

WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_c)

06/28/19 through 07/04/19

Crops (Leafout Date)	#148 Merced			#39 Parlier			#258 Lemon Cove		
	6/28- 7/4 Water Use	Accum'd Seasonal Water Use	7/5- 7/11 Estimated ETc	6/28- 7/4 Water Use	Accum'd Seasonal Water Use	7/5- 7/11 Estimated ETc	6/28- 7/4 Water Use	Accum'd Seasonal Water Use	7/5- 7/11 Estimated ETc
Almonds (3/10) *	1.84	19.25	2.08	2.03	20.74	1.99	2.01	19.78	2.00
Pistachio (4/19) * **	1.97	12.53	2.17	2.16	13.38	2.08	2.15	12.95	2.09
Citrus (2/1)	1.17	17.22	1.26	1.28	18.54	1.24	1.27	17.52	1.25
Raisin Grapes (3/16) (11 ft. row spacing)	1.50	12.47	1.61	1.63	13.24	1.59	1.62	12.75	1.60
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.67	13.05	1.89	1.83	14.04	1.80	1.81	13.49	1.81
Walnuts (4/15)	1.64	11.68	1.82	1.79	12.53	1.73	1.78	12.02	1.74
Stone Fruit (3/20)	1.52	12.37	1.82	1.67	13.25	1.73	1.66	12.66	1.74
Past 7 days precipitation (inches)	0.00			0.00			0.00		
Accumulated precipitation (inches) (1/1/2019)	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)	2.8	2.5	2.2	1.9	3.1	2.7	2.4	2.1	3.1	2.7	2.4	2.1
Pistachio (4/19)	3.0	2.6	2.3	2.1	3.3	2.9	2.5	2.3	3.3	2.9	2.5	2.3
Citrus (2/1)	1.8	1.6	1.4	1.2	2.0	1.7	1.5	1.3	2.0	1.7	1.5	1.3
Raisin Grapes (3/16) (11 ft. row spacing)	2.3	2.0	1.8	1.6	2.5	2.2	1.9	1.7	2.5	2.2	1.9	1.7
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	2.6	2.2	2.0	1.8	2.8	2.4	2.2	1.9	2.8	2.4	2.1	1.9
Walnuts (4/15)	2.5	2.2	1.9	1.7	2.8	2.4	2.1	1.9	2.7	2.4	2.1	1.9
Stone Fruit (3/20)	2.3	2.0	1.8	1.6	2.6	2.2	2.0	1.8	2.6	2.2	2.0	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	#148 Merced				#39 Parlier				#258 Lemon Cove			
	Almonds 115 Trees/A	661	590	519	449	732	638	567	496	732	638	567
Pistachio 106 Trees/A	747	648	573	523	822	722	623	573	822	722	623	573
Citrus 110 Trees/A	444	395	346	296	494	420	370	321	494	420	370	321
Raisin Grapes 566 Vines/A	110	96	86	77	120	106	91	82	120	106	91	82
Winegrapes 622 Vines/A	114	96	87	79	122	105	96	83	122	105	92	83
Walnuts 76 Trees/A	893	786	679	607	1000	857	750	679	965	857	750	679
Stonefruit 172 Trees/A	363	316	284	253	410	347	316	284	410	347	316	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_c)

06/28/19 through 07/04/19

Crops (Leafout Date)	#124 Panoche				#2 Five Points				#15 Stratford		
	6/28- 7/4 Water Use	Accum'd Seasonal Water Use	7/5- 7/11 Estimated ETc		6/28- 7/4 Water Use	Accum'd Seasonal Water Use	7/5- 7/11 Estimated ETc		6/28- 7/4 Water Use	Accum'd Seasonal Water Use	7/5- 7/11 Estimated ETc
Almonds (3/10) *	2.11	22.45	2.08		2.18	22.85	2.15		2.15	21.50	2.23
Pistachio (4/19) * **	2.22	14.84	2.17		2.27	14.42	2.24		2.26	13.70	2.30
Citrus (2/1)	1.32	19.85	1.26		1.36	20.73	1.33		1.33	19.19	1.39
Raisin Grapes (3/16) (11 ft. row spacing)	1.69	14.68	1.61		1.72	14.44	1.68		1.70	13.58	1.74
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.89	15.43	1.89		1.92	15.29	1.96		1.92	14.41	2.01
Walnuts (4/15)	1.87	13.81	1.82		1.90	13.54	1.89		1.89	12.75	1.95
Stone Fruit (3/20)	1.74	14.51	1.82		1.78	14.48	1.89		1.77	13.72	1.95
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)	3.2	2.8	2.5	2.2		3.4	2.9	2.6	2.3		3.3	2.9	2.5	2.3
Pistachio (4/19)	3.4	3.0	2.6	2.3		3.5	3.0	2.7	2.4		3.5	3.0	2.7	2.4
Citrus (2/1)	2.0	1.8	1.6	1.4		2.1	1.8	1.6	1.4		2.0	1.8	1.6	1.4
Raisin Grapes (3/16) (11 ft. row spacing)	2.6	2.3	2.0	1.8		2.6	2.3	2.0	1.8		2.6	2.3	2.0	1.8
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	2.9	2.5	2.2	2.0		3.0	2.6	2.3	2.0		3.0	2.6	2.3	2.0
Walnuts (4/15)	2.9	2.5	2.2	2.0		2.9	2.5	2.2	2.0		2.9	2.5	2.2	2.0
Stone Fruit (3/20)	2.7	2.3	2.0	1.8		2.7	2.4	2.1	1.9		2.7	2.4	2.1	1.9

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			
	756	661	590	519		803	685	614	543		779	685	590	543
Almonds 115 Trees/A	847	747	648	573		872	747	673	598		872	747	673	598
Pistachio 106 Trees/A	494	444	395	346		518	444	395	346		494	444	395	346
Citrus 110 Trees/A	125	110	96	86		125	110	96	86		125	110	96	86
Raisin Grapes 566 Vines/A	127	109	96	87		131	114	100	87		131	114	100	87
Winegrapes 622 Vines/A	1036	893	786	715		1036	893	786	715		1036	893	786	715
Walnuts 76 Trees/A	426	363	316	284		426	379	332	300		426	379	332	300
Stonefruit 172 Trees/A														

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