

**WEEKLY SOIL MOISTURE LOSS IN INCHES**

(Estimated Crop Evapotranspiration or ET<sub>c</sub>)

08/31/18 through 09/06/18

Crops (Leafout Date)	#188 Madera II ***			#39 Parlier			#86 Lindcove		
	8/31- 9/6 Water Use	Accum'd Seasonal Water Use	9/7- 9/13 Estimated ETc	8/31- 9/6 Water Use	Accum'd Seasonal Water Use	9/7- 9/13 Estimated ETc	8/31- 9/6 Water Use	Accum'd Seasonal Water Use	9/7- 9/13 Estimated ETc
Almonds (3/16) *	1.56	36.70	1.34	1.69	38.16	1.29	1.64	36.97	1.30
Pistachio (4/21) * **	1.56	27.26	1.41	1.69	28.84	1.36	1.64	28.23	1.37
Citrus (2/1)	1.03	28.70	0.98	1.12	29.62	0.93	1.07	28.63	0.94
Raisin Grapes (3/16) (11 ft. row spacing)	1.21	26.49	1.06	1.29	27.61	1.01	1.26	26.83	1.02
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.35	28.93	1.20	1.48	30.26	1.15	1.43	29.46	1.16
Walnuts (4/4)	1.59	32.44	1.35	1.72	34.02	1.29	1.67	33.10	1.30
Stone Fruit (3/16)	1.56	30.52	1.41	1.69	32.12	1.36	1.64	31.29	1.37
<b>Past 7 days precipitation (inches)</b>	0.00			0.00			0.00		
<b>Accumulated precipitation (inches) (1/1/2018)</b>	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<sub>o</sub> will be used for the weekly report.

**PAST WEEKLY APPLIED WATER IN INCHES, ADJUSTED FOR EFFICIENCY <sup>1</sup>**

Crops	#188 Madera II				#39 Parlier				#86 Lindcove			
	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/16)	2.4	2.1	1.8	1.6	2.6	2.3	2.0	1.8	2.5	2.2	1.9	1.7
Pistachio (4/21)	2.4	2.1	1.8	1.6	2.6	2.3	2.0	1.8	2.5	2.2	1.9	1.7
Citrus (2/1)	1.6	1.4	1.2	1.1	1.7	1.5	1.3	1.2	1.6	1.4	1.3	1.1
Raisin Grapes (3/16) (11 ft. row spacing)	1.9	1.6	1.4	1.3	2.0	1.7	1.5	1.4	1.9	1.7	1.5	1.3
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	2.1	1.8	1.6	1.4	2.3	2.0	1.7	1.6	2.2	1.9	1.7	1.5
Walnuts (4/4)	2.4	2.1	1.9	1.7	2.6	2.3	2.0	1.8	2.6	2.2	2.0	1.8
Stone Fruit (3/16)	2.4	2.1	1.8	1.6	2.6	2.3	2.0	1.8	2.5	2.2	1.9	1.7

<sup>1</sup> 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	567	496	425	378	614	543	472	425	590	519	449
Pistachio 106 Trees/A	598	523	448	399	648	573	498	448	623	548	473	424
Citrus 110 Trees/A	395	346	296	272	420	370	321	296	395	346	321	272
Raisin Grapes 566 Vines/A	91	77	67	62	96	82	72	67	91	82	72	62
Winegrapes 622 Vines/A	92	79	70	61	100	87	74	70	96	83	74	65
Walnuts 76 Trees/A	857	750	679	607	929	822	715	643	929	786	715	643
Stonefruit 172 Trees/A	379	332	284	253	410	363	316	284	395	347	300	268

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<sub>c</sub>)

08/31/18 through 09/06/18

Crops (Leafout Date)	#124 Panoche			#2 Five Points			#15 Stratford		
	8/31- 9/6 Water Use	Accum'd Seasonal Water Use	9/7- 9/13 Estimated ETc	8/31- 9/6 Water Use	Accum'd Seasonal Water Use	9/7- 9/13 Estimated ETc	8/31- 9/6 Water Use	Accum'd Seasonal Water Use	9/7- 9/13 Estimated ETc
Almonds (3/16) *	1.41	39.81	1.47	1.76	42.23	1.54	1.79	41.99	1.62
Pistachio (4/21) * **	1.41	29.99	1.54	1.76	31.58	1.60	1.80	31.27	1.65
Citrus (2/1)	0.93	31.75	1.10	1.19	34.03	1.12	1.21	33.68	1.15
Raisin Grapes (3/16) (11 ft. row spacing)	1.07	28.33	1.19	1.34	29.84	1.24	1.37	29.64	1.26
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.23	31.15	1.33	1.55	32.85	1.39	1.58	32.65	1.44
Walnuts (4/4)	1.44	35.33	1.54	1.79	37.36	1.60	1.82	37.08	1.65
Stone Fruit (3/16)	1.41	33.50	1.54	1.76	35.45	1.60	1.80	35.12	1.65
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 <sup>1</sup>**

Crops	#124 Panoche				#2 Five Points				#15 Stratford			
	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/16)	2.2	1.9	1.7	1.5	2.7	2.3	2.1	1.9	2.8	2.4	2.1	1.9
Pistachio (4/21)	2.2	1.9	1.7	1.5	2.7	2.3	2.1	1.9	2.8	2.4	2.1	1.9
Citrus (2/1)	1.4	1.2	1.1	1.0	1.8	1.6	1.4	1.3	1.9	1.6	1.4	1.3
Raisin Grapes (3/16) (11 ft. row spacing)	1.6	1.4	1.3	1.1	2.1	1.8	1.6	1.4	2.1	1.8	1.6	1.4
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.9	1.6	1.4	1.3	2.4	2.1	1.8	1.6	2.4	2.1	1.9	1.7
Walnuts (4/4)	2.2	1.9	1.7	1.5	2.8	2.4	2.1	1.9	2.8	2.4	2.1	1.9
Stone Fruit (3/16)	2.2	1.9	1.7	1.5	2.7	2.3	2.1	1.9	2.8	2.4	2.1	1.9

<sup>1</sup> 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	519	449	401	354	638	543	496	449	661	567	496
Pistachio 106 Trees/A	548	473	424	374	673	573	523	473	698	598	523	473
Citrus 110 Trees/A	346	296	272	247	444	395	346	321	469	395	346	321
Raisin Grapes 566 Vines/A	77	67	62	53	101	86	77	67	101	86	77	67
Winegrapes 622 Vines/A	83	70	61	57	105	92	79	70	105	92	83	74
Walnuts 76 Trees/A	786	679	607	536	1000	857	750	679	1000	857	750	679
Stonefruit 172 Trees/A	347	300	268	237	426	363	332	300	442	379	332	300

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