

**WEEKLY SOIL MOISTURE LOSS IN INCHES**

(Estimated Crop Evapotranspiration or ET<sub>c</sub>)  
08/16/19 through 08/22/19

Crops (Leafout Date)	#148 Merced				#39 Parlier				#258 Lemon Cove		
	8/16- 8/22 Water Use	Accum'd Seasonal Water Use	8/23- 8/29 Estimated ETc		8/16- 8/22 Water Use	Accum'd Seasonal Water Use	8/23- 8/29 Estimated ETc		8/16- 8/22 Water Use	Accum'd Seasonal Water Use	8/23- 8/29 Estimated ETc
Almonds (3/10) *	1.81	32.56	1.76		1.88	35.02	1.65		1.73	33.07	1.67
Pistachio (4/19) * **	1.83	26.24	1.76		1.92	28.14	1.65		1.75	26.64	1.67
Citrus (2/1)	1.09	25.30	1.12		1.14	27.28	1.01		1.03	25.58	1.03
Raisin Grapes (3/16 ) (11 ft. row spacing)	1.39	22.87	1.34		1.46	24.40	1.26		1.33	23.10	1.26
Winegrapes (3/16 ) (10 ft. spacing on California Sprawl Trellis)	1.60	24.95	1.55		1.67	26.89	1.44		1.52	25.38	1.46
Walnuts (4/15)	1.90	24.76	1.83		1.99	26.65	1.72		1.82	25.10	1.74
Stone Fruit (3/20 )	1.83	25.09	1.76		1.92	27.00	1.65		1.75	25.35	1.67
<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	2.4	2.1	1.9	2.9	2.5	2.2	2.0	2.7	2.3	2.0	1.8
Pistachio (4/19)	2.8	2.4	2.2	1.9	3.0	2.6	2.3	2.0	2.7	2.3	2.1	1.8
Citrus (2/1)	1.7	1.5	1.3	1.1	1.8	1.5	1.3	1.2	1.6	1.4	1.2	1.1
Raisin Grapes (3/16 ) (11 ft. row spacing)	2.1	1.9	1.6	1.5	2.2	1.9	1.7	1.5	2.0	1.8	1.6	1.4
Winegrapes (3/16 ) (10 ft. spacing on California Sprawl Trellis)	2.5	2.1	1.9	1.7	2.6	2.2	2.0	1.8	2.3	2.0	1.8	1.6
Walnuts (4/15)	2.9	2.5	2.2	2.0	3.1	2.7	2.3	2.1	2.8	2.4	2.1	1.9
Stone Fruit (3/20 )	2.8	2.4	2.2	1.9	3.0	2.6	2.3	2.0	2.7	2.3	2.1	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	638	543	472	425
Almonds 115 Trees/A	661	567	496	449	685	590	519	472	638	543	472	425
Pistachio 106 Trees/A	698	598	548	473	747	648	573	498	673	573	523	448
Citrus 110 Trees/A	420	370	321	272	444	370	321	296	395	346	296	272
Raisin Grapes 566 Vines/A	101	91	77	72	106	91	82	72	96	86	77	67
Winegrapes 622 Vines/A	109	92	83	74	114	96	87	79	100	87	79	70
Walnuts 76 Trees/A	1036	893	786	715	1108	965	822	750	1000	857	750	679
Stonefruit 172 Trees/A	442	379	347	300	474	410	363	316	426	363	332	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>)

08/16/19 through 08/22/19

Crops (Leafout Date)	#124 Panoche				#2 Five Points				#15 Stratford			
	8/16- 8/22 Water Use	Accum'd Seasonal Water Use	8/23- 8/29 Estimated ETc		8/16- 8/22 Water Use	Accum'd Seasonal Water Use	8/23- 8/29 Estimated ETc		8/16- 8/22 Water Use	Accum'd Seasonal Water Use	8/23- 8/29 Estimated ETc	
Almonds (3/10) *	1.93	37.59	1.72		2.01	37.96	1.90		1.86	35.80	1.88	
Pistachio (4/19) * **	1.98	30.40	1.72		2.08	30.04	1.97		1.90	28.46	1.94	
Citrus (2/1)	1.17	29.07	1.04		1.22	29.94	1.15		1.12	27.92	1.13	
Raisin Grapes (3/16 ) (11 ft. row spacing)	1.50	26.49	1.30		1.57	26.21	1.48		1.44	24.75	1.46	
Winegrapes (3/16 ) (10 ft. spacing on California Sprawl Trellis)	1.72	29.00	1.51		1.80	28.92	1.69		1.65	27.22	1.67	
Walnuts (4/15)	2.05	28.72	1.79		2.15	28.51	2.04		1.97	26.87	2.01	
Stone Fruit (3/20 )	1.98	29.09	1.72		2.08	29.12	1.97		1.90	27.49	1.94	
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	2.9	2.5	2.2	2.0
Pistachio (4/19)	3.0	2.6	2.3	2.1	3.2	2.8	2.4	2.2	2.9	2.5	2.2	2.0
Citrus (2/1)	1.8	1.6	1.4	1.2	1.9	1.6	1.4	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	1.8	1.7	2.2	1.9	1.7	1.5
Winegrapes (3/16 ) (10 ft. spacing on California Sprawl Trellis)	2.6	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	2.7	2.4	2.2	3.3	2.9	2.5	2.3	3.0	2.6	2.3	2.1
Stone Fruit (3/20 )	3.0	2.6	2.3	2.1	3.2	2.8	2.4	2.2	2.9	2.5	2.2	2.0

<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			
Almonds 115 Trees/A	708	614	543	472	732	638	567	496	685	590	519	472
Pistachio 106 Trees/A	747	648	573	523	797	698	598	548	722	623	548	498
Citrus 110 Trees/A	444	395	346	296	469	395	346	321	420	370	321	296
Raisin Grapes 566 Vines/A	110	96	86	77	115	101	86	82	106	91	82	72
Winegrapes 622 Vines/A	114	100	87	79	122	105	92	83	109	96	83	74
Walnuts 76 Trees/A	1143	965	857	786	1179	1036	893	822	1072	929	822	750
Stonefruit 172 Trees/A	474	410	363	332	505	442	379	347	458	395	347	316

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