

WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_c)

09/21/18 through 09/27/18

Crops (Leafout Date)	#188 Madera II ***				#39 Parlier				#86 Lindcove			
	9/21- 9/27 Water Use	Accum'd Seasonal Water Use	9/28- 10/4 Estimated ETc		9/21- 9/27 Water Use	Accum'd Seasonal Water Use	9/28- 10/4 Estimated ETc		9/21- 9/27 Water Use	Accum'd Seasonal Water Use	9/28- 10/4 Estimated ETc	
Almonds (3/16) *	1.19	40.59	1.02		1.33	42.46	1.00		1.33	41.26	0.98	
Pistachio (4/21) * **	1.26	31.36	1.02		1.40	33.32	1.00		1.40	32.70	0.99	
Citrus (2/1)	0.75	31.32	0.66		0.85	32.48	0.64		0.84	31.48	0.63	
Raisin Grapes (3/16) (11 ft. row spacing)	0.93	29.56	0.81		1.05	31.01	0.79		1.05	30.22	0.78	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.05	32.40	0.88		1.19	34.11	0.86		1.19	33.30	0.85	
Walnuts (4/4)	1.10	36.24	0.91		1.21	38.20	0.89		1.21	37.29	0.89	
Stone Fruit (3/16)	1.26	34.62	1.02		1.40	36.60	1.00		1.40	35.76	0.99	
Past 7 days precipitation (inches)	0.00				0.00				0.00			
Accumulated precipitation (inches) (1/1/2018)	6.33				4.96				3.32			

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_o will be used for the weekly report.

PAST WEEKLY APPLIED WATER IN INCHES, ADJUSTED FOR EFFICIENCY ¹

Crops	#188 Madera II				#39 Parlier				#86 Lindcove			
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/16)	1.8	1.6	1.4	1.3	2.0	1.8	1.6	1.4	2.0	1.8	1.6	1.4
Pistachio (4/21)	1.9	1.7	1.5	1.3	2.2	1.9	1.6	1.5	2.2	1.9	1.6	1.5
Citrus (2/1)	1.2	1.0	0.9	0.8	1.3	1.1	1.0	0.9	1.3	1.1	1.0	0.9
Raisin Grapes (3/16) (11 ft. row spacing)	1.4	1.2	1.1	1.0	1.6	1.4	1.2	1.1	1.6	1.4	1.2	1.1
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.6	1.4	1.2	1.1	1.8	1.6	1.4	1.3	1.8	1.6	1.4	1.3
Walnuts (4/4)	1.7	1.5	1.3	1.2	1.9	1.6	1.4	1.3	1.9	1.6	1.4	1.3
Stone Fruit (3/16)	1.9	1.7	1.5	1.3	2.2	1.9	1.6	1.5	2.2	1.9	1.6	1.5

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	#188 Madera II				#39 Parlier				#86 Lindcove			
Almonds 115 Trees/A	425	378	331	307	472	425	378	331	472	425	378	331
Pistachio 106 Trees/A	473	424	374	324	548	473	399	374	548	473	399	374
Citrus 110 Trees/A	296	247	222	197	321	272	247	222	321	272	247	222
Raisin Grapes 566 Vines/A	67	58	53	48	77	67	58	53	77	67	58	53
Winegrapes 622 Vines/A	70	61	52	48	79	70	61	57	79	70	61	57
Walnuts 76 Trees/A	607	536	464	429	679	572	500	464	679	572	500	464
Stonefruit 172 Trees/A	300	268	237	205	347	300	253	237	347	300	253	237

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)

09/21/18 through 09/27/18

Crops (Leafout Date)	#124 Panoche				#2 Five Points				#15 Stratford			
	9/21- 9/27 Water Use	Accum'd Seasonal Water Use	9/28- 10/4 Estimated ETc		9/21- 9/27 Water Use	Accum'd Seasonal Water Use	9/28- 10/4 Estimated ETc		9/21- 9/27 Water Use	Accum'd Seasonal Water Use	9/28- 10/4 Estimated ETc	
Almonds (3/16) *	1.30	44.22	1.21		1.47	47.06	1.23		1.49	46.86	1.26	
Pistachio (4/21) * **	1.37	34.58	1.28		1.54	36.55	1.30		1.56	36.30	1.33	
Citrus (2/1)	0.82	34.69	0.78		0.94	37.24	0.80		0.96	36.93	0.83	
Raisin Grapes (3/16) (11 ft. row spacing)	1.02	31.78	0.93		1.18	33.64	0.95		1.18	33.48	0.98	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.16	35.08	1.07		1.33	37.17	1.09		1.35	37.02	1.12	
Walnuts (4/4)	1.17	39.58	1.08		1.33	42.01	1.08		1.35	41.78	1.10	
Stone Fruit (3/16)	1.37	38.09	1.28		1.54	40.42	1.30		1.56	40.15	1.33	
Past 7 days precipitation (inches)	0.00				0.00				0.00			
Accumulated precipitation (inches) (1/1/2018)	2.56				3.04				1.62			

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			
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/16)	2.0	1.7	1.5	1.4	2.3	2.0	1.7	1.5	2.3	2.0	1.8	1.6
Pistachio (4/21)	2.1	1.8	1.6	1.4	2.4	2.1	1.8	1.6	2.4	2.1	1.8	1.6
Citrus (2/1)	1.3	1.1	1.0	0.9	1.4	1.3	1.1	1.0	1.5	1.3	1.1	1.0
Raisin Grapes (3/16) (11 ft. row spacing)	1.6	1.4	1.2	1.1	1.8	1.6	1.4	1.2	1.8	1.6	1.4	1.2
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.8	1.5	1.4	1.2	2.0	1.8	1.6	1.4	2.1	1.8	1.6	1.4
Walnuts (4/4)	1.8	1.6	1.4	1.2	2.0	1.8	1.6	1.4	2.1	1.8	1.6	1.4
Stone Fruit (3/16)	2.1	1.8	1.6	1.4	2.4	2.1	1.8	1.6	2.4	2.1	1.8	1.6

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			
Almonds 115 Trees/A	472	401	354	331	543	472	401	354	543	472	425	378
Pistachio 106 Trees/A	523	448	399	349	598	523	448	399	598	523	448	399
Citrus 110 Trees/A	321	272	247	222	346	321	272	247	370	321	272	247
Raisin Grapes 566 Vines/A	77	67	58	53	86	77	67	58	86	77	67	58
Winegrapes 622 Vines/A	79	65	61	52	87	79	70	61	92	79	70	61
Walnuts 76 Trees/A	643	572	500	429	715	643	572	500	750	643	572	500
Stonefruit 172 Trees/A	332	284	253	221	379	332	284	253	379	332	284	253

For further information concerning all counties receiving this report, contact the Fresno Co. Farm Advisor's office at (559) 241-7526.