

WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_c)

07/13/18 through 07/19/18

Crops (Leafout Date)	#188 Madera II ***				#39 Parlier				#86 Lindcove			
	7/13- 7/19 Water Use	Accum'd Seasonal Water Use	7/20- 7/26 Estimated ETc		7/13- 7/19 Water Use	Accum'd Seasonal Water Use	7/20- 7/26 Estimated ETc		7/13- 7/19 Water Use	Accum'd Seasonal Water Use	7/20- 7/26 Estimated ETc	
Almonds (3/16) *	1.96	24.36	1.91		2.16	24.87	1.89		2.04	23.84	1.91	
Pistachio (4/21) * **	2.03	14.80	1.98		2.23	15.26	1.96		2.11	14.78	1.98	
Citrus (2/1)	1.19	21.15	1.14		1.34	21.42	1.12		1.26	20.59	1.14	
Raisin Grapes (3/16) (11 ft. row spacing)	1.54	17.00	1.49		1.69	17.28	1.47		1.60	16.60	1.49	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.75	18.06	1.70		1.95	18.44	1.68		1.85	17.80	1.70	
Walnuts (4/4)	1.90	19.53	2.05		2.10	19.99	2.03		1.98	19.20	2.05	
Stone Fruit (3/16)	1.80	18.28	1.84		2.01	18.72	1.82		1.91	18.04	1.84	
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)	3.0	2.6	2.3	2.1	3.3	2.9	2.5	2.3	3.1	2.7	2.4	2.1
Pistachio (4/21)	3.1	2.7	2.4	2.1	3.4	3.0	2.6	2.3	3.2	2.8	2.5	2.2
Citrus (2/1)	1.8	1.6	1.4	1.3	2.1	1.8	1.6	1.4	1.9	1.7	1.5	1.3
Raisin Grapes (3/16) (11 ft. row spacing)	2.4	2.1	1.8	1.6	2.6	2.3	2.0	1.8	2.5	2.1	1.9	1.7
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	2.7	2.3	2.1	1.8	3.0	2.6	2.3	2.1	2.8	2.5	2.2	1.9
Walnuts (4/4)	2.9	2.5	2.2	2.0	3.2	2.8	2.5	2.2	3.0	2.6	2.3	2.1
Stone Fruit (3/16)	2.8	2.4	2.1	1.9	3.1	2.7	2.4	2.1	2.9	2.5	2.2	2.0

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	708	614	543	496	779	685	590	543	732	638	567	496
Pistachio 106 Trees/A	772	673	598	523	847	747	648	573	797	698	623	548
Citrus 110 Trees/A	444	395	346	321	518	444	395	346	469	420	370	321
Raisin Grapes 566 Vines/A	115	101	86	77	125	110	96	86	120	101	91	82
Winegrapes 622 Vines/A	118	100	92	79	131	114	100	92	122	109	96	83
Walnuts 76 Trees/A	1036	893	786	715	1143	1000	893	786	1072	929	822	750
Stonefruit 172 Trees/A	442	379	332	300	489	426	379	332	458	395	347	316

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)

07/13/18 through 07/19/18

Crops (Leafout Date)	#124 Panoche				#2 Five Points				#15 Stratford			
	7/13- 7/19 Water Use	Accum'd Seasonal Water Use	7/20- 7/26 Estimated ETc		7/13- 7/19 Water Use	Accum'd Seasonal Water Use	7/20- 7/26 Estimated ETc		7/13- 7/19 Water Use	Accum'd Seasonal Water Use	7/20- 7/26 Estimated ETc	
Almonds (3/16) *	2.41	26.54	1.99		2.40	27.68	2.10		2.41	27.83	2.14	
Pistachio (4/21) * **	2.48	16.45	2.06		2.47	16.72	2.17		2.48	16.83	2.21	
Citrus (2/1)	1.46	23.55	1.22		1.46	25.03	1.26		1.47	24.93	1.30	
Raisin Grapes (3/16) (11 ft. row spacing)	1.91	18.06	1.57		1.90	18.57	1.61		1.90	18.66	1.65	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	2.16	19.33	1.78		2.15	19.82	1.89		2.16	20.00	1.93	
Walnuts (4/4)	2.35	21.34	2.13		2.34	22.02	2.24		2.35	22.18	2.28	
Stone Fruit (3/16)	2.29	20.13	1.92		2.28	20.73	2.03		2.29	20.83	2.07	
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)	3.7	3.2	2.8	2.5	3.7	3.2	2.8	2.5	3.7	3.2	2.8	2.5
Pistachio (4/21)	3.8	3.3	2.9	2.6	3.8	3.3	2.9	2.6	3.8	3.3	2.9	2.6
Citrus (2/1)	2.2	1.9	1.7	1.5	2.2	1.9	1.7	1.5	2.3	2.0	1.7	1.5
Raisin Grapes (3/16) (11 ft. row spacing)	2.9	2.5	2.2	2.0	2.9	2.5	2.2	2.0	2.9	2.5	2.2	2.0
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	3.3	2.9	2.5	2.3	3.3	2.9	2.5	2.3	3.3	2.9	2.5	2.3
Walnuts (4/4)	3.6	3.1	2.8	2.5	3.6	3.1	2.8	2.5	3.6	3.1	2.8	2.5
Stone Fruit (3/16)	3.5	3.1	2.7	2.4	3.5	3.0	2.7	2.4	3.5	3.1	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	874	756	661	590	874	756	661	590	874	756	661	590
Pistachio 106 Trees/A	947	822	722	648	947	822	722	648	947	822	722	648
Citrus 110 Trees/A	543	469	420	370	543	469	420	370	568	494	420	370
Raisin Grapes 566 Vines/A	139	120	106	96	139	120	106	96	139	120	106	96
Winegrapes 622 Vines/A	144	127	109	100	144	127	109	100	144	127	109	100
Walnuts 76 Trees/A	1286	1108	1000	893	1286	1108	1000	893	1286	1108	1000	893
Stonefruit 172 Trees/A	553	489	426	379	553	474	426	379	553	489	426	379

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