### University of California Agriculture and Natural Resources



# UCCE/DWR Weekly Crop Water Use Report

Making a Difference for California

#### WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or  $ET_C$ ) 04/19/24 through 04/25/24

Crops (Leafout Date)	#148 Merced				#39 Parlier				#258 Lemon Cove			
	04/19 - 04/25	Accum'd	04/26 - 05/02		04/19 - 04/25	Accum'd	04/26 - 05/02		04/19 - 04/25	Accum'd	04/26 - 05/02	1
	Water	Seasonal	Estimated		Water	Seasonal	Estimated		Water	Seasonal	Estimated	l
	Use	Water Use	ETc		Use	Water Use	ETc		Use	Water Use	ETc	1
Almonds (3/1) *	1.07	5.37	1.18		1.09	5.53	1.21		1.08	5.32	1.25	l
Pistachio (4/20) * **	0.12	0.12	0.30		0.11	0.11	0.30		0.11	0.11	0.31	İ
Citrus (2/1)	0.91	6.84	0.97		0.94	7.12	1.01		0.94	6.88	1.05	İ
Raisin Grapes (3/11) (11 ft. row spacing)	0.30	0.77	0.37		0.29	0.77	0.38		0.30	0.75	0.42	
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	0.33	1.12	0.40		0.35	1.13	0.42		0.34	1.10	0.43	
Walnuts (4/20)	0.12	0.12	0.15		0.14	0.14	0.17		0.15	0.15	0.21	
Stone Fruit (3/11)	0.49	1.97	0.75		0.52	2.04	0.77		0.52	2.01	0.81	
Past 7 days precipitation (inches)		0.00		_		0.00		-		0.00		
Accumulated precipitation (inches) (1/1/2023)		14.98				8.64				9.06		

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.

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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)	1.6	1.4	1.3	1.1	1.7	1.5	1.3	1.1	1.7	1.4	1.3	1.1
Pistachio (4/20)	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1
Citrus (2/1)	1.4	1.2	1.1	1.0	1.4	1.3	1.1	1.0	1.4	1.3	1.1	1.0
Raisin Grapes (3/11) (11 ft. row spacing)***	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis) ***	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Walnuts (4/20)	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2
Stone Fruit (3/11)	0.8	0.7	0.6	0.5	0.8	0.7	0.6	0.5	0.8	0.7	0.6	0.5

<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 Merce	ed			#39 Parlier			#258 Lemon Cove			
Almonds 115 Trees/A	378	331	307	260	401	354	307	260	401	331	307	260
Pistachio 106 Trees/A	50	50	25	25	50	25	25	25	50	25	25	25
Citrus 110 Trees/A	346	296	272	247	346	321	272	247	346	321	272	247
Raisin Grapes 566 Vines/A	0	0	0	0	0	0	0	0	0	0	0	0
Winegrapes 622 Vines/A	0	0	0	0	0	0	0	0	0	0	0	0
Walnuts 76 Trees/A	71	71	36	36	71	71	71	36	71	71	71	71
Stonefruit 172 Trees/A	126	111	95	79	126	111	95	79	126	111	95	79

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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### WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or  $ET_C$ ) 04/19/24 through 04/25/24

Crops (Leafout Date)	#124 Panoche				#2 Five Points				#15 Stratford			
	04/19- 04/25	Accum'd	04/26- 05/02		04/19- 04/25	Accum'd	04/26- 05/02		04/19- 04/25	Accum'd	04/26- 05/02	
	Water	Seasonal	Estimated		Water	Seasonal	Estimated		Water	Seasonal	Estimated	
	Use	Water Use	ETc		Use	Water Use	ETc		Use	Water Use	ETc	
Almonds (3/1) *	1.18	5.19	1.34		1.21	5.26	1.41		1.13	5.09	1.38	
Pistachio (4/20) * **	0.11	0.11	0.36		0.13	0.13	0.38		0.11	0.11	0.37	
Citrus (2/1)	1.01	7.12	1.13		1.07	7.38	1.20		0.99	7.17	1.17	
Raisin Grapes (3/11) (11 ft. row spacing)	0.30	0.77	0.41		0.32	0.79	0.43		0.29	0.77	0.42	
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	0.35	1.15	0.45		0.36	1.14	0.48		0.34	1.12	0.46	
Walnuts (4/20)	0.15	0.15	0.21		0.16	0.16	0.21		0.16	0.16	0.21	
Stone Fruit (3/11)	0.57	2.11	0.86		0.58	2.04	0.91		0.54	1.96	0.89	
Past 7 days precipitation (inches)		0.00		-		0.00		-		0.00		_
Accumulated precipitation (inches) (1/1/2023)		6.41				6.69				5.29		

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

Walnuts (4/20)

Stone Fruit (3/11)

<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.

Crops		#124 Panoc	he		#2 Five Poi	nts		#15 Stratford				
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/1)	1.8	1.6	1.4	1.2	1.9	1.6	1.4	1.3	1.7	1.5	1.3	1.2
Pistachio (4/20)	0.2	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.1	0.1
Citrus (2/1)	1.6	1.3	1.2	1.1	1.6	1.4	1.3	1.1	1.5	1.3	1.2	1.0
Raisin Grapes (3/11) (11 ft. row spacing)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4

PAST WEEKLY APPLIED WATER IN INCHES, ADJUSTED FOR EFFICIENCY

0.2

0.6

0.2

0.9

0.2

0.8

0.2

0.7

0.2

0.6

0.2

0.8

0.2

0.7

0.2

0.6

0.2

0.6

0.2

0.7

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

0.2

0.8

0.2

0.9

Cwang		#124 Damas				#2 Five Poi			#15 Stratford			
Crops	#124 Panoche					#2 Five Pol	nts					
Almonds 115 Trees/A	425	378	331	283	449	378	331	307	401	354	307	283
Pistachio 106 Trees/A	50	25	25	25	50	50	50	25	50	25	25	25
Citrus 110 Trees/A	395	321	296	272	395	346	321	272	370	321	296	247
Raisin Grapes 566 Vines/A	0	0	0	0	0	0	0	0	0	0	0	0
Winegrapes 622 Vines/A	0	0	0	0	0	0	0	0	0	0	0	17
Walnuts 76 Trees/A	71	71	71	71	71	71	71	71	71	71	71	71
Stonefruit 172 Trees/A	142	126	111	95	142	126	111	95	126	111	95	95
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