

WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_c)

09/20/19 through 09/26/19

Crops (Leafout Date)	#148 Merced				#39 Parlier				#258 Lemon Cove		
	9/20-9/26 Water Use	Accum'd Seasonal Water Use	9/27-10/3 Estimated ETc		9/20-9/26 Water Use	Accum'd Seasonal Water Use	9/27-10/3 Estimated ETc		9/20-9/26 Water Use	Accum'd Seasonal Water Use	9/27-10/3 Estimated ETc
Almonds (3/10) *	1.25	39.91	1.10		1.32	42.95	1.04		1.28	40.29	1.04
Pistachio (4/19) * **	1.22	33.70	1.03		1.29	36.21	0.97		1.25	34.00	0.97
Citrus (2/1)	0.78	30.14	0.73		0.83	32.52	0.70		0.80	30.32	0.70
Raisin Grapes (3/16) (11 ft. row spacing)	0.97	28.57	0.91		1.04	30.61	0.88		1.00	28.75	0.88
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.11	31.48	1.01		1.18	33.96	0.95		1.14	31.79	0.95
Walnuts (4/15)	1.25	32.43	1.10		1.33	34.96	1.04		1.28	32.65	1.04
Stone Fruit (3/20)	1.32	32.65	1.22		1.39	35.17	1.13		1.35	32.81	1.13
Past 7 days precipitation (inches)	0.00				0.00				0.00		
Accumulated precipitation (inches) (1/1/2018)	11.15				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				#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 (3/10)	1.9	1.7	1.5	1.3	2.0	1.8	1.6	1.4	2.0	1.7	1.5	1.3
Pistachio (4/19)	1.9	1.6	1.4	1.3	2.0	1.7	1.5	1.4	1.9	1.7	1.5	1.3
Citrus (2/1)	1.2	1.0	0.9	0.8	1.3	1.1	1.0	0.9	1.2	1.1	0.9	0.8
Raisin Grapes (3/16) (11 ft. row spacing)	1.5	1.3	1.1	1.0	1.6	1.4	1.2	1.1	1.5	1.3	1.2	1.1
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.7	1.5	1.3	1.2	1.8	1.6	1.4	1.2	1.8	1.5	1.3	1.2
Walnuts (4/15)	1.9	1.7	1.5	1.3	2.0	1.8	1.6	1.4	2.0	1.7	1.5	1.3
Stone Fruit (3/20)	2.0	1.8	1.6	1.4	2.1	1.9	1.6	1.5	2.1	1.8	1.6	1.4

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	449	401	354	307	472	425	378	331	472	401	354	307
Pistachio 106 Trees/A	473	399	349	324	498	424	374	349	473	424	374	324
Citrus 110 Trees/A	296	247	222	197	321	272	247	222	296	272	222	197
Raisin Grapes 566 Vines/A	72	62	53	48	77	67	58	53	72	62	58	53
Winegrapes 622 Vines/A	74	65	57	52	79	70	61	52	79	65	57	52
Walnuts 76 Trees/A	679	607	536	464	715	643	572	500	715	607	536	464
Stonefruit 172 Trees/A	316	284	253	221	332	300	253	237	332	284	253	221

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) 09/20/19 through 10/06/19														
Crops (Leafout Date)	#124 Panoche					#2 Five Points					#15 Stratford			
	9/20- 9/26 Water Use	Accum'd Seasonal Water Use	9/27- 10/3 Estimated ETc		9/20- 9/26 Water Use	Accum'd Seasonal Water Use	9/27- 10/3 Estimated ETc		9/20- 9/26 Water Use	Accum'd Seasonal Water Use	9/27- 10/3 Estimated ETc			
Almonds (3/10) *	1.40	45.67	1.17		1.53	46.80	1.28		1.47	44.01	1.23			
Pistachio (4/19) * **	1.37	38.62	1.10		1.50	39.08	1.21		1.44	36.77	1.16			
Citrus (2/1)	0.87	34.33	0.77		0.96	35.72	0.85		0.91	33.28	0.81			
Raisin Grapes (3/16) (11 ft. row spacing)	1.12	32.84	0.94		1.23	33.16	1.05		1.18	31.16	1.00			
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.26	36.22	1.08		1.39	36.85	1.19		1.33	34.54	1.14			
Walnuts (4/15)	1.45	37.22	1.16		1.60	37.87	1.24		1.54	35.50	1.18			
Stone Fruit (3/20)	1.47	37.41	1.29		1.60	38.26	1.40		1.54	35.90	1.35			
Past 7 days precipitation (inches)	0.00				0.07				0.00					
Accumulated precipitation (inches) (1/1/2019)	4.82				7.59				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			
System Efficiency >>	65%	75%	85%	95%		65%	75%	85%	95%		65%	75%	85%	95%
Almonds (3/10)	2.2	1.9	1.6	1.5		2.4	2.0	1.8	1.6		2.3	2.0	1.7	1.5
Pistachio (4/19)	2.1	1.8	1.6	1.4		2.3	2.0	1.8	1.6		2.2	1.9	1.7	1.5
Citrus (2/1)	1.3	1.2	1.0	0.9		1.5	1.3	1.1	1.0		1.4	1.2	1.1	1.0
Raisin Grapes (3/16) (11 ft. row spacing)	1.7	1.5	1.3	1.2		1.9	1.6	1.4	1.3		1.8	1.6	1.4	1.2
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.9	1.7	1.5	1.3		2.1	1.9	1.6	1.5		2.0	1.8	1.6	1.4
Walnuts (4/15)	2.2	1.9	1.7	1.5		2.5	2.1	1.9	1.7		2.4	2.1	1.8	1.6
Stone Fruit (3/20)	2.3	2.0	1.7	1.5		2.5	2.1	1.9	1.7		2.4	2.1	1.8	1.6
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	519	449	378	354		567	472	425	378		543	472	401	354
Pistachio 106 Trees/A	523	448	399	349		573	498	448	399		548	473	424	374
Citrus 110 Trees/A	321	296	247	222		370	321	272	247		346	296	272	247
Raisin Grapes 566 Vines/A	82	72	62	58		91	77	67	62		86	77	67	58
Winegrapes 622 Vines/A	83	74	65	57		92	83	70	65		87	79	70	61
Walnuts 76 Trees/A	786	679	607	536		893	750	679	607		857	750	643	572
Stonefruit 172 Trees/A	363	316	268	237		395	332	300	268		379	332	284	253
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