



WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_c)

07/12/19 through 07/18/19

Crops (Leafout Date)	#148 Merced			#39 Parlier			#258 Lemon Cove		
	7/12- 7/18 Water Use	Accum'd Seasonal Water Use	7/19- 7/25 Estimated ETc	7/12- 7/18 Water Use	Accum'd Seasonal Water Use	7/19- 7/25 Estimated ETc	7/12- 7/18 Water Use	Accum'd Seasonal Water Use	7/19- 7/25 Estimated ETc
Almonds (3/10) *	2.03	23.15	2.04	2.20	24.99	1.94	2.08	23.85	1.96
Pistachio (4/19) * **	2.10	16.59	2.11	2.27	17.79	2.01	2.15	17.18	2.03
Citrus (2/1)	1.23	19.60	1.26	1.36	21.17	1.17	1.26	20.03	1.19
Raisin Grapes (3/16) (11 ft. row spacing)	1.58	15.54	1.61	1.72	16.57	1.52	1.61	15.95	1.54
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.82	16.58	1.83	1.99	17.91	1.73	1.87	17.19	1.75
Walnuts (4/15)	1.85	15.15	1.90	2.02	16.35	1.80	1.90	15.66	1.82
Stone Fruit (3/20)	1.76	15.77	1.94	1.92	16.98	1.84	1.80	16.21	1.86
Past 7 days precipitation (inches)	0.00			0.00			0.09		
Accumulated precipitation (inches) (1/1/2019)	11.08			7.89			10.90		

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)	3.1	2.7	2.4	2.1	3.4	2.9	2.6	2.3	3.2	2.8	2.4	2.2
Pistachio (4/19)	3.2	2.8	2.5	2.2	3.5	3.0	2.7	2.4	3.3	2.9	2.5	2.3
Citrus (2/1)	1.9	1.6	1.4	1.3	2.1	1.8	1.6	1.4	1.9	1.7	1.5	1.3
Raisin Grapes (3/16) (11 ft. row spacing)	2.4	2.1	1.9	1.7	2.6	2.3	2.0	1.8	2.5	2.1	1.9	1.7
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	2.8	2.4	2.1	1.9	3.1	2.7	2.3	2.1	2.9	2.5	2.2	2.0
Walnuts (4/15)	2.8	2.5	2.2	1.9	3.1	2.7	2.4	2.1	2.9	2.5	2.2	2.0
Stone Fruit (3/20)	2.7	2.3	2.1	1.9	3.0	2.6	2.3	2.0	2.8	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	#148 Merced				#39 Parlier				#258 Lemon Cove			
	Almonds 115 Trees/A	732	638	567	496	803	685	614	543	756	661	567
Pistachio 106 Trees/A	797	698	623	548	872	747	673	598	822	722	623	573
Citrus 110 Trees/A	469	395	346	321	518	444	395	346	469	420	370	321
Raisin Grapes 566 Vines/A	115	101	91	82	125	110	96	86	120	101	91	82
Winegrapes 622 Vines/A	122	105	92	83	135	118	100	92	127	109	96	87
Walnuts 76 Trees/A	1000	893	786	679	1108	965	857	750	1036	893	786	715
Stonefruit 172 Trees/A	426	363	332	300	474	410	363	316	442	379	332	300

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)

07/12/19 through 07/18/19

Crops (Leafout Date)	#124 Panoche				#2 Five Points				#15 Stratford		
	7/12- 7/18 Water Use	Accum'd Seasonal Water Use	7/19- 7/25 Estimated ETc		7/12- 7/18 Water Use	Accum'd Seasonal Water Use	7/19- 7/25 Estimated ETc		7/12- 7/18 Water Use	Accum'd Seasonal Water Use	7/19- 7/25 Estimated ETc
Almonds (3/10) *	2.37	27.08	2.00		2.29	27.25	2.13		2.20	25.73	2.15
Pistachio (4/19) * **	2.42	19.59	2.07		2.35	18.98	2.20		2.25	18.08	2.22
Citrus (2/1)	1.44	22.67	1.23		1.39	23.42	1.29		1.34	21.79	1.31
Raisin Grapes (3/16) (11 ft. row spacing)	1.85	18.30	1.58		1.79	17.88	1.64		1.71	16.89	1.66
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	2.12	19.56	1.79		2.06	19.26	1.92		1.97	18.20	1.94
Walnuts (4/15)	2.16	17.95	1.86		2.10	17.50	1.99		2.00	16.53	2.01
Stone Fruit (3/20)	2.06	18.55	1.90		2.00	18.34	2.03		1.90	17.41	2.05
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)	3.6	3.2	2.8	2.5		3.5	3.1	2.7	2.4		3.4	2.9	2.6	2.3
Pistachio (4/19)	3.7	3.2	2.8	2.5		3.6	3.1	2.8	2.5		3.5	3.0	2.6	2.4
Citrus (2/1)	2.2	1.9	1.7	1.5		2.1	1.9	1.6	1.5		2.1	1.8	1.6	1.4
Raisin Grapes (3/16) (11 ft. row spacing)	2.8	2.5	2.2	1.9		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)	3.3	2.8	2.5	2.2		3.2	2.7	2.4	2.2		3.0	2.6	2.3	2.1
Walnuts (4/15)	3.3	2.9	2.5	2.3		3.2	2.8	2.5	2.2		3.1	2.7	2.4	2.1
Stone Fruit (3/20)	3.2	2.7	2.4	2.2		3.1	2.7	2.4	2.1		2.9	2.5	2.2	2.0

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			
	850	756	661	590		826	732	638	567		803	685	614	543
Almonds 115 Trees/A	850	756	661	590		826	732	638	567		803	685	614	543
Pistachio 106 Trees/A	922	797	698	623		897	772	698	623		872	747	648	598
Citrus 110 Trees/A	543	469	420	370		518	469	395	370		518	444	395	346
Raisin Grapes 566 Vines/A	134	120	106	91		134	115	101	91		125	110	96	86
Winegrapes 622 Vines/A	144	122	109	96		140	118	105	96		131	114	100	92
Walnuts 76 Trees/A	1179	1036	893	822		1143	1000	893	786		1108	965	857	750
Stonefruit 172 Trees/A	505	426	379	347		489	426	379	332		458	395	347	316

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