

**WEEKLY SOIL MOISTURE LOSS IN INCHES**  
(Estimated Crop Evapotranspiration or ET<sub>c</sub>)  
08/23/19 through 08/29/19

Crops (Leafout Date)	#148 Merced				#39 Parlier				#258 Lemon Cove		
	8/23- 8/29 Water Use	Accum'd Seasonal Water Use	8/30- 9/5 Estimated ETc		8/23- 8/29 Water Use	Accum'd Seasonal Water Use	8/30- 9/5 Estimated ETc		8/23- 8/29 Water Use	Accum'd Seasonal Water Use	8/30- 9/5 Estimated ETc
Almonds (3/10) *	1.79	34.35	1.65		1.87	36.89	1.52		1.68	34.75	1.53
Pistachio (4/19) * **	1.79	28.03	1.67		1.92	30.06	1.57		1.68	28.32	1.58
Citrus (2/1)	1.12	26.42	1.10		1.17	28.45	1.04		1.04	26.62	1.04
Raisin Grapes (3/16) (11 ft. row spacing)	1.37	24.24	1.27		1.45	25.85	1.22		1.28	24.38	1.23
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.58	26.53	1.46		1.66	28.55	1.36		1.47	26.85	1.37
Walnuts (4/15)	1.86	26.62	1.74		1.99	28.64	1.64		1.75	26.85	1.65
Stone Fruit (3/20)	1.79	26.88	1.67		1.92	28.92	1.57		1.68	27.03	1.58
Past 7 days precipitation (inches)	0.00				0.00				0.00		
Accumulated precipitation (inches) (1/1/2018)	11.08				7.89				10.81		

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.

\*\*\* CIMIS station #188 Madera II has been taken out of service due to a conversion of the pasture to permanent crops. For the remainder of 2018 irrigation season Historical Average ET<sub>o</sub> will be used for the weekly report.

**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 (3/10)	2.8	2.4	2.1	1.9	2.9	2.5	2.2	2.0	2.6	2.2	2.0	1.8
Pistachio (4/19)	2.8	2.4	2.1	1.9	3.0	2.6	2.3	2.0	2.6	2.2	2.0	1.8
Citrus (2/1)	1.7	1.5	1.3	1.2	1.8	1.6	1.4	1.2	1.6	1.4	1.2	1.1
Raisin Grapes (3/16) (11 ft. row spacing)	2.1	1.8	1.6	1.4	2.2	1.9	1.7	1.5	2.0	1.7	1.5	1.3
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	2.4	2.1	1.9	1.7	2.6	2.2	2.0	1.7	2.3	2.0	1.7	1.5
Walnuts (4/15)	2.9	2.5	2.2	2.0	3.1	2.7	2.3	2.1	2.7	2.3	2.1	1.8
Stone Fruit (3/20)	2.8	2.4	2.1	1.9	3.0	2.6	2.3	2.0	2.6	2.2	2.0	1.8

<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			
	661	567	496	449	685	590	519	472	614	519	472	425
Almonds 115 Trees/A	661	567	496	449	685	590	519	472	614	519	472	425
Pistachio 106 Trees/A	698	598	523	473	747	648	573	498	648	548	498	448
Citrus 110 Trees/A	420	370	321	296	444	395	346	296	395	346	296	272
Raisin Grapes 566 Vines/A	101	86	77	67	106	91	82	72	96	82	72	62
Winegrapes 622 Vines/A	105	92	83	74	114	96	87	74	100	87	74	65
Walnuts 76 Trees/A	1036	893	786	715	1108	965	822	750	965	822	750	643
Stonefruit 172 Trees/A	442	379	332	300	474	410	363	316	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 <sub>C</sub> )														
08/23/19 through 08/29/19														
Crops (Leafout Date)	#124 Panoche					#2 Five Points					#15 Stratford			
	8/23- 8/29 Water Use	Accum'd Seasonal Water Use	8/30- 9/5 Estimated ETc			8/23- 8/29 Water Use	Accum'd Seasonal Water Use	8/30- 9/5 Estimated ETc			8/23- 8/29 Water Use	Accum'd Seasonal Water Use	8/30- 9/5 Estimated ETc	
Almonds (3/10) *	1.94	39.53	1.62		2.02	39.98	1.83		1.83	37.63	1.79			
Pistachio (4/19) * **	2.00	32.40	1.65		2.09	32.13	1.85		1.85	30.31	1.79			
Citrus (2/1)	1.18	30.25	1.04		1.25	31.19	1.17		1.12	29.04	1.14			
Raisin Grapes (3/16 ) (11 ft. row spacing)	1.52	28.01	1.26		1.58	27.79	1.41		1.41	26.16	1.37			
Winegrapes (3/16 ) (10 ft. spacing on California Sprawl Trellis)	1.73	30.73	3.33		1.81	30.73	1.62		1.62	28.84	1.58			
Walnuts (4/15)	2.07	30.79	1.72		2.16	30.67	1.92		1.92	28.79	1.86			
Stone Fruit (3/20 )	2.00	31.09	1.65		2.09	31.21	1.85		1.85	29.34	1.79			
Past 7 days precipitation (inches)		0.00				0.00				0.00				
Accumulated precipitation (inches) (1/1/2019)		4.80				7.42				7.08				
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 >>>	65%	75%	85%	95%		65%	75%	85%	95%		65%	75%	85%	95%
Almonds (3/10)	3.0	2.6	2.3	2.0		3.1	2.7	2.4	2.1		2.8	2.4	2.2	1.9
Pistachio (4/19)	3.1	2.7	2.4	2.1		3.2	2.8	2.5	2.2		2.8	2.5	2.2	1.9
Citrus (2/1)	1.8	1.6	1.4	1.2		1.9	1.7	1.5	1.3		1.7	1.5	1.3	1.2
Raisin Grapes (3/16 ) (11 ft. row spacing)	2.3	2.0	1.8	1.6		2.4	2.1	1.9	1.7		2.2	1.9	1.7	1.5
Winegrapes (3/16 ) (10 ft. spacing on California Sprawl Trellis)	2.7	2.3	2.0	1.8		2.8	2.4	2.1	1.9		2.5	2.2	1.9	1.7
Walnuts (4/15)	3.2	2.8	2.4	2.2		3.3	2.9	2.5	2.3		3.0	2.6	2.3	2.0
Stone Fruit (3/20 )	3.1	2.7	2.4	2.1		3.2	2.8	2.5	2.2		2.8	2.5	2.2	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			
	708	614	543	472		732	638	567	496		661	567	519	449
Almonds 115 Trees/A	708	614	543	472		732	638	567	496		661	567	519	449
Pistachio 106 Trees/A	772	673	598	523		797	698	623	548		698	623	548	473
Citrus 110 Trees/A	444	395	346	296		469	420	370	321		420	370	321	296
Raisin Grapes 566 Vines/A	110	96	86	77		115	101	91	82		106	91	82	72
Winegrapes 622 Vines/A	118	100	87	79		122	105	92	83		109	96	83	74
Walnuts 76 Trees/A	1143	1000	857	786		1179	1036	893	822		1072	929	822	715
Stonefruit 172 Trees/A	489	426	379	332		505	442	395	347		442	395	347	300