

WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_c)

10/12/18 through 10/18/18

Crops (Leafout Date)	#188 Madera II ***				#39 Parlier				#86 Lindcove			
	10/12- 10/18 Water Use	Accum'd Seasonal Water Use	10/19- 10/25 Estimated ETc		10/12- 10/18 Water Use	Accum'd Seasonal Water Use	10/19- 10/25 Estimated ETc		10/12- 10/18 Water Use	Accum'd Seasonal Water Use	10/19- 10/25 Estimated ETc	
Almonds (3/16) *	0.81	43.41	0.61		0.93	45.44	0.59		0.91	44.11	0.61	
Pistachio (4/21) * **	0.75	34.16	0.61		0.87	36.30	0.59		0.85	35.55	0.61	
Citrus (2/1)	0.56	33.23	0.43		0.65	34.52	0.42		0.63	33.42	0.42	
Raisin Grapes (3/16) (11 ft. row spacing)	0.67	31.89	0.00		0.79	33.49	0.00		0.77	32.59	0.00	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	0.77	34.97	0.00		0.86	36.84	0.00		0.84	35.92	0.00	
Walnuts (4/4)	0.70	38.70	0.32		0.75	40.74	0.31		0.74	39.75	0.33	
Stone Fruit (3/16)	0.79	37.52	0.50		0.91	39.69	0.49		0.89	38.72	0.49	
Past 7 days precipitation (inches)	0.00				0.00				0.00			
Accumulated precipitation (inches) (1/1/2018)	6.33				4.96				3.87			

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)	1.2	1.1	1.0	0.9	1.4	1.2	1.1	1.0	1.4	1.2	1.1	1.0
Pistachio (4/21)	1.2	1.0	0.9	0.8	1.3	1.2	1.0	0.9	1.3	1.1	1.0	0.9
Citrus (2/1)	0.9	0.7	0.7	0.6	1.0	0.9	0.8	0.7	1.0	0.8	0.7	0.7
Raisin Grapes (3/16) (11 ft. row spacing)	1.0	0.9	0.8	0.7	1.2	1.1	0.9	0.8	1.2	1.0	0.9	0.8
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.2	1.0	0.9	0.8	1.3	1.1	1.0	0.9	1.3	1.1	1.0	0.9
Walnuts (4/4)	1.1	0.9	0.8	0.7	1.2	1.0	0.9	0.8	1.1	1.0	0.9	0.8
Stone Fruit (3/16)	1.2	1.1	0.9	0.8	1.4	1.2	1.1	1.0	1.4	1.2	1.0	0.9

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	#188 Madera II				#39 Parlier				#86 Lindcove			
Almonds 115 Trees/A	283	260	236	213	331	283	260	236	331	283	260	236
Pistachio 106 Trees/A	299	249	224	199	324	299	249	224	324	274	249	224
Citrus 110 Trees/A	222	173	173	148	247	222	197	173	247	197	173	173
Raisin Grapes 566 Vines/A	48	43	38	34	58	53	43	38	58	48	43	38
Winegrapes 622 Vines/A	52	44	39	35	57	48	44	39	57	48	44	39
Walnuts 76 Trees/A	393	322	286	250	429	357	322	286	393	357	322	286
Stonefruit 172 Trees/A	189	174	142	126	221	189	174	158	221	189	158	142

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)

10/12/18 through 10/18/18

Crops (Leafout Date)	#124 Panoche				#2 Five Points				#15 Stratford			
	10/12- 10/18 Water Use	Accum'd Seasonal Water Use	10/19- 10/25 Estimated ETc		10/12- 10/18 Water Use	Accum'd Seasonal Water Use	10/19- 10/25 Estimated ETc		10/12- 10/18 Water Use	Accum'd Seasonal Water Use	10/19- 10/25 Estimated ETc	
Almonds (3/16) *	0.86	47.03	0.73		1.08	50.48	0.72		1.09	50.17	0.76	
Pistachio (4/21) * **	0.80	37.40	0.78		1.05	40.02	0.77		1.04	39.63	0.82	
Citrus (2/1)	0.58	36.60	0.55		0.79	39.59	0.55		0.78	39.20	0.57	
Raisin Grapes (3/16) (11 ft. row spacing)	0.72	34.11	0.65		0.93	36.47	0.64		0.92	36.21	0.69	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	0.84	37.73	0.79		1.04	40.36	0.78		1.03	40.08	0.82	
Walnuts (4/4)	0.72	42.06	0.41		0.92	44.99	0.41		0.91	44.66	0.43	
Stone Fruit (3/16)	0.84	41.03	0.65		1.12	44.07	0.64		1.09	43.64	0.69	
Past 7 days precipitation (inches)	0.00				0.00				0.00			
Accumulated precipitation (inches) (1/1/2018)	2.56				3.42				1.74			

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.

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PAST WEEKLY APPLIED WATER IN INCHES, ADJUSTED FOR EFFICIENCY ¹

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System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/16)	1.3	1.1	1.0	0.9	1.7	1.4	1.3	1.1	1.7	1.5	1.3	1.1
Pistachio (4/21)	1.2	1.1	0.9	0.8	1.6	1.4	1.2	1.1	1.6	1.4	1.2	1.1
Citrus (2/1)	0.9	0.8	0.7	0.6	1.2	1.1	0.9	0.8	1.2	1.0	0.9	0.8
Raisin Grapes (3/16) (11 ft. row spacing)	1.1	1.0	0.8	0.8	1.4	1.2	1.1	1.0	1.4	1.2	1.1	1.0
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.3	1.1	1.0	0.9	1.6	1.4	1.2	1.1	1.6	1.4	1.2	1.1
Walnuts (4/4)	1.1	1.0	0.8	0.8	1.4	1.2	1.1	1.0	1.4	1.2	1.1	1.0
Stone Fruit (3/16)	1.3	1.1	1.0	0.9	1.7	1.5	1.3	1.2	1.7	1.5	1.3	1.1

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PAST WEEKLY APPLIED WATER IN GALLON PER TREE OR VINE

Crops	#124 Panoche				#2 Five Points				#15 Stratford			
Almonds 115 Trees/A	307	260	236	213	401	331	307	260	401	354	307	260
Pistachio 106 Trees/A	299	274	224	199	399	349	299	274	399	349	299	274
Citrus 110 Trees/A	222	197	173	148	296	272	222	197	296	247	222	197
Raisin Grapes 566 Vines/A	53	48	38	38	67	58	53	48	67	58	53	48
Winegrapes 622 Vines/A	57	48	44	39	70	61	52	48	70	61	52	48
Walnuts 76 Trees/A	393	357	286	286	500	429	393	357	500	429	393	357
Stonefruit 172 Trees/A	205	174	158	142	268	237	205	189	268	237	205	174

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