

WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_c)

09/07/18 through 09/13/18

Crops (Leafout Date)	#188 Madera II ***				#39 Parlier				#86 Lindcove			
	9/7- 9/13 Water Use	Accum'd Seasonal Water Use	9/14- 9/20 Estimated ETc		9/7- 9/13 Water Use	Accum'd Seasonal Water Use	9/14- 9/20 Estimated ETc		9/7- 9/13 Water Use	Accum'd Seasonal Water Use	9/14- 9/20 Estimated ETc	
Almonds (3/16) *	1.39	38.09	1.23		1.59	39.75	1.20		1.59	38.56	1.21	
Pistachio (4/21) * **	1.46	28.72	1.30		1.63	30.47	1.27		1.63	29.86	1.28	
Citrus (2/1)	1.03	29.73	0.76		1.14	30.76	0.73		1.14	29.77	0.74	
Raisin Grapes (3/16) (11 ft. row spacing)	1.11	27.60	0.95		1.25	28.86	0.92		1.25	28.08	0.93	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.25	30.18	1.09		1.42	31.68	1.06		1.42	30.88	1.07	
Walnuts (4/4)	1.45	33.89	1.20		1.63	35.65	1.17		1.63	34.73	1.18	
Stone Fruit (3/16)	1.46	31.98	1.30		1.63	33.75	1.27		1.63	32.92	1.28	
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)	2.1	1.9	1.6	1.5	2.4	2.1	1.9	1.7	2.4	2.1	1.9	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)	1.6	1.4	1.2	1.1	1.8	1.5	1.3	1.2	1.8	1.5	1.3	1.2
Raisin Grapes (3/16) (11 ft. row spacing)	1.7	1.5	1.3	1.2	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)	1.9	1.7	1.5	1.3	2.2	1.9	1.7	1.5	2.2	1.9	1.7	1.5
Walnuts (4/4)	2.2	1.9	1.7	1.5	2.5	2.2	1.9	1.7	2.5	2.2	1.9	1.7
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

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	496	449	378	354	567	496	449	401	567	496	449	401
Pistachio 106 Trees/A	548	473	424	374	623	548	473	424	623	548	473	424
Citrus 110 Trees/A	395	346	296	272	444	370	321	296	444	370	321	296
Raisin Grapes 566 Vines/A	82	72	62	58	91	82	72	62	91	82	72	62
Winegrapes 622 Vines/A	83	74	65	57	96	83	74	65	96	83	74	65
Walnuts 76 Trees/A	786	679	607	536	893	786	679	607	893	786	679	607
Stonefruit 172 Trees/A	347	300	268	237	395	347	300	268	395	347	300	268

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)

09/07/18 through 09/13/18

Crops (Leafout Date)	#124 Panoche				#2 Five Points				#15 Stratford			
	9/7- 9/13 Water Use	Accum'd Seasonal Water Use	9/14- 9/20 Estimated ETc		9/7- 9/13 Water Use	Accum'd Seasonal Water Use	9/14- 9/20 Estimated ETc		9/7- 9/13 Water Use	Accum'd Seasonal Water Use	9/14- 9/20 Estimated ETc	
Almonds (3/16) *	1.53	41.58	1.38		1.78	44.01	1.45		1.81	43.80	1.47	
Pistachio (4/21) * **	1.57	31.80	1.45		1.81	33.39	1.52		1.85	33.12	1.54	
Citrus (2/1)	1.11	33.02	0.87		1.29	35.32	0.92		1.30	34.98	0.93	
Raisin Grapes (3/16) (11 ft. row spacing)	1.19	29.70	1.10		1.38	31.22	1.17		1.41	31.05	1.19	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.36	32.72	1.24		1.58	34.43	1.31		1.61	34.26	1.33	
Walnuts (4/4)	1.56	37.13	1.36		1.79	39.15	1.43		1.82	38.90	1.45	
Stone Fruit (3/16)	1.57	35.31	1.45		1.81	37.26	1.52		1.85	36.97	1.54	
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)	2.4	2.0	1.8	1.6	2.7	2.4	2.1	1.9	2.8	2.4	2.1	1.9
Pistachio (4/21)	2.4	2.1	1.8	1.7	2.8	2.4	2.1	1.9	2.8	2.5	2.2	1.9
Citrus (2/1)	1.7	1.5	1.3	1.2	2.0	1.7	1.5	1.4	2.0	1.7	1.5	1.4
Raisin Grapes (3/16) (11 ft. row spacing)	1.8	1.6	1.4	1.3	2.1	1.8	1.6	1.5	2.2	1.9	1.7	1.5
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	2.1	1.8	1.6	1.4	2.4	2.1	1.9	1.7	2.5	2.1	1.9	1.7
Walnuts (4/4)	2.4	2.1	1.8	1.6	2.8	2.4	2.1	1.9	2.8	2.4	2.1	1.9
Stone Fruit (3/16)	2.4	2.1	1.8	1.7	2.8	2.4	2.1	1.9	2.8	2.5	2.2	1.9

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	567	472	425	378	638	567	496	449	661	567	496	449
Pistachio 106 Trees/A	598	523	448	424	698	598	523	473	698	623	548	473
Citrus 110 Trees/A	420	370	321	296	494	420	370	346	494	420	370	346
Raisin Grapes 566 Vines/A	86	77	67	62	101	86	77	72	106	91	82	72
Winegrapes 622 Vines/A	92	79	70	61	105	92	83	74	109	92	83	74
Walnuts 76 Trees/A	857	750	643	572	1000	857	750	679	1000	857	750	679
Stonefruit 172 Trees/A	379	332	284	268	442	379	332	300	442	395	347	300

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