

WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_c)

10/09/20 through 10/15/20

Crops (Leafout Date)	#148 Merced				#39 Parlier				#258 Lemon Cove		
	10/9 - 10/15 Water Use	Accum'd Seasonal Water Use	10/16 - 10/22 Estimated ETc		10/9 - 10/15 Water Use	Accum'd Seasonal Water Use	10/16 - 10/22 Estimated ETc		10/9 - 10/15 Water Use	Accum'd Seasonal Water Use	10/16 - 10/22 Estimated ETc
Almonds (3/5) *	0.82	44.43	0.68		0.82	45.37	0.66		0.74	42.54	0.65
Pistachio (4/13) * **	0.80	37.41	0.68		0.80	38.43	0.66		0.74	36.31	0.65
Citrus (2/1)	0.62	34.18	0.54		0.62	34.39	0.52		0.57	32.38	0.51
Raisin Grapes (3/16) (11 ft. row spacing)	0.75	30.88	0.61		0.76	31.60	0.59		0.67	29.94	0.58
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis) ***	0.85	34.08	0.75		0.85	34.94	0.73		0.79	32.99	0.72
Walnuts (4/8)	0.78	37.50	0.64		0.78	38.52	0.62		0.72	36.35	0.61
Stone Fruit (3/10)	0.78	38.28	0.61		0.79	39.25	0.59		0.70	36.88	0.58
Past 7 days precipitation (inches)	0.00				0.00				0.00		
Accumulated precipitation (inches) (1/1/2020)	5.05				4.80				5.61		

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	#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 (3/5)	1.3	1.1	1.0	0.9		1.3	1.1	1.0	0.9		1.1	1.0	0.9	0.8
Pistachio (4/13)	1.2	1.1	0.9	0.8		1.2	1.1	0.9	0.8		1.1	1.0	0.9	0.8
Citrus (2/1)	1.0	0.8	0.7	0.7		1.0	0.8	0.7	0.7		0.9	0.8	0.7	0.6
Raisin Grapes (3/16) (11 ft. row spacing)***	1.2	1.0	0.9	0.8		1.2	1.0	0.9	0.8		1.0	0.9	0.8	0.7
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis) ***	1.3	1.1	1.0	0.9		1.3	1.1	1.0	0.9		1.2	1.1	0.9	0.8
Walnuts (4/8)	1.2	1.0	0.9	0.8		1.2	1.0	0.9	0.8		1.1	1.0	0.8	0.8
Stone Fruit (3/10)	1.2	1.0	0.9	0.8		1.2	1.1	0.9	0.8		1.1	0.9	0.8	0.7

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			
	307	260	236	213		307	260	236	213		260	236	213	189
Almonds 115 Trees/A	307	260	236	213		307	260	236	213		260	236	213	189
Pistachio 106 Trees/A	299	274	224	199		299	274	224	199		274	249	224	199
Citrus 110 Trees/A	247	197	173	173		247	197	173	173		222	197	173	148
Raisin Grapes 566 Vines/A	58	48	43	38		58	48	43	38		48	43	38	34
Winegrapes 622 Vines/A	57	48	44	39		57	48	44	39		52	48	39	35
Walnuts 76 Trees/A	429	357	322	286		429	357	322	286		393	357	286	286
Stonefruit 172 Trees/A	189	158	142	126		189	174	142	126		174	142	126	111

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)

10/09/20 through 10/15/20

Crops (Leafout Date)	#124 Panoche				#2 Five Points				#15 Stratford		
	10/9 - 10/15 Water Use	Accum'd Seasonal Water Use	10/16- 10/22 Estimated ETc		10/9 - 10/15 Water Use	Accum'd Seasonal Water Use	10/16- 10/22 Estimated ETc		10/9 - 10/15 Water Use	Accum'd Seasonal Water Use	10/16- 10/22 Estimated ETc
Almonds (3/5) *	0.95	48.42	0.75		1.05	49.93	0.79		1.01	50.52	0.77
Pistachio (4/13) * **	0.91	41.16	0.72		1.01	42.10	0.78		0.97	42.56	0.74
Citrus (2/1)	0.72	36.74	0.57		0.79	38.20	0.64		0.76	38.43	0.60
Raisin Grapes (3/16) (11 ft. row spacing)	0.85	33.32	0.69		0.94	34.15	0.78		0.90	34.58	0.74
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	0.96	36.95	0.82		1.06	37.86	0.86		1.02	38.20	0.84
Walnuts (4/8)	0.89	41.17	0.71		0.99	42.35	0.74		0.95	42.76	0.72
Stone Fruit (3/10)	0.86	42.09	0.69		0.97	43.25	0.78		0.93	43.71	0.74
Past 7 days precipitation (inches)	0.00				0.00				0.00		
Accumulated precipitation (inches) (1/1/2020)	2.68				4.05				3.13		

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.

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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 >>												
Almonds (3/5)	1.5	1.3	1.1	1.0	1.6	1.4	1.2	1.1	1.6	1.3	1.2	1.1
Pistachio (4/13)	1.4	1.2	1.1	1.0	1.6	1.3	1.2	1.1	1.5	1.3	1.1	1.0
Citrus (2/1)	1.1	1.0	0.8	0.8	1.2	1.1	0.9	0.8	1.2	1.0	0.9	0.8
Raisin Grapes (3/16) (11 ft. row spacing)	1.3	1.1	1.0	0.9	1.4	1.3	1.1	1.0	1.4	1.2	1.1	0.9
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.5	1.3	1.1	1.0	1.6	1.4	1.2	1.1	1.6	1.4	1.2	1.1
Walnuts (4/8)	1.4	1.2	1.0	0.9	1.5	1.3	1.2	1.0	1.5	1.3	1.1	1.0
Stone Fruit (3/10)	1.3	1.1	1.0	0.9	1.5	1.3	1.1	1.0	1.4	1.2	1.1	1.0

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			
	Almonds 115 Trees/A	354	307	260	236	378	331	283	260	378	307	283
Pistachio 106 Trees/A	349	299	274	249	399	324	299	274	374	324	274	249
Citrus 110 Trees/A	272	247	197	197	296	272	222	197	296	247	222	197
Raisin Grapes 566 Vines/A	62	53	48	43	67	62	53	48	67	58	53	43
Winegrapes 622 Vines/A	65	57	48	44	70	61	52	48	70	61	52	48
Walnuts 76 Trees/A	500	429	357	322	536	464	429	357	536	464	393	357
Stonefruit 172 Trees/A	205	174	158	142	237	205	174	158	221	189	174	158

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