



**WEEKLY SOIL MOISTURE LOSS IN INCHES**  
 (Estimated Crop Evapotranspiration or ET<sub>c</sub>)  
 08/09/19 through 08/15/19

Crops (Leafout Date)	#148 Merced				#39 Parlier				#258 Lemon Cove		
	8/9 - 8/15 Water Use	Accum'd Seasonal Water Use	8/16- 8/22 Estimated ET <sub>c</sub>		8/9 - 8/15 Water Use	Accum'd Seasonal Water Use	8/16- 8/22 Estimated ET <sub>c</sub>		8/9 - 8/15 Water Use	Accum'd Seasonal Water Use	8/16- 8/22 Estimated ET <sub>c</sub>
Almonds (3/10) *	1.84	30.75	1.84		1.96	33.14	1.73		1.82	31.34	1.75
Pistachio (4/19) * **	1.86	24.41	1.86		2.03	26.22	1.73		1.84	24.89	1.75
Citrus (2/1)	1.12	24.21	1.12		1.19	26.14	1.03		1.10	24.55	1.05
Raisin Grapes (3/16 ) (11 ft. row spacing)	1.42	21.48	1.42		1.54	22.94	1.31		1.40	21.77	1.33
Winegrapes (3/16 ) (10 ft. spacing on California Sprawl Trellis)	1.63	23.35	1.63		1.75	25.22	1.52		1.61	23.86	1.54
Walnuts (4/15)	1.93	22.86	1.93		2.10	24.66	1.80		1.91	23.28	1.82
Stone Fruit (3/20 )	1.86	23.26	1.86		2.03	25.08	1.73		1.84	23.60	1.75
<b>Past 7 days precipitation (inches)</b>	0.00				0.00				0.00		
<b>Accumulated precipitation (inches) (1/1/2018)</b>	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	2.5	2.2	1.9	3.0	2.6	2.3	2.1	2.8	2.4	2.1	1.9
Pistachio (4/19)	2.9	2.5	2.2	2.0	3.1	2.7	2.4	2.1	2.8	2.5	2.2	1.9
Citrus (2/1)	1.7	1.5	1.3	1.2	1.8	1.6	1.4	1.3	1.7	1.5	1.3	1.2
Raisin Grapes (3/16 ) (11 ft. row spacing)	2.2	1.9	1.7	1.5	2.4	2.1	1.8	1.6	2.2	1.9	1.6	1.5
Winegrapes (3/16 ) (10 ft. spacing on California Sprawl Trellis)	2.5	2.2	1.9	1.7	2.7	2.3	2.1	1.8	2.5	2.1	1.9	1.7
Walnuts (4/15)	3.0	2.6	2.3	2.0	3.2	2.8	2.5	2.2	2.9	2.5	2.2	2.0
Stone Fruit (3/20 )	2.9	2.5	2.2	2.0	3.1	2.7	2.4	2.1	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	#148 Merced				#39 Parlier				#258 Lemon Cove			
	661	590	519	449	708	614	543	496	661	567	496	449
Almonds 115 Trees/A	661	590	519	449	708	614	543	496	661	567	496	449
Pistachio 106 Trees/A	722	623	548	498	772	673	598	523	698	623	548	473
Citrus 110 Trees/A	420	370	321	296	444	395	346	321	420	370	321	296
Raisin Grapes 566 Vines/A	106	91	82	72	115	101	86	77	106	91	77	72
Winegrapes 622 Vines/A	109	96	83	74	118	100	92	79	109	92	83	74
Walnuts 76 Trees/A	1072	929	822	715	1143	1000	893	786	1036	893	786	715
Stonefruit 172 Trees/A	458	395	347	316	489	426	379	332	442	395	347	300

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>)

08/09/19 through 08/15/19

Crops (Leafout Date)	#124 Panoche				#2 Five Points				#15 Stratford		
	8/9 - 8/15 Water Use	Accum'd Seasonal Water Use	8/16- 8/22 Estimated ETc		8/9 - 8/15 Water Use	Accum'd Seasonal Water Use	8/16- 8/22 Estimated ETc		8/9 - 8/15 Water Use	Accum'd Seasonal Water Use	8/16- 8/22 Estimated ETc
Almonds (3/10) *	2.01	35.66	1.79		2.14	35.95	1.96		1.98	33.94	1.95
Pistachio (4/19) * **	2.07	28.42	1.79		2.21	27.96	2.03		2.05	26.56	2.02
Citrus (2/1)	1.23	27.90	1.09		1.30	28.72	1.19		1.21	26.80	1.18
Raisin Grapes (3/16 ) (11 ft. row spacing)	1.57	24.99	1.37		1.65	24.64	1.54		1.56	23.31	1.53
Winegrapes (3/16 ) (10 ft. spacing on California Sprawl Trellis)	1.80	27.28	1.58		1.93	27.12	1.75		1.77	25.57	1.74
Walnuts (4/15)	2.14	26.67	1.86		2.28	26.36	2.10		2.12	24.90	2.09
Stone Fruit (3/20 )	2.07	27.11	1.79		2.21	27.04	2.03		2.05	25.59	2.02
<b>Past 7 days precipitation (inches)</b>		0.00				0.00				0.00	
<b>Accumulated precipitation (inches) (1/1/2019)</b>		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)	3.1	2.7	2.4	2.1		3.3	2.9	2.5	2.3		3.0	2.6	2.3	2.1
Pistachio (4/19)	3.2	2.8	2.4	2.2		3.4	2.9	2.6	2.3		3.2	2.7	2.4	2.2
Citrus (2/1)	1.9	1.6	1.4	1.3		2.0	1.7	1.5	1.4		1.9	1.6	1.4	1.3
Raisin Grapes (3/16 ) (11 ft. row spacing)	2.4	2.1	1.8	1.7		2.5	2.2	1.9	1.7		2.4	2.1	1.8	1.6
Winegrapes (3/16 ) (10 ft. spacing on California Sprawl Trellis)	2.8	2.4	2.1	1.9		3.0	2.6	2.3	2.0		2.7	2.4	2.1	1.9
Walnuts (4/15)	3.3	2.9	2.5	2.3		3.5	3.0	2.7	2.4		3.3	2.8	2.5	2.2
Stone Fruit (3/20 )	3.2	2.8	2.4	2.2		3.4	2.9	2.6	2.3		3.2	2.7	2.4	2.2

<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			
	732	638	567	496		779	685	590	543		708	614	543	496
Almonds 115 Trees/A	732	638	567	496		779	685	590	543		708	614	543	496
Pistachio 106 Trees/A	797	698	598	548		847	722	648	573		797	673	598	548
Citrus 110 Trees/A	469	395	346	321		494	420	370	346		469	395	346	321
Raisin Grapes 566 Vines/A	115	101	86	82		120	106	91	82		115	101	86	77
Winegrapes 622 Vines/A	122	105	92	83		131	114	100	87		118	105	92	83
Walnuts 76 Trees/A	1179	1036	893	822		1251	1072	965	857		1179	1000	893	786
Stonefruit 172 Trees/A	505	442	379	347		537	458	410	363		505	426	379	347

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