trees/A	395	347	300	268	410	363	316	284	410	347	316	284

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)

09/03/21 through 09/09/21

Crops (Leafout Date)	#124 Panoche				#2 Five Points				#15 Stratford		
	9/3- 9/9 Water Use	Accum'd Seasonal Water Use	9/10- 9/16 Estimated ETc		9/3- 9/9 Water Use	Accum'd Seasonal Water Use	9/10- 9/16 Estimated ETc		9/3- 9/9 Water Use	Accum'd Seasonal Water Use	9/10- 9/16 Estimated ETc
Almonds (3/5) *	1.79	45.72	1.43		1.83	46.04	1.57		1.90	47.05	1.53
Pistachio (4/16) * **	1.78	40.10	1.34		1.80	39.85	1.48		1.90	41.04	1.44
Citrus (2/1)	1.24	35.12	1.02		1.27	35.80	1.11		1.31	36.10	1.07
Raisin Grapes (3/12) (11 ft. row spacing)	1.39	31.75	1.15		1.40	31.61	1.26		1.47	32.55	1.24
Winegrapes (3/12) (10 ft. spacing on California Sprawl Trellis)	1.59	34.97	1.29		1.62	34.87	1.43		1.69	35.83	1.39
Walnuts (4/5)	1.59	42.11	1.26		1.62	42.09	1.37		1.69	43.12	1.35
Stone Fruit (3/10)	1.83	38.37	1.50		1.85	38.41	1.64		1.95	39.41	1.60
Past 7 days precipitation (inches)	0.00				0.00				0.00		
Accumulated precipitation (inches) (1/1/2021)	3.83				4.72				3.06		

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 >>	65%	75%	85%	95%		65%	75%	85%	95%		65%	75%	85%	95%
Almonds (3/5)	2.8	2.4	2.1	1.9		2.8	2.4	2.2	1.9		2.9	2.5	2.2	2.0
Pistachio (4/16)	2.7	2.4	2.1	1.9		2.8	2.4	2.1	1.9		2.9	2.5	2.2	2.0
Citrus (2/1)	1.9	1.7	1.5	1.3		2.0	1.7	1.5	1.3		2.0	1.7	1.5	1.4
Raisin Grapes (3/12) (11 ft. row spacing)	2.1	1.9	1.6	1.5		2.2	1.9	1.6	1.5		2.3	2.0	1.7	1.5
Winegrapes (3/12) (10 ft. spacing on California Sprawl Trellis)	2.4	2.1	1.9	1.7		2.5	2.2	1.9	1.7		2.6	2.3	2.0	1.8
Walnuts (4/5)	2.4	2.1	1.9	1.7		2.5	2.2	1.9	1.7		2.6	2.3	2.0	1.8
Stone Fruit (3/10)	2.8	2.4	2.2	1.9		2.8	2.5	2.2	1.9		3.0	2.6	2.3	2.1

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			
	661	567	496	449		661	567	519	449		685	590	519	472
Almonds 115 Trees/A	661	567	496	449		661	567	519	449		685	590	519	472
Pistachio 106 Trees/A	673	598	523	473		698	598	523	473		722	623	548	498
Citrus 110 Trees/A	469	420	370	321		494	420	370	321		494	420	370	346
Raisin Grapes 566 Vines/A	101	91	77	72		106	91	77	72		110	96	82	72
Winegrapes 622 Vines/A	105	92	83	74		109	96	83	74		114	100	87	79
Walnuts 76 Trees/A	857	750	679	607		893	786	679	607		929	822	715	643
Stonefruit 172 Trees/A	442	379	347	300		442	395	347	300		474	410	363	332

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