

**WEEKLY SOIL MOISTURE LOSS IN INCHES**

(Estimated Crop Evapotranspiration or ET<sub>c</sub>)

09/14/18 through 09/20/18

Crops (Leafout Date)	#188 Madera II ***			#39 Parlier			#86 Lindcove		
	9/14- 9/20 Water Use	Accum'd Seasonal Water Use	9/21- 9/27 Estimated ETc	9/14- 9/20 Water Use	Accum'd Seasonal Water Use	9/21- 9/27 Estimated ETc	9/14- 9/20 Water Use	Accum'd Seasonal Water Use	9/21- 9/27 Estimated ETc
Almonds (3/16) *	1.31	39.40	1.10	1.38	41.13	1.10	1.37	39.93	1.10
Pistachio (4/21) * **	1.38	30.10	1.15	1.45	31.92	1.15	1.44	31.30	1.15
Citrus (2/1)	0.84	30.57	0.68	0.87	31.63	0.68	0.87	30.64	0.68
Raisin Grapes (3/16) (11 ft. row spacing)	1.03	28.63	0.89	1.10	29.96	0.89	1.09	29.17	0.89
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.17	31.35	0.96	1.24	32.92	0.96	1.23	32.11	0.96
Walnuts (4/4)	1.25	35.14	1.03	1.34	36.99	1.03	1.35	36.08	1.03
Stone Fruit (3/16)	1.38	33.36	1.15	1.45	35.20	1.15	1.44	34.36	1.15
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<sub>o</sub> will be used for the weekly report.

**PAST WEEKLY APPLIED WATER IN INCHES, ADJUSTED FOR EFFICIENCY <sup>1</sup>**

Crops	#188 Madera II				#39 Parlier				#86 Lindcove			
	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 (3/16)	2.0	1.7	1.5	1.4	2.1	1.8	1.6	1.5	2.1	1.8	1.6	1.4
Pistachio (4/21)	2.1	1.8	1.6	1.5	2.2	1.9	1.7	1.5	2.2	1.9	1.7	1.5
Citrus (2/1)	1.3	1.1	1.0	0.9	1.3	1.2	1.0	0.9	1.3	1.2	1.0	0.9
Raisin Grapes (3/16) (11 ft. row spacing)	1.6	1.4	1.2	1.1	1.7	1.5	1.3	1.2	1.7	1.5	1.3	1.1
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.8	1.6	1.4	1.2	1.9	1.7	1.5	1.3	1.9	1.6	1.4	1.3
Walnuts (4/4)	1.9	1.7	1.5	1.3	2.1	1.8	1.6	1.4	2.1	1.8	1.6	1.4
Stone Fruit (3/16)	2.1	1.8	1.6	1.5	2.2	1.9	1.7	1.5	2.2	1.9	1.7	1.5

<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	#188 Madera II				#39 Parlier				#86 Lindcove			
	Almonds 115 Trees/A	472	401	354	331	496	425	378	354	496	425	378
Pistachio 106 Trees/A	523	448	399	374	548	473	424	374	548	473	424	374
Citrus 110 Trees/A	321	272	247	222	321	296	247	222	321	296	247	222
Raisin Grapes 566 Vines/A	77	67	58	53	82	72	62	58	82	72	62	53
Winegrapes 622 Vines/A	79	70	61	52	83	74	65	57	83	70	61	57
Walnuts 76 Trees/A	679	607	536	464	750	643	572	500	750	643	572	500
Stonefruit 172 Trees/A	332	284	253	237	347	300	268	237	347	300	268	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<sub>c</sub>)

09/14/18 through 09/20/18

Crops (Leafout Date)	#124 Panoche				#2 Five Points				#15 Stratford		
	9/14- 9/20 Water Use	Accum'd Seasonal Water Use	9/21- 9/27 Estimated ETc		9/14- 9/20 Water Use	Accum'd Seasonal Water Use	9/21- 9/27 Estimated ETc		9/14- 9/20 Water Use	Accum'd Seasonal Water Use	9/21- 9/27 Estimated ETc
Almonds (3/16) *	1.34	42.92	1.30		1.58	45.59	1.35		1.57	45.37	1.37
Pistachio (4/21) * **	1.41	33.21	1.37		1.62	35.01	1.42		1.62	34.74	1.44
Citrus (2/1)	0.85	33.87	0.81		0.98	36.30	0.85		0.99	35.97	0.87
Raisin Grapes (3/16) (11 ft. row spacing)	1.06	30.76	1.02		1.24	32.46	1.07		1.25	32.30	1.09
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.20	33.92	1.16		1.41	35.84	1.21		1.41	35.67	1.23
Walnuts (4/4)	1.28	38.41	1.16		1.53	40.68	1.21		1.53	40.43	1.23
Stone Fruit (3/16)	1.41	36.72	1.37		1.62	38.88	1.42		1.62	38.59	1.44
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 <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 (3/16)	2.1	1.8	1.6	1.4		2.4	2.1	1.9	1.7		2.4	2.1	1.8	1.7
Pistachio (4/21)	2.2	1.9	1.7	1.5		2.5	2.2	1.9	1.7		2.5	2.2	1.9	1.7
Citrus (2/1)	1.3	1.1	1.0	0.9		1.5	1.3	1.2	1.0		1.5	1.3	1.2	1.0
Raisin Grapes (3/16) (11 ft. row spacing)	1.6	1.4	1.2	1.1		1.9	1.7	1.5	1.3		1.9	1.7	1.5	1.3
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.8	1.6	1.4	1.3		2.2	1.9	1.7	1.5		2.2	1.9	1.7	1.5
Walnuts (4/4)	2.0	1.7	1.5	1.3		2.4	2.0	1.8	1.6		2.4	2.0	1.8	1.6
Stone Fruit (3/16)	2.2	1.9	1.7	1.5		2.5	2.2	1.9	1.7		2.5	2.2	1.9	1.7

<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	496	425	378	331		567	496	449	401		567	496	425	401
Pistachio 106 Trees/A	548	473	424	374		623	548	473	424		623	548	473	424
Citrus 110 Trees/A	321	272	247	222		370	321	296	247		370	321	296	247
Raisin Grapes 566 Vines/A	77	67	58	53		91	82	72	62		91	82	72	62
Winegrapes 622 Vines/A	79	70	61	57		96	83	74	65		96	83	74	65
Walnuts 76 Trees/A	715	607	536	464		857	715	643	572		857	715	643	572
Stonefruit 172 Trees/A	347	300	268	237		395	347	300	268		395	347	300	268

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