University of California

**Agriculture and Natural Resources** 

Making a Difference for California



UCCE/DWR Weekly Crop Water Use Report

## WEEKLY SOIL MOISTURE LOSS IN INCHES (Estimated Crop Evapotranspiration or ET<sub>C</sub>) 10/08/21 through 10/14/21

Crops (Leafout Date)	#148 Merced			#39 Parlier			#258 Lemon Cove		
	10/8 - 10/14	Accum'd	10/15 - 10/21	10/8 - 10/14	Accum'd	10/15 - 10/21	10/8 - 10/14	Accum'd	10/15 - 10/21
	Water	Seasonal	Estimated	Water	Seasonal	Estimated	Water	Seasonal	Estimated
	Use	Water Use	ETc	Use	Water Use	ETc	Use	Water Use	ETc
Almonds (3/5) *	0.93	45.80	0.70	0.87	48.62	0.67	0.69	44.94	0.67
Pistachio (4/16) * **	0.85	39.78	0.61	0.79	42.50	0.58	0.63	38.97	0.58
Citrus (2/1)	0.70	34.76	0.55	0.66	36.64	0.53	0.50	33.96	0.53
Raisin Grapes (3/12) (11 ft. row spacing)	0.85	32.16	0.63	0.80	34.38	0.60	0.61	31.47	0.60
Winegrapes (3/12) (10 ft. spacing on California Sprawl Trellis) ***	0.94	35.46	0.77	0.88	37.90	0.74	0.74	34.75	0.74
Walnuts (4/5)	0.53	40.79	0.21	0.49	43.46	0.21	0.38	40.04	0.21
Stone Fruit (3/10)	0.88	39.19	0.63	0.82	41.86	0.60	0.63	38.38	0.60
Past 7 days precipitation (inches)		0.00			0.00			0.00	
Accumulated precipitation (inches) (1/1/2021)		5.62			3.95			3.90	

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 stre 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 <sup>1</sup>												
Crops		#148 Merce	ed			#39 Parlier						
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/5)	1.4	1.2	1.1	1.0	1.3	1.2	1.0	0.9	1.1	0.9	0.8	0.7
Pistachio (4/16)	1.3	1.1	1.0	0.9	1.2	1.1	0.9	0.8	1.0	0.8	0.7	0.7
Citrus (2/1)	1.1	0.9	0.8	0.7	1.0	0.9	0.8	0.7	0.8	0.7	0.6	0.5
Raisin Grapes (3/12) (11 ft. row spacing)***	1.3	1.1	1.0	0.9	1.2	1.1	0.9	0.8	0.9	0.8	0.7	0.6
Winegrapes (3/12) (10 ft. spacing on California Sprawl Trellis) ***	1.4	1.3	1.1	1.0	1.4	1.2	1.0	0.9	1.1	1.0	0.9	0.8
Walnuts (4/5)	0.8	0.7	0.6	0.6	0.8	0.7	0.6	0.5	0.6	0.5	0.4	0.4
Stone Fruit (3/10)	1.4	1.2	1.0	0.9	1.3	1.1	1.0	0.9	1.0	0.8	0.7	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				
Almonds 115 Trees/A	331	283	260	236	307	283	236	213	260	213	189	165	
Pistachio 106 Trees/A	324	274	249	224	299	274	224	199	249	199	174	174	
Citrus 110 Trees/A	272	222	197	173	247	222	197	173	197	173	148	123	
Raisin Grapes 566 Vines/A	62	53	48	43	58	53	43	38	43	38	34	29	
Winegrapes 622 Vines/A	61	57	48	44	61	52	44	39	48	44	39	35	
Walnuts 76 Trees/A	286	250	214	214	286	250	214	179	214	179	143	143	
Stonefruit 172 Trees/A	221	189	158	142	205	174	158	142	158	126	111	111	
For further information concerning all counties receiving this report, contact	or further information concerning all counties receiving this report, contact the Fresno Co. Farm Advisor's office at (559) 241-7526.												

