

WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_C)

06/21/19 through 06/27/19

Crops (Leafout Date)	#148 Merced				#39 Parlier				#258 Lemon Cove		
	6/21- 6/27 Water Use	Accum'd Seasonal Water Use	6/28- 7/4 Estimated ETc		6/21- 6/27 Water Use	Accum'd Seasonal Water Use	6/28- 7/4 Estimated ETc		6/21- 6/27 Water Use	Accum'd Seasonal Water Use	6/28- 7/4 Estimated ETc
Almonds (3/10) *	1.87	17.41	2.03		2.05	18.71	1.96		1.98	17.77	1.96
Pistachio (4/19) * **	2.03	10.56	2.17		2.21	11.22	2.10		2.14	10.80	2.10
Citrus (2/1)	1.20	16.05	1.26		1.31	17.26	1.26		1.26	16.25	1.26
Raisin Grapes (3/16) (11 ft. row spacing)	1.54	10.97	1.61		1.67	11.61	1.61		1.61	11.13	1.61
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.70	11.38	1.84		1.86	12.21	1.78		1.79	11.68	1.78
Walnuts (4/15)	1.56	10.04	1.80		1.72	10.74	1.73		1.65	10.24	1.73
Stone Fruit (3/20)	1.56	10.85	1.68		1.72	11.58	1.61		1.65	11.00	1.61
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)	2.9	2.5	2.2	2.0		3.2	2.7	2.4	2.2		3.0	2.6	2.3	2.1
Pistachio (4/19)	3.1	2.7	2.4	2.1		3.4	2.9	2.6	2.3		3.3	2.9	2.5	2.3
Citrus (2/1)	1.8	1.6	1.4	1.3		2.0	1.7	1.5	1.4		1.9	1.7	1.5	1.3
Raisin Grapes (3/16) (11 ft. row spacing)	2.4	2.1	1.8	1.6		2.6	2.2	2.0	1.8		2.5	2.1	1.9	1.7
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	2.6	2.3	2.0	1.8		2.9	2.5	2.2	2.0		2.8	2.4	2.1	1.9
Walnuts (4/15)	2.4	2.1	1.8	1.6		2.6	2.3	2.0	1.8		2.5	2.2	1.9	1.7
Stone Fruit (3/20)	2.4	2.1	1.8	1.6		2.6	2.3	2.0	1.8		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	#148 Merced					#39 Parlier					#258 Lemon Cove			
	685	590	519	472		756	638	567	519		708	614	543	496
Almonds 115 Trees/A	685	590	519	472		756	638	567	519		708	614	543	496
Pistachio 106 Trees/A	772	673	598	523		847	722	648	573		822	722	623	573
Citrus 110 Trees/A	444	395	346	321		494	420	370	346		469	420	370	321
Raisin Grapes 566 Vines/A	115	101	86	77		125	106	96	86		120	101	91	82
Winegrapes 622 Vines/A	114	100	87	79		127	109	96	87		122	105	92	83
Walnuts 76 Trees/A	857	750	643	572		929	822	715	643		893	786	679	607
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_c)
 06/21/19 through 06/27/19

Crops (Leafout Date)	#124 Panoche				#2 Five Points				#15 Stratford		
	6/21- 6/27 Water Use	Accum'd Seasonal Water Use	6/28- 7/4 Estimated ETc		6/21- 6/27 Water Use	Accum'd Seasonal Water Use	6/28- 7/4 Estimated ETc		6/21- 6/27 Water Use	Accum'd Seasonal Water Use	6/28- 7/4 Estimated ETc
Almonds (3/10) *	2.28	20.34	2.07		2.21	20.67	2.20		2.10	19.35	2.22
Pistachio (4/19) * **	2.45	12.62	2.21		2.37	12.15	2.30		2.26	11.44	2.31
Citrus (2/1)	1.44	18.53	1.30		1.40	19.37	1.39		1.34	17.86	1.40
Raisin Grapes (3/16) (11 ft. row spacing)	1.88	12.99	1.65		1.81	12.72	1.74		1.70	11.88	1.75
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	2.07	13.54	1.88		2.02	13.37	1.95		1.91	12.49	1.96
Walnuts (4/15)	1.91	11.94	1.84		1.88	11.64	1.93		1.77	10.86	1.94
Stone Fruit (3/20)	1.91	12.77	1.72		1.88	12.70	1.81		1.77	11.95	1.82
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)	3.5	3.0	2.7	2.4		3.4	2.9	2.6	2.3		3.2	2.8	2.5	2.2
Pistachio (4/19)	3.8	3.3	2.9	2.6		3.6	3.2	2.8	2.5		3.5	3.0	2.7	2.4
Citrus (2/1)	2.2	1.9	1.7	1.5		2.2	1.9	1.6	1.5		2.1	1.8	1.6	1.4
Raisin Grapes (3/16) (11 ft. row spacing)	2.9	2.5	2.2	2.0		2.8	2.4	2.1	1.9		2.6	2.3	2.0	1.8
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	3.2	2.8	2.4	2.2		3.1	2.7	2.4	2.1		2.9	2.5	2.2	2.0
Walnuts (4/15)	2.9	2.5	2.2	2.0		2.9	2.5	2.2	2.0		2.7	2.4	2.1	1.9
Stone Fruit (3/20)	2.9	2.5	2.2	2.0		2.9	2.5	2.2	2.0		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			
	826	708	638	567		803	685	614	543		756	661	590	519
Almonds 115 Trees/A	826	708	638	567		803	685	614	543		756	661	590	519
Pistachio 106 Trees/A	947	822	722	648		897	797	698	623		872	747	673	598
Citrus 110 Trees/A	543	469	420	370		543	469	395	370		518	444	395	346
Raisin Grapes 566 Vines/A	139	120	106	96		134	115	101	91		125	110	96	86
Winegrapes 622 Vines/A	140	122	105	96		135	118	105	92		127	109	96	87
Walnuts 76 Trees/A	1036	893	786	715		1036	893	786	715		965	857	750	679
Stonefruit 172 Trees/A	458	395	347	316		458	395	347	316		426	379	332	300

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