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>) 10/29/21 through 11/04/21

Crops (Leafout Date)	#	#148 Merced			#39 Parlier			#258 Lemon Cove			
	10/29 - 11/4	Accum'd	11/5 - 11/11		10/29 - 11/4	Accum'd	11/5 - 11/11	10/29 - 11/4	Accum'd	11/5 - 11/11	
	Water	Seasonal	Estimated		Water	Seasonal	Estimated	Water	Seasonal	Estimated	
	Use	Water Use	ETc		Use	Water Use	ETc	Use	Water Use	ETc	
Almonds (3/5) *	0.44	47.37	0.35		0.44	50.29	0.34	0.39	46.47	0.34	
Pistachio (4/16) * **	0.39	41.15	0.31		0.39	43.94	0.31	0.33	40.28	0.31	
Citrus (2/1)	0.39	36.07	0.35		0.39	38.00	0.33	0.33	35.23	0.34	
Raisin Grapes (3/12) (11 ft. row spacing)	0.47	33.72	0.42		0.46	36.00	0.40	0.40	32.98	0.41	
Winegrapes (3/12) (10 ft. spacing on California Sprawl Trellis) ***	0.54	37.26	0.49		0.55	39.81	0.47	0.46	36.48	0.48	
Walnuts (4/5)	0.15	41.31	0.14		0.16	44.01	0.14	0.13	40.55	0.14	
Stone Fruit (3/10)	0.41	40.64	0.24		0.43	43.40	0.24	0.36	39.82	0.24	
Past 7 days precipitation (inches)		0.02				0.01			0.00		
Accumulated precipitation (inches) (1/1/2021)		9.00				5.05			5.83		

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)	0.7	0.6	0.5	0.5	0.7	0.6	0.5	0.5	0.6	0.5	0.5	0.4
Pistachio (4/16)	0.6	0.5	0.5	0.4	0.6	0.5	0.5	0.4	0.5	0.4	0.4	0.3
Citrus (2/1)	0.6	0.5	0.5	0.4	0.6	0.5	0.5	0.4	0.5	0.4	0.4	0.3
Raisin Grapes (3/12) (11 ft. row spacing)***	0.7	0.6	0.6	0.5	0.7	0.6	0.5	0.5	0.6	0.5	0.5	0.4
Winegrapes (3/12) (10 ft. spacing on California Sprawl Trellis) ***	0.8	0.7	0.6	0.6	0.8	0.7	0.6	0.6	0.7	0.6	0.5	0.5
Walnuts (4/5)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1
Stone Fruit (3/10)	0.6	0.5	0.5	0.4	0.7	0.6	0.5	0.5	0.6	0.5	0.4	0.4

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	•					
Almonds 115 Trees/A	165	142	118	118	165	142	118	118	142	118	118	94
Pistachio 106 Trees/A	149	125	125	100	149	125	125	100	125	100	100	75
Citrus 110 Trees/A	148	123	123	99	148	123	123	99	123	99	99	74
Raisin Grapes 566 Vines/A	34	29	29	24	34	29	24	24	29	24	24	19
Winegrapes 622 Vines/A	35	31	26	26	35	31	26	26	31	26	22	22
Walnuts 76 Trees/A	71	71	71	71	71	71	71	71	71	71	71	36
Stonefruit 172 Trees/A	95	79	79	63	111	95	79	79	95	79	63	63
For further information concerning all counties receiving this report, contact the Fresno Co. Farm Advisor's office at (559) 241-7526.												

ess. Weekly estimates of	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>)

10/29/21 through 11/04/21

Crops (Leafout Date)	#	#124 Panoche			#2 Five Points			#15 Stratford				
	10/29-11/4	Accum'd	11/5-11/11		10/29-11/4	Accum'd	11/5-11/11		10/29-11/4	Accum'd	11/5-11/11	
	Water	Seasonal	Estimated		10/30- 11/5	Seasonal	Estimated		Water	Seasonal	Estimated	
	Use	Water Use	ETc		Use	Water Use	ETc		Use	Water Use	ETc	
Almonds (3/5) *	0.45	53.90	0.38		0.44	54.59	0.45		0.62	56.03	0.44	
Pistachio (4/16) * **	0.39	47.47	0.34		0.38	47.61	0.38		0.54	49.18	0.38	
Citrus (2/1)	0.39	40.95	0.38		0.38	41.97	0.42		0.53	42.60	0.42	
Raisin Grapes (3/12) (11 ft. row spacing)	0.48	38.82	0.45		0.45	38.99	0.52		0.62	40.29	0.51	
Winegrapes (3/12) (10 ft. spacing on California Sprawl Trellis)	0.55	42.99	0.52		0.53	43.27	0.59		0.74	44.69	0.58	
Walnuts (4/5)	0.16	47.41	0.14		0.15	47.64	0.17		0.21	48.82	0.16	
Stone Fruit (3/10)	0.42	46.76	0.42		0.42	47.24	0.45		0.60	48.63	0.44	
Past 7 days precipitation (inches)		0.00				0.00				0.00		
Accumulated precipitation (inches) (1/1/2021)		4.60				5.96				3.82		

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.

PA	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)	0.7	0.6	0.5	0.5	0.7	0.6	0.5	0.5	1.0	0.8	0.7	0.7	
Pistachio (4/16)	0.6	0.5	0.5	0.4	0.6	0.5	0.4	0.4	0.8	0.7	0.6	0.6	
Citrus (2/1)	0.6	0.5	0.5	0.4	0.6	0.5	0.4	0.4	0.8	0.7	0.6	0.6	
Raisin Grapes (3/12) (11 ft. row spacing)	0.7	0.6	0.6	0.5	0.7	0.6	0.5	0.5	1.0	0.8	0.7	0.7	
Winegrapes (3/12) (10 ft. spacing on California Sprawl Trellis)	0.8	0.7	0.6	0.6	0.8	0.7	0.6	0.6	1.1	1.0	0.9	0.8	
Walnuts (4/5)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	
Stone Fruit (3/10)	0.6	0.6	0.5	0.4	0.6	0.6	0.5	0.4	0.9	0.8	0.7	0.6	

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 Poi	ints					
Almonds 115 Trees/A	165	142	118	118	165	142	118	118	236	189	165	165
Pistachio 106 Trees/A	149	125	125	100	149	125	100	100	199	174	149	149
Citrus 110 Trees/A	148	123	123	99	148	123	99	99	197	173	148	148
Raisin Grapes 566 Vines/A	34	29	29	24	34	29	24	24	48	38	34	34
Winegrapes 622 Vines/A	35	31	26	26	35	31	26	26	48	44	39	35
Walnuts 76 Trees/A	71	71	71	71	71	71	71	71	107	107	71	71
Stonefruit 172 Trees/A	95	95	79	63	95	95	79	63	142	126	111	95
For further information concerning all counties receiving this report, contact	the Fresno	Co. Farm Ad	visor's office	e at (559) 24	41-7526.				-			