

WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_c)

09/06/19 through 09/12/19

Crops (Leafout Date)	#148 Merced				#39 Parlier				#258 Lemon Cove		
	9/6- 9/12 Water Use	Accum'd Seasonal Water Use	9/13- 9/19 Estimated ETc		9/6- 9/12 Water Use	Accum'd Seasonal Water Use	9/13- 9/19 Estimated ETc		9/6- 9/12 Water Use	Accum'd Seasonal Water Use	9/13- 9/19 Estimated ETc
Almonds (3/10) *	1.41	37.42	1.36		1.58	40.20	1.28		1.40	37.68	1.29
Pistachio (4/19) * **	1.48	31.18	1.43		1.62	33.42	1.35		1.47	31.35	1.36
Citrus (2/1)	1.04	28.57	0.87		1.15	30.78	0.81		1.03	28.68	0.82
Raisin Grapes (3/16) (11 ft. row spacing)	1.13	26.63	1.08		1.24	28.42	1.00		1.12	26.69	1.01
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.27	29.26	1.22		1.41	31.49	1.14		1.26	29.46	1.15
Walnuts (4/15)	1.55	29.91	1.40		1.69	32.14	1.30		1.53	30.00	1.31
Stone Fruit (3/20)	1.48	30.03	1.43		1.62	32.28	1.35		1.47	30.06	1.36
Past 7 days precipitation (inches)		0.00				0.00				0.00	
Accumulated precipitation (inches) (1/1/2018)		11.08				7.89				10.81	

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	#148 Merced				#39 Parlier				#258 Lemon Cove			
	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 (3/10)	2.2	1.9	1.7	1.5	2.4	2.1	1.9	1.7	2.2	1.9	1.6	1.5
Pistachio (4/19)	2.3	2.0	1.7	1.6	2.5	2.2	1.9	1.7	2.3	2.0	1.7	1.5
Citrus (2/1)	1.6	1.4	1.2	1.1	1.8	1.5	1.4	1.2	1.6	1.4	1.2	1.1
Raisin Grapes (3/16) (11 ft. row spacing)	1.7	1.5	1.3	1.2	1.9	1.7	1.5	1.3	1.7	1.5	1.3	1.2
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	2.0	1.7	1.5	1.3	2.2	1.9	1.7	1.5	1.9	1.7	1.5	1.3
Walnuts (4/15)	2.4	2.1	1.8	1.6	2.6	2.3	2.0	1.8	2.4	2.0	1.8	1.6
Stone Fruit (3/20)	2.3	2.0	1.7	1.6	2.5	2.2	1.9	1.7	2.3	2.0	1.7	1.5

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	#148 Merced				#39 Parlier				#258 Lemon Cove			
Almonds 115 Trees/A	519	449	401	354	567	496	449	401	519	449	378	354
Pistachio 106 Trees/A	573	498	424	399	623	548	473	424	573	498	424	374
Citrus 110 Trees/A	395	346	296	272	444	370	346	296	395	346	296	272
Raisin Grapes 566 Vines/A	82	72	62	58	91	82	72	62	82	72	62	58
Winegrapes 622 Vines/A	87	74	65	57	96	83	74	65	83	74	65	57
Walnuts 76 Trees/A	857	750	643	572	929	822	715	643	857	715	643	572
Stonefruit 172 Trees/A	363	316	268	253	395	347	300	268	363	316	268	237

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)
09/06/19 through 09/12/19

Crops (Leafout Date)	#124 Panoche				#2 Five Points				#15 Stratford		
	9/6- 9/12 Water Use	Accum'd Seasonal Water Use	9/13- 9/19 Estimated ETc		9/6- 9/12 Water Use	Accum'd Seasonal Water Use	9/13- 9/19 Estimated ETc		9/6- 9/12 Water Use	Accum'd Seasonal Water Use	9/13- 9/19 Estimated ETc
Almonds (3/10) *	1.60	42.93	1.39		1.74	43.70	1.51		1.58	40.99	1.49
Pistachio (4/19) * **	1.64	35.85	1.46		1.78	35.96	1.58		1.62	33.73	1.56
Citrus (2/1)	1.12	32.52	0.99		1.20	33.66	1.06		1.10	31.28	1.06
Raisin Grapes (3/16) (11 ft. row spacing)	1.26	30.65	1.11		1.36	30.69	1.23		1.24	28.76	1.21
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.43	33.75	1.25		1.55	34.05	1.37		1.41	31.82	1.35
Walnuts (4/15)	1.71	34.38	1.46		1.85	34.64	1.59		1.69	32.35	1.57
Stone Fruit (3/20)	1.64	34.54	1.46		1.78	35.04	1.58		1.62	32.76	1.56
Past 7 days precipitation (inches)	0.00				0.00				0.00		
Accumulated precipitation (inches) (1/1/2019)	4.80				7.42				7.08		

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			
	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 (3/10)	2.5	2.1	1.9	1.7	2.7	2.3	2.0	1.8	2.4	2.1	1.9	1.7
Pistachio (4/19)	2.5	2.2	1.9	1.7	2.7	2.4	2.1	1.9	2.5	2.2	1.9	1.7
Citrus (2/1)	1.7	1.5	1.3	1.2	1.8	1.6	1.4	1.3	1.7	1.5	1.3	1.2
Raisin Grapes (3/16) (11 ft. row spacing)	1.9	1.7	1.5	1.3	2.1	1.8	1.6	1.4	1.9	1.7	1.5	1.3
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	2.2	1.9	1.7	1.5	2.4	2.1	1.8	1.6	2.2	1.9	1.7	1.5
Walnuts (4/15)	2.6	2.3	2.0	1.8	2.8	2.5	2.2	1.9	2.6	2.3	2.0	1.8
Stone Fruit (3/20)	2.5	2.2	1.9	1.7	2.7	2.4	2.1	1.9	2.5	2.2	1.9	1.7

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			
	590	496	449	401	638	543	472	425	567	496	449	401
Almonds 115 Trees/A	590	496	449	401	638	543	472	425	567	496	449	401
Pistachio 106 Trees/A	623	548	473	424	673	598	523	473	623	548	473	424
Citrus 110 Trees/A	420	370	321	296	444	395	346	321	420	370	321	296
Raisin Grapes 566 Vines/A	91	82	72	62	101	86	77	67	91	82	72	62
Winegrapes 622 Vines/A	96	83	74	65	105	92	79	70	96	83	74	65
Walnuts 76 Trees/A	929	822	715	643	1000	893	786	679	929	822	715	643
Stonefruit 172 Trees/A	395	347	300	268	426	379	332	300	395	347	300	268

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