ess.	Weekly	estimates	of soil	moisture

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## HEALTHY FOOD SYSTEMS . HEALTHY ENVIRONMENTS

UCCE/DWR Weekly Crop Water Use Report

## WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET<sub>C</sub>)

10/08/21 through 10/14/21

Crops (Leafout Date)	#124 Panoche			#2 Five Points			#15 Stratford			
	10/8 - 10/14	Accum'd	10/15-10/21	10/8 - 10/14	Accum'd	10/15-10/21	10/8 - 10/14	Accum'd	10/15-10/21	
	Water	Seasonal	Estimated	Water	Seasonal	Estimated	Water	Seasonal	Estimated	
	Use	Water Use	ETc	Use	Water Use	ETc	Use	Water Use	ETc	
Almonds (3/5) *	1.10	52.12	0.77	1.15	52.81	0.82	1.16	53.94	0.78	
Pistachio (4/16) * **	0.99	45.96	0.68	1.03	46.07	0.75	1.04	47.39	0.70	
Citrus (2/1)	0.83	39.52	0.59	0.85	40.49	0.68	0.87	40.90	0.63	
Raisin Grapes (3/12) (11 ft. row spacing)	0.99	37.10	0.73	1.02	37.23	0.82	1.04	38.29	0.77	
Winegrapes (3/12) (10 ft. spacing on California Sprawl Trellis)	1.10	40.98	0.84	1.16	41.26	0.89	1.17	42.35	0.85	
Walnuts (4/5)	0.60	46.82	0.24	0.62	47.05	0.28	0.63	48.15	0.27	
Stone Fruit (3/10)	1.03	45.13	0.73	1.04	45.54	0.81	1.04	46.66	0.77	
Past 7 days precipitation (inches)		0.00			0.00			0.00		
Accumulated precipitation (inches) (1/1/2021)		3.83			5.17			3.09		

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 <sup>1</sup>												
Crops		#124 Pano	che			#2 Five Poi	ints					
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/5)	1.7	1.5	1.3	1.2	1.8	1.5	1.4	1.2	1.8	1.5	1.4	1.2
Pistachio (4/16)	1.5	1.3	1.2	1.0	1.6	1.4	1.2	1.1	1.6	1.4	1.2	1.1
Citrus (2/1)	1.3	1.1	1.0	0.9	1.3	1.1	1.0	0.9	1.3	1.2	1.0	0.9
Raisin Grapes (3/12) (11 ft. row spacing)	1.5	1.3	1.2	1.0	1.6	1.4	1.2	1.1	1.6	1.4	1.2	1.1
Winegrapes (3/12) (10 ft. spacing on California Sprawl Trellis)	1.7	1.5	1.3	1.2	1.8	1.5	1.4	1.2	1.8	1.6	1.4	1.2
Walnuts (4/5)	0.9	0.8	0.7	0.6	1.0	0.8	0.7	0.7	1.0	0.8	0.7	0.7
Stone Fruit (3/10)	1.6	1.4	1.2	1.1	1.6	1.4	1.2	1.1	1.6	1.4	1.2	1.1

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 Pano	che			#2 Five Poi	ints					
Almonds 115 Trees/A	401	354	307	283	425	354	331	283	425	354	331	283
Pistachio 106 Trees/A	374	324	299	249	399	349	299	274	399	349	299	274
Citrus 110 Trees/A	321	272	247	222	321	272	247	222	321	296	247	222
Raisin Grapes 566 Vines/A	72	62	58	48	77	67	58	53	77	67	58	53
Winegrapes 622 Vines/A	74	65	57	52	79	65	61	52	79	70	61	52
Walnuts 76 Trees/A	322	286	250	214	357	286	250	250	357	286	250	250
Stonefruit 172 Trees/A	253	221	189	174	253	221	189	174	253	221	189	174
For further information concerning all counties receiving this report, contact	the Fresno	Co. Farm Ad	lvisor's offic	e at (559) 24	41-7526.				-			