

WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_c)

09/28/18 through 10/04/18

Crops (Leafout Date)	#188 Madera II ***				#39 Parlier				#86 Lindcove			
	9/28- 10/4 Water Use	Accum'd Seasonal Water Use	10/5- 10/11 Estimated ETc		9/28- 10/4 Water Use	Accum'd Seasonal Water Use	10/5- 10/11 Estimated ETc		9/28- 10/4 Water Use	Accum'd Seasonal Water Use	10/5- 10/11 Estimated ETc	
Almonds (3/16) *	1.08	41.67	0.85		1.03	43.53	0.82		1.01	42.31	0.81	
Pistachio (4/21) * **	1.11	32.47	0.86		1.08	34.44	0.83		1.06	33.80	0.82	
Citrus (2/1)	0.70	32.02	0.58		0.68	33.18	0.56		0.66	32.16	0.56	
Raisin Grapes (3/16) (11 ft. row spacing)	0.87	30.43	0.71		0.82	31.87	0.68		0.80	31.06	0.67	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	0.94	33.34	0.79		0.92	35.07	0.77		0.91	34.25	0.77	
Walnuts (4/4)	0.97	37.21	0.87		0.93	39.15	0.75		0.93	38.24	0.74	
Stone Fruit (3/16)	1.11	35.73	1.06		1.08	37.72	0.89		1.06	36.86	0.88	
Past 7 days precipitation (inches)		0.00				0.00				0.55		
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)	1.7	1.4	1.3	1.1	1.6	1.4	1.2	1.1	1.6	1.3	1.2	1.1
Pistachio (4/21)	1.7	1.5	1.3	1.2	1.7	1.4	1.3	1.1	1.6	1.4	1.2	1.1
Citrus (2/1)	1.1	0.9	0.8	0.7	1.0	0.9	0.8	0.7	1.0	0.9	0.8	0.7
Raisin Grapes (3/16) (11 ft. row spacing)	1.3	1.2	1.0	0.9	1.3	1.1	1.0	0.9	1.2	1.1	0.9	0.8
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.4	1.3	1.1	1.0	1.4	1.2	1.1	1.0	1.4	1.2	1.1	1.0
Walnuts (4/4)	1.5	1.3	1.1	1.0	1.4	1.2	1.1	1.0	1.4	1.2	1.1	1.0
Stone Fruit (3/16)	1.7	1.5	1.3	1.2	1.7	1.4	1.3	1.1	1.6	1.4	1.2	1.1

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	401	331	307	260	378	331	283	260	378	307	283	260
Pistachio 106 Trees/A	424	374	324	299	424	349	324	274	399	349	299	274
Citrus 110 Trees/A	272	222	197	173	247	222	197	173	247	222	197	173
Raisin Grapes 566 Vines/A	62	58	48	43	62	53	48	43	58	53	43	38
Winegrapes 622 Vines/A	61	57	48	44	61	52	48	44	61	52	48	44
Walnuts 76 Trees/A	536	464	393	357	500	429	393	357	500	429	393	357
Stonefruit 172 Trees/A	268	237	205	189	268	221	205	174	253	221	189	174

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

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09/28/18 through 10/04/18

Crops (Leafout Date)	#124 Panoche				#2 Five Points				#15 Stratford			
	9/28- 10/4 Water Use	Accum'd Seasonal Water Use	10/5- 10/11 Estimated ETc		9/28- 10/4 Water Use	Accum'd Seasonal Water Use	10/5- 10/11 Estimated ETc		9/28- 10/4 Water Use	Accum'd Seasonal Water Use	10/5- 10/11 Estimated ETc	
Almonds (3/16) *	0.94	45.14	1.03		1.14	48.22	1.04		1.08	47.98	1.08	
Pistachio (4/21) * **	1.00	35.56	1.05		1.20	37.77	1.06		1.14	37.48	1.10	
Citrus (2/1)	0.61	35.30	0.74		0.74	37.99	0.75		0.69	37.65	0.77	
Raisin Grapes (3/16) (11 ft. row spacing)	0.76	32.52	0.89		0.90	34.56	0.89		0.85	34.37	0.91	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	0.86	35.92	0.96		1.02	38.21	0.97		0.96	38.02	1.01	
Walnuts (4/4)	0.87	40.45	0.89		1.01	43.04	0.90		0.97	42.79	0.94	
Stone Fruit (3/16)	1.00	39.07	1.15		1.20	41.64	1.16		1.14	41.33	1.22	
Past 7 days precipitation (inches)	0.00				0.38				0.12			
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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System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/16)	1.4	1.3	1.1	1.0	1.8	1.5	1.3	1.2	1.7	1.4	1.3	1.1
Pistachio (4/21)	1.5	1.3	1.2	1.1	1.8	1.6	1.4	1.3	1.8	1.5	1.3	1.2
Citrus (2/1)	0.9	0.8	0.7	0.6	1.1	1.0	0.9	0.8	1.1	0.9	0.8	0.7
Raisin Grapes (3/16) (11 ft. row spacing)	1.2	1.0	0.9	0.8	1.4	1.2	1.1	0.9	1.3	1.1	1.0	0.9
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	1.5	1.3	1.1	1.0
Walnuts (4/4)	1.3	1.2	1.0	0.9	1.6	1.3	1.2	1.1	1.5	1.3	1.1	1.0
Stone Fruit (3/16)	1.5	1.3	1.2	1.1	1.8	1.6	1.4	1.3	1.8	1.5	1.3	1.2

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Raisin Grapes 566 Vines/A	58	48	43	38	67	58	53	43	62	53	48	43
Winegrapes 622 Vines/A	57	48	44	39	70	61	52	48	65	57	48	44
Walnuts 76 Trees/A	464	429	357	322	572	464	429	393	536	464	393	357
Stonefruit 172 Trees/A	237	205	189	174	284	253	221	205	284	237	205	189

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