### 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  $ET_C$ ) 04/26/24 through 05/02/24

Crops (Leafout Date)	#148 Merced			#39 Parlier			#258 Lemon Cove		
	04/26 - 05/02	Accum'd	05/03 - 05/09	04/26 - 05/02	Accum'd	05/03 - 05/09	04/26 - 05/02	Accum'd	05/03 - 05/09
	Water	Seasonal	Estimated	Water	Seasonal	Estimated	Water	Seasonal	Estimated
	Use	Water Use	ETc	Use	Water Use	ЕТс	Use	Water Use	ETc
Almonds (3/1) *	1.18	6.55	1.31	1.25	6.78	1.33	1.13	6.45	1.41
Pistachio (4/20) * **	0.30	0.42	0.51	0.32	0.43	0.53	0.28	0.39	0.55
Citrus (2/1)	0.97	7.81	1.05	1.04	8.16	1.05	0.94	7.82	1.11
Raisin Grapes (3/11) (11 ft. row spacing)	0.42	1.18	0.51	0.48	1.24	0.52	0.43	1.17	0.55
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	0.44	1.56	0.51	0.48	1.61	0.52	0.43	1.53	0.55
Walnuts (4/20)	0.15	0.27	0.80	0.19	0.33	0.82	0.18	0.33	0.84
Stone Fruit (3/11)	0.75	2.72	0.80	0.80	2.84	0.82	0.73	2.74	0.84
Past 7 days precipitation (inches)		0.00			0.00			0.06	
Accumulated precipitation (inches) (1/1/2024)		14.98			8.64			9.12	

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

For further information concerning all counties receiving this report, contact the Fresno Co. Farm Advisor's office at (559) 241-7526.

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

Crops		#148 Merce	d			#39 Parlier			#258 Lemon Cove			
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	1.7	1.5	1.3	1.7	1.5	1.3	1.2
Pistachio (4/20)	0.5	0.4	0.4	0.3	0.5	0.4	0.4	0.3	0.4	0.4	0.3	0.3
Citrus (2/1)	1.5	1.3	1.1	1.0	1.6	1.4	1.2	1.1	1.4	1.3	1.1	1.0
Raisin Grapes (3/11) (11 ft. row spacing)***	As	ssume all gra	pe	0.4	Assume all grape 0			0.5	Assume all grape			0.4
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis) ***	irrig	ation type is	drip	0.5	irrigation type is drip		0.5	irrigation type is drip		drip	0.5	
Walnuts (4/20)	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.3	0.2	0.2	0.2
Stone Fruit (3/11)	1.2	1.0	0.9	0.8	1.2	1.1	0.9	0.8	1.1	1.0	0.9	0.8

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	425	378	331	283	449	401	354	307	401	354	307	283
Pistachio 106 Trees/A	125	100	100	75	125	100	100	75	100	100	75	75
Citrus 110 Trees/A	370	321	272	247	395	346	296	272	346	321	272	247
Raisin Grapes 566 Vines/A	Assume all grape			19	Assume all grape 24		24	Assume all grape			19	
Winegrapes 622 Vines/A	irrig	ation type is	drip	22	irrigation type is drip		22	irrigation type is drip		drip	22	
Walnuts 76 Trees/A	71	71	71	71	107	107	71	71	107	71	71	71
Stonefruit 172 Trees/A	189	158	142	126	189	174	142	126	174	158	142	126

<sup>\*</sup> Estimates are for orchard floor conditions where vegetation is managed by some combination of atrip 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  $ET_C$ ) 04/26/24 through 05/02/24

Crops (Leafout Date)	#124 Panoche			<b>#2 Five Points</b>			#15 Stratford			
	04/26- 05/02	Accum'd	05/03- 05/09	04/26- 05/02	Accum'd	05/03- 05/09	04/26- 05/02	Accum'd	05/03- 05/09	
	Water	Seasonal	Estimated	Water	Seasonal	Estimated	Water	Seasonal	Estimated	
	Use	Water Use	ETc	Use	Water Use	ETc	Use	Water Use	ETc	
Almonds (3/1) *	1.44	6.63	1.52	1.51	6.77	1.54	1.27	6.36	1.54	
Pistachio (4/20) * **	0.37	0.48	0.60	0.39	0.52	0.62	0.33	0.44	0.62	
Citrus (2/1)	1.22	8.34	1.24	1.29	8.67	1.26	1.07	8.24	1.26	
Raisin Grapes (3/11) (11 ft. row spacing)	0.51	1.28	0.58	0.54	1.34	0.60	0.45	1.22	0.60	
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	0.53	1.68	0.58	0.55	1.69	0.60	0.48	1.59	0.60	
Walnuts (4/20)	0.21	0.36	0.91	0.22	0.38	0.91	0.19	0.35	0.91	
Stone Fruit (3/11)	0.92	3.03	0.91	0.98	3.02	0.91	0.83	2.79	0.91	
Past 7 days precipitation (inches)		0.00	<del>-</del>		0.00			0.00		
Accumulated precipitation (inches) (1/1/2024)		6.41			6.69			5.29		

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

<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.

PAST WEEKLY APPLIED WATER IN INCHES, ADJUSTED FOR EFFICIENCY <sup>1</sup>													
Crops		#124 Panoc	he			#2 Five Poi	nts						
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%	
Almonds (3/1)	2.2	1.9	1.7	1.5	2.3	2.0	1.8	1.6	2.0	1.7	1.5	1.3	
Pistachio (4/20)	0.6	0.5	0.4	0.4	0.6	0.5	0.5	0.4	0.5	0.4	0.4	0.3	
Citrus (2/1)	1.9	1.6	1.4	1.3	2.0	1.7	1.5	1.4	1.6	1.4	1.3	1.1	
Raisin Grapes (3/11) (11 ft. row spacing)	As	ssume all gra	ipe	0.5	Assume all grape 0.6			0.6	A	0.5			
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	irrig	ation type is	drip	0.6	irrigation type is drip		drip	0.6	irrigation type is drip		drip	0.5	
Walnuts (4/20)	0.3	0.3	0.2	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.2	
Stone Fruit (3/11)	1.4	1.2	1.1	1.0	1.5	1.3	1.2	1.0	1.3	1.1	1.0	0.9	

<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		#124 Panoc	he			#2 Five Poi	nts					
Almonds 115 Trees/A	519	449	401	354	543	472	425	378	472	401	354	307
Pistachio 106 Trees/A	149	125	100	100	149	125	125	100	125	100	100	75
Citrus 110 Trees/A	469	395	346	321	494	420	370	346	395	346	321	272
Raisin Grapes 566 Vines/A	Assume all grape			24	Assume all grape 29			29	Assume all grape			24
Winegrapes 622 Vines/A	irrig	ation type is	drip	26	irrigation type is drip 26			26	irrigation type is drip			22
Walnuts 76 Trees/A	107	107	71	71	107	107	107	71	107	107	71	71
Stonefruit 172 Trees/A	221	189	174	158	237	205	189	158	205	174	158	142
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.