

WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_c)

08/03/18 through 08/09/18

Crops (Leafout Date)	#188 Madera II ***				#39 Parlier				#86 Lindcove			
	8/3- 8/9 Water Use	Accum'd Seasonal Water Use	8/10- 8/16 Estimated ETc		8/3- 8/9 Water Use	Accum'd Seasonal Water Use	8/10- 8/16 Estimated ETc		8/3- 8/9 Water Use	Accum'd Seasonal Water Use	8/10- 8/16 Estimated ETc	
Almonds (3/16) *	1.79	29.98	1.75		2.00	30.95	1.74		1.99	29.89	1.76	
Pistachio (4/21) * **	1.79	20.54	1.75		2.07	21.53	1.74		2.06	21.02	1.76	
Citrus (2/1)	1.09	24.55	1.05		1.20	25.11	1.04		1.20	24.25	1.06	
Raisin Grapes (3/16) (11 ft. row spacing)	1.37	21.36	1.33		1.57	22.04	1.32		1.57	21.36	1.34	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.58	23.05	1.54		1.79	23.89	1.53		1.78	23.21	1.55	
Walnuts (4/4)	1.86	25.48	1.82		2.14	26.47	1.81		2.13	25.65	1.83	
Stone Fruit (3/16)	1.79	23.80	1.75		2.07	24.81	1.74		2.06	24.08	1.76	
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)	2.8	2.4	2.1	1.9	3.1	2.7	2.4	2.1	3.1	2.7	2.3	2.1
Pistachio (4/21)	2.8	2.4	2.1	1.9	3.2	2.8	2.4	2.2	3.2	2.7	2.4	2.2
Citrus (2/1)	1.7	1.5	1.3	1.1	1.8	1.6	1.4	1.3	1.8	1.6	1.4	1.3
Raisin Grapes (3/16) (11 ft. row spacing)	2.1	1.8	1.6	1.4	2.4	2.1	1.8	1.7	2.4	2.1	1.8	1.7
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	2.4	2.1	1.9	1.7	2.8	2.4	2.1	1.9	2.7	2.4	2.1	1.9
Walnuts (4/4)	2.9	2.5	2.2	2.0	3.3	2.9	2.5	2.3	3.3	2.8	2.5	2.2
Stone Fruit (3/16)	2.8	2.4	2.1	1.9	3.2	2.8	2.4	2.2	3.2	2.7	2.4	2.2

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	661	567	496	449	732	638	567	496	732	638	543	496
Pistachio 106 Trees/A	698	598	523	473	797	698	598	548	797	673	598	548
Citrus 110 Trees/A	420	370	321	272	444	395	346	321	444	395	346	321
Raisin Grapes 566 Vines/A	101	86	77	67	115	101	86	82	115	101	86	82
Winegrapes 622 Vines/A	105	92	83	74	122	105	92	83	118	105	92	83
Walnuts 76 Trees/A	1036	893	786	715	1179	1036	893	822	1179	1000	893	786
Stonefruit 172 Trees/A	442	379	332	300	505	442	379	347	505	426	379	347

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)

08/03/18 through 08/09/18

Crops (Leafout Date)	#124 Panoche				#2 Five Points				#15 Stratford			
	8/3- 8/9 Water Use	Accum'd Seasonal Water Use	8/10- 8/16 Estimated ETc		8/3- 8/9 Water Use	Accum'd Seasonal Water Use	8/10- 8/16 Estimated ETc		8/3- 8/9 Water Use	Accum'd Seasonal Water Use	8/10- 8/16 Estimated ETc	
Almonds (3/16) *	1.98	32.86	1.83		2.30	34.52	1.97		2.21	34.61	2.01	
Pistachio (4/21) * **	2.03	22.95	1.84		2.34	23.72	2.04		2.27	23.78	2.08	
Citrus (2/1)	1.21	27.42	1.12		1.38	29.17	1.20		1.35	29.06	1.24	
Raisin Grapes (3/16) (11 ft. row spacing)	1.54	22.98	1.41		1.78	23.89	1.55		1.73	23.95	1.59	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.77	25.01	1.62		2.06	25.98	1.76		1.99	26.11	1.80	
Walnuts (4/4)	2.10	28.05	1.91		2.42	29.26	2.11		2.34	29.36	2.15	
Stone Fruit (3/16)	2.03	26.46	1.84		2.34	27.59	2.04		2.27	27.63	2.08	
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)	3.0	2.6	2.3	2.1	3.5	3.1	2.7	2.4	3.4	2.9	2.6	2.3
Pistachio (4/21)	3.1	2.7	2.4	2.1	3.6	3.1	2.8	2.5	3.5	3.0	2.7	2.4
Citrus (2/1)	1.9	1.6	1.4	1.3	2.1	1.8	1.6	1.5	2.1	1.8	1.6	1.4
Raisin Grapes (3/16) (11 ft. row spacing)	2.4	2.1	1.8	1.6	2.7	2.4	2.1	1.9	2.7	2.3	2.0	1.8
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	2.7	2.4	2.1	1.9	3.2	2.7	2.4	2.2	3.1	2.7	2.3	2.1
Walnuts (4/4)	3.2	2.8	2.5	2.2	3.7	3.2	2.8	2.5	3.6	3.1	2.8	2.5
Stone Fruit (3/16)	3.1	2.7	2.4	2.1	3.6	3.1	2.8	2.5	3.5	3.0	2.7	2.4

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	708	614	543	496	826	732	638	567	803	685	614	543
Pistachio 106 Trees/A	772	673	598	523	897	772	698	623	872	747	673	598
Citrus 110 Trees/A	469	395	346	321	518	444	395	370	518	444	395	346
Raisin Grapes 566 Vines/A	115	101	86	77	130	115	101	91	130	110	96	86
Winegrapes 622 Vines/A	118	105	92	83	140	118	105	96	135	118	100	92
Walnuts 76 Trees/A	1143	1000	893	786	1322	1143	1000	893	1286	1108	1000	893
Stonefruit 172 Trees/A	489	426	379	332	568	489	442	395	553	474	426	379

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