### University of California Agriculture and Natural Resources



# UCCE/DWR Weekly Crop Water Use Report

Making a Difference for California

#### WEEKLY CROP WATER USE - Based on local CIMIS Weather Stations (in inches)

(Estimated Crop Evapotranspiration or  $ET_C$ ) 03/29/24 through 04/04/24

Crops (Leafout Date)	#148 Merced			#39 Parlier			#258 Lemon Cove			
	3/31 - 4/4	Accum'd	4/5 - 4/11	3/29 - 4/4	Accum'd	4/5 - 4/11	3/29 - 4/4	Accum'd	4/5 - 4/11	
	Water	Seasonal	Estimated	Water	Seasonal	Estimated	Water	Seasonal	Estimated	
	Use	Water Use	ETc	Use	Water Use	ETc	Use	Water Use	ETc	
Almonds (3/1) *	0.62	2.66	0.80	0.63	2.74	0.85	0.59	2.56	0.87	
Pistachio (TBD) * **	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Citrus (2/1)	0.62	4.39	0.77	0.62	4.58	0.78	0.57	4.40	0.80	
Raisin Grapes (3/11) (11 ft. row spacing)	0.07	0.21	0.12	0.07	0.20	0.12	0.07	0.18	0.12	
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	0.12	0.38	0.18	0.13	0.40	0.18	0.11	0.35	0.18	
Walnuts (TBD)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Stone Fruit (3/11)	0.24	0.73	0.32	0.25	0.74	0.37	0.24	0.70	0.37	
Past 7 days precipitation (inches)		0.50	·		0.73			0.61		
Accumulated precipitation (inches) (1/1/2024)		14.64			7.65			8.40		

Dates in parentheses above, indicate leaf out or starting date for ET accumulation for the specific crop

<sup>\*\*\*</sup> Raisin Grapes and Winegrapes Irrigation should hold off until midday leaf water potential drops to -1.0 MPa, before that soil moisture reservoir is sufficient to supply the vine water demand. Update will be sent shortly once the county wide leaf water potential reaches approximate -1.0 MPa. Growers should adjust the irrigation start date based on the individual vineyard location and soil type.

PAST WEEKLY APPLIED WATER IN INCHES, ADJUSTED FOR EFFICIENCY <sup>1</sup>													
Crops		#148 Merce	ed			#39 Parlier			#258 Lemon Cove				
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%	
Almonds (3/1)	1.0	0.8	0.7	0.7	1.0	0.8	0.7	0.7	0.9	0.8	0.7	0.6	
Pistachio (TBD)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
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 (3/11) (11 ft. row spacing)***	Assume all grape			0.0	Assume all grape			0.0	Assume all grape			0.0	
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis) ***	irrigation type is drip			0.0	irrigation type is drip			0.0	irrigation type is drip			0.0	
Walnuts (TBD)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Stone Fruit (3/11)	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	0.4	0.3	0.3	0.3	

<sup>1</sup> 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 Pistachio 106 Trees/A Citrus 110 Trees/A Raisin Grapes 566 Vines/A Assume all grape Assume all grape Assume all grape Winegrapes 622 Vines/A irrigation type is drip irrigation type is drip irrigation type is drip Walnuts 76 Trees/A Stonefruit 172 Trees/A For further information concerning all counties receiving this report, contact the Fresno Co. Farm Advisor's office at (559) 241-7526.

<sup>\*</sup> 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.

<sup>\*\*</sup> 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.

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(Estimated Crop Evapotranspiration or  $ET_C$ ) 03/29/24 through 04/04/24

Crops (Leafout Date)	#124 Panoche			#2 Five Points			#15 Stratford			
	3/29 - 4/4	Accum'd	4/5 - 4/11	3/29 - 4/4	Accum'd	4/5 - 4/11	3/29 - 4/4	Accum'd	4/5 - 4/11	
	Water	Seasonal	Estimated	Water	Seasonal	Estimated	Water	Seasonal	Estimated	
	Use	Water Use	ETc	Use	Water Use	ETc	Use	Water Use	ETc	
Almonds (3/1) *	0.68	2.32	0.91	0.59	2.37	0.98	0.63	2.27	0.97	
Pistachio (TBD) * **	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Citrus (2/1)	0.66	4.52	0.89	0.59	4.71	0.91	0.63	4.57	0.91	
Raisin Grapes (3/11) (11 ft. row spacing)	0.07	0.21	0.12	0.07	0.21	0.12	0.08	0.21	0.12	
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	0.13	0.40	0.18	0.11	0.40	0.18	0.13	0.40	0.18	
Walnuts (TBD)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Stone Fruit (3/11)	0.28	0.76	0.37	0.23	0.65	0.43	0.26	0.63	0.42	
Past 7 days precipitation (inches)		0.45	<del></del>		0.28			0.64	-	
Accumulated precipitation (inches) (1/1/2024)		5.59			6.17			4.17		

Dates in parentheses above, indicate leaf out or starting date for ET accumulation for the specific crop

#### PAST WEEKLY APPLIED WATER IN INCHES, ADJUSTED FOR EFFICIENCY 1

Crops		#124 Pano	che			#2 Five Poi	ints		#15 Stratford				
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%	
Almonds (3/1)	1.0	0.9	0.8	0.7	0.9	0.8	0.7	0.6	1.0	0.8	0.7	0.7	
Pistachio (TBD)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Citrus (2/1)	1.0	0.9	0.8	0.7	0.9	0.8	0.7	0.6	1.0	0.8	0.7	0.7	
Raisin Grapes (3/11) (11 ft. row spacing)	Assume all grape			0.0	Assume all grape			0.0	Assume all grape			0.0	
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	irrigation type is drip			0.0	irrigation type is drip			0.0	irrigation type is drip			0.0	
Walnuts (TBD)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Stone Fruit (3/11)	0.4	0.4	0.3	0.3	0.4	0.3	0.3	0.2	0.4	0.3	0.3	0.3	

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#### PAST WEEKLY APPLIED WATER IN GALLON PER TREE OR VINE

Crops		#124 Pano	che			#2 Five Po	ints		#15 Stratford			
Almonds 115 Trees/A	236	213	189	165	213	189	165	142	236	189	165	165
Pistachio 106 Trees/A	0	0	0	0	0	0	0	0	0	0	0	0
Citrus 110 Trees/A	247	222	197	173	222	197	173	148	247	197	173	173
Raisin Grapes 566 Vines/A	As	sume all gr	ape	0	Assume all grape 0			Assume all grape			0	
Winegrapes 622 Vines/A	irrigation type is drip			0	irrigation type is drip 0			0	irrigation type is drip			0
Walnuts 76 Trees/A	0	0	0	0	0	0	0	0	0	0	0	0
Stonefruit 172 Trees/A	63	63	47	47	63	47	47	32	63	47	47	47
For further information concerning all counties receiving this report, contact	t the Fresno	Co. Farm A	dvisor's offi	ce at (559)	241-7526.							

<sup>\*</sup> 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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