

WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_c)

08/17/18 through 08/23/18

Crops (Leafout Date)	#188 Madera II ***				#39 Parlier				#86 Lindcove			
	8/17- 8/23 Water Use	Accum'd Seasonal Water Use	8/24- 8/30 Estimated ETc		8/17- 8/23 Water Use	Accum'd Seasonal Water Use	8/24- 8/30 Estimated ETc		8/17- 8/23 Water Use	Accum'd Seasonal Water Use	8/24- 8/30 Estimated ETc	
Almonds (3/16) *	1.74	33.48	1.59		1.91	34.79	1.58		1.90	33.70	1.59	
Pistachio (4/21) * **	1.74	24.04	1.59		1.95	25.47	1.58		1.95	24.95	1.59	
Citrus (2/1)	1.04	26.65	0.98		1.17	27.45	0.98		1.15	26.54	0.98	
Raisin Grapes (3/16) (11 ft. row spacing)	1.32	24.02	1.24		1.49	25.04	1.23		1.48	24.33	1.24	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.53	26.13	1.38		1.70	27.31	1.37		1.69	26.60	1.38	
Walnuts (4/4)	1.81	29.12	1.66		2.02	30.55	1.65		2.02	29.72	1.66	
Stone Fruit (3/16)	1.74	27.30	1.59		1.95	28.75	1.58		1.95	28.01	1.59	
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)	2.7	2.3	2.0	1.8	2.9	2.5	2.2	2.0	2.9	2.5	2.2	2.0
Pistachio (4/21)	2.7	2.3	2.0	1.8	3.0	2.6	2.3	2.1	3.0	2.6	2.3	2.1
Citrus (2/1)	1.6	1.4	1.2	1.1	1.8	1.6	1.4	1.2	1.8	1.5	1.4	1.2
Raisin Grapes (3/16) (11 ft. row spacing)	2.0	1.8	1.6	1.4	2.3	2.0	1.8	1.6	2.3	2.0	1.7	1.6
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	2.4	2.0	1.8	1.6	2.6	2.3	2.0	1.8	2.6	2.3	2.0	1.8
Walnuts (4/4)	2.8	2.4	2.1	1.9	3.1	2.7	2.4	2.1	3.1	2.7	2.4	2.1
Stone Fruit (3/16)	2.7	2.3	2.0	1.8	3.0	2.6	2.3	2.1	3.0	2.6	2.3	2.1

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	638	543	472	425	685	590	519	472	685	590	519	472
Pistachio 106 Trees/A	673	573	498	448	747	648	573	523	747	648	573	523
Citrus 110 Trees/A	395	346	296	272	444	395	346	296	444	370	346	296
Raisin Grapes 566 Vines/A	96	86	77	67	110	96	86	77	110	96	82	77
Winegrapes 622 Vines/A	105	87	79	70	114	100	87	79	114	100	87	79
Walnuts 76 Trees/A	1000	857	750	679	1108	965	857	750	1108	965	857	750
Stonefruit 172 Trees/A	426	363	316	284	474	410	363	332	474	410	363	332

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)

08/17/18 through 08/23/18

Crops (Leafout Date)	#124 Panoche				#2 Five Points				#15 Stratford			
	8/17- 8/23 Water Use	Accum'd Seasonal Water Use	8/24- 8/30 Estimated ETc		8/17- 8/23 Water Use	Accum'd Seasonal Water Use	8/24- 8/30 Estimated ETc		8/17- 8/23 Water Use	Accum'd Seasonal Water Use	8/24- 8/30 Estimated ETc	
Almonds (3/16) *	1.94	36.72	1.71		2.05	38.67	1.85		2.05	38.46	1.87	
Pistachio (4/21) * **	1.98	26.90	1.71		2.11	28.00	1.88		2.12	27.71	1.92	
Citrus (2/1)	1.18	29.77	1.07		1.25	31.71	1.14		1.24	31.39	1.16	
Raisin Grapes (3/16) (11 ft. row spacing)	1.50	25.98	1.29		1.59	27.12	1.43		1.60	26.93	1.45	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.73	28.45	1.50		1.84	29.71	1.64		1.84	29.54	1.66	
Walnuts (4/4)	2.05	32.14	1.78		2.18	33.68	1.95		2.19	33.43	1.99	
Stone Fruit (3/16)	1.98	30.41	1.71		2.11	31.87	1.88		2.12	31.56	1.92	
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.

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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	2.0	3.2	2.7	2.4	2.2	3.2	2.7	2.4	2.2
Pistachio (4/21)	3.0	2.6	2.3	2.1	3.2	2.8	2.5	2.2	3.3	2.8	2.5	2.2
Citrus (2/1)	1.8	1.6	1.4	1.2	1.9	1.7	1.5	1.3	1.9	1.7	1.5	1.3
Raisin Grapes (3/16) (11 ft. row spacing)	2.3	2.0	1.8	1.6	2.4	2.1	1.9	1.7	2.5	2.1	1.9	1.7
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	2.7	2.3	2.0	1.8	2.8	2.5	2.2	1.9	2.8	2.5	2.2	1.9
Walnuts (4/4)	3.2	2.7	2.4	2.2	3.4	2.9	2.6	2.3	3.4	2.9	2.6	2.3
Stone Fruit (3/16)	3.0	2.6	2.3	2.1	3.2	2.8	2.5	2.2	3.3	2.8	2.5	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	#124 Panoche				#2 Five Points				#15 Stratford			
Almonds 115 Trees/A	708	614	543	472	756	638	567	519	756	638	567	519
Pistachio 106 Trees/A	747	648	573	523	797	698	623	548	822	698	623	548
Citrus 110 Trees/A	444	395	346	296	469	420	370	321	469	420	370	321
Raisin Grapes 566 Vines/A	110	96	86	77	115	101	91	82	120	101	91	82
Winegrapes 622 Vines/A	118	100	87	79	122	109	96	83	122	109	96	83
Walnuts 76 Trees/A	1143	965	857	786	1215	1036	929	822	1215	1036	929	822
Stonefruit 172 Trees/A	474	410	363	332	505	442	395	347	521	442	395	347

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