# 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>) 08/25/23 through 08/31/23

Crops (Leafout Date)	#148 Merced				#39 Parlier			#258 Lemon Cove			
	8/25 - 8/31	Accum'd	9/1 - 9/7	8/25 - 8/31	Accum'd	9/1 - 9/7		8/25 - 8/31	Accum'd	9/1 - 9/7	
	Water	Seasonal	Estimated	Water	Seasonal	Estimated		Water	Seasonal	Estimated	
	Use	Water Use	ETc	Use	Water Use	ETc		Use	Water Use	ETc	
Almonds (3/13) *	1.73	35.24	1.59	1.79	37.14	1.49		1.67	36.19	1.47	
Pistachio (4/20) * **	1.74	29.48	1.63	1.80	31.02	1.56		1.69	30.52	1.54	
Citrus (2/1)	1.08	26.50	1.07	1.11	28.13	1.04		1.05	27.28	1.02	
Raisin Grapes (3/22) (11 ft. row spacing)	1.13	19.14	1.06	1.16	20.12	1.03		1.10	19.83	1.01	
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis) ***	1.30	21.05	1.21	1.34	22.14	1.15		1.26	21.79	1.13	
Walnuts (4/20)	1.81	27.77	1.67	1.87	29.27	1.60		1.76	28.82	1.58	
Stone Fruit (3/19)	1.74	30.64	1.63	1.80	32.19	1.56		1.69	31.63	1.54	
Past 7 days precipitation (inches)		0.00			0.00		_		0.00		
Accumulated precipitation (inches) (1/1/2023)		16.39			13.04				16.68		

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	

Crops	#148 Merced					#39 Parlier	•		#258 Lemon Cove			
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/13)	2.7 2.3 2.0		1.8	2.8	2.4	2.1	1.9	2.6	2.2	2.0	1.8	
Pistachio (4/20)	2.7 2.3 2.0		1.8	2.8	2.4	2.1	1.9	2.6	2.3	2.0	1.8	
Citrus (2/1)	1.7	1.4	1.3	1.1	1.7	1.5	1.3	1.2	1.6	1.4	1.2	1.1
Raisin Grapes (3/22) (11 ft. row spacing)***	Assume all grape			1.2	Assume all grape			1.2	Assume all grape			1.2
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis) ***	irriga	ation type is	s drip	1.4	irrigation type is drip			1.4	irrigation type is drip		1.3	
Walnuts (4/20)	2.8	2.4	2.1	1.9	2.9	2.5	2.2	2.0	2.7	2.3	2.1	1.9
Stone Fruit (3/19)	2.7	2.3	2.0	1.8	2.8	2.4	2.1	1.9	2.6	2.3	2.0	1.8

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	638	543	472	425	661	567	496	449	614	519	472	425
Pistachio 106 Trees/A	673	573	498	448	698	598	523	473	648	573	498	448
Citrus 110 Trees/A	420	346	321	272	420	370	321	296	395	346	296	272
Raisin Grapes 566 Vines/A	As	sume all gra	ape	58	Assume all grape 58				Assume all grape			58
Winegrapes 622 Vines/A	irriga	irrigation type is drip			irrigation type is drip 61			61	irrigation type is drip			57
Walnuts 76 Trees/A	1000	857	750	679	1036	893	786	715	965	822	750	679
Stonefruit 172 Trees/A	426	363	316	284	442	379	332	300	410	363	316	284
For further information concerning all counties receiving this report, contact	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.



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### WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET<sub>C</sub>) 08/25/23 through 08/31/23

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Crops (Leafout Date)	#124 Panoche				#2 Five Points			#			
	8/25- 8/31	Accum'd	9/1-9/7		8/25-8/31	Accum'd	9/1-9/7	8/25-8/31	Accum'd	9/1-9/7	
	Water	Seasonal	Estimated		Water	Seasonal	Estimated	Water	Seasonal	Estimated	
	Use	Water Use	ETc		Use	Water Use	ЕТс	Use	Water Use	ETc	
Almonds (3/13) *	1.85	38.06	1.60		1.94	37.32	1.77	1.92	40.64	1.75	
Pistachio (4/20) * **	1.88	32.21	1.64		1.99	31.34	1.81	1.98	34.01	1.78	
Citrus (2/1)	1.20	28.50	1.10		1.25	28.19	1.25	1.24	30.63	1.24	
Raisin Grapes (3/22) (11 ft. row spacing)	1.22	20.53	1.07		1.29	20.06	1.17	1.28	21.68	1.16	
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	1.39	22.54	1.22		1.47	21.96	1.35	1.45	23.80	1.33	
Walnuts (4/20)	1.95	30.36	1.68		2.06	29.51	1.85	2.05	32.09	1.82	
Stone Fruit (3/19)	1.88	33.55	1.64		1.99	32.75	1.81	1.98	35.65	1.78	
Past 7 days precipitation (inches)		0.00	<del></del>	-		0.00		 -	0.00	<del></del>	
Accumulated precipitation (inches) (1/1/2023)		6.36				8.39			8.15		

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 1												
Crops		#124 Pano	che	#2 Five Points								
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/13)	2.8 2.5 2.2		1.9	3.0	2.6	2.3	2.0	3.0	2.6	2.3	2.0	
Pistachio (4/20)	2.9	2.5	2.2	2.0	3.1	2.7	2.3	2.1	3.0	2.6	2.3	2.1
Citrus (2/1)	1.8	1.6	1.4	1.3	1.9	1.7	1.5	1.3	1.9	1.7	1.5	1.3
Raisin Grapes (3/22) (11 ft. row spacing)	Assume all grape			1.3	Assume all grape			1.4	Assume all grape			1.3
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	irriga	ation type is	s drip	1.5	irriga	ation type is	s drip	1.5	irrigation type is drip			1.5
Walnuts (4/20)	3.0	2.6	2.3	2.1	3.2	2.7	2.4	2.2	3.2	2.7	2.4	2.2
Stone Fruit (3/19)	2.9	2.5	2.2	2.0	3.1	2.7	2.3	2.1	3.0	2.6	2.3	2.1

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 W	EEKLY A	PPLIED W	ATER IN C	GALLON PI	ER TREE (	OR VINE							
Crops		#124 Pano	che		#2 Five Points					#15 Stratford				
Almonds 115 Trees/A	661	661 590 519		449	708	614	543	472	708	614	543	472		
Pistachio 106 Trees/A	722	623	548	498	772	673	573	523	747	648	573	523		
Citrus 110 Trees/A	444	395	346	321	469	420	370	321	469	420	370	321		
Raisin Grapes 566 Vines/A	Assume all grape			62	Assume all grape			67	Assume all grape		ape	62		
Winegrapes 622 Vines/A	irriga	ation type is	s drip	65	irrigation type is drip			65	irrigation type is drip			65		
Walnuts 76 Trees/A	1072	929	822	750	1143	965	857	786	1143	965	857	786		
Stonefruit 172 Trees/A	458	395	347	316	489	426	363	332	474	410	363	332		
For further information concerning all counties receiving this report, contact	t the Fresno	Co. Farm Ac	lvisor's offic	e at (559) 24	41-7526.									

<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.