## 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  $ET_C$ ) 05/10/24 through 05/16/24

Crops (Leafout Date)	#148 Merced				#39 Parlier			#258 Lemon Cove				
	05/10 - 05/16	Accum'd	05/17 - 05/23		05/10 - 05/16	Accum'd	05/17 - 05/23		05/10 - 05/16	Accum'd	05/17 - 05/23	
	Water	Seasonal	Estimated		Water	Seasonal	Estimated		Water	Seasonal	Estimated	
	Use	Water Use	ETc		Use	Water Use	ETc		Use	Water Use	ETc	_
Almonds (3/1) *	1.46	9.32	1.54		1.63	9.61	1.56		1.62	9.31	1.54	
Pistachio (4/20) * **	0.76	1.69	1.02		0.85	1.76	1.04		0.84	1.72	1.02	
Citrus (2/1)	1.08	9.94	1.12		1.25	10.37	1.14		1.24	10.05	1.12	
Raisin Grapes (3/11) (11 ft. row spacing)	0.77	2.52	0.93		0.88	2.65	0.94		0.88	2.60	0.93	
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	0.72	2.84	0.83		0.81	2.92	0.85		0.82	2.87	0.83	
Walnuts (4/20)	0.84	1.91	1.12		0.94	2.00	1.12		0.95	2.03	1.12	
Stone Fruit (3/11)	1.02	4.54	1.05		1.15	4.72	1.07		1.14	4.63	1.05	
Past 7 days precipitation (inches)		0.00		_		0.00		_		0.00		
Accumulated precipitation (inches) (1/1/2024)		14.98				8.98				9.71		

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		#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)	2.2	1.9	1.7	1.5	2.5	2.2	1.9	1.7	2.5	2.2	1.9	1.7	
Pistachio (4/20)	1.2	1.0	0.9	0.8	1.3	1.1	1.0	0.9	1.3	1.1	1.0	0.9	
Citrus (2/1)	1.7	1.4	1.3	1.1	1.9	1.7	1.5	1.3	1.9	1.7	1.5	1.3	
Raisin Grapes (3/11) (11 ft. row spacing)	As	ssume all gra	ipe	0.8	Assume all grape			0.9	Assume all grape			0.9	
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	irrig	ation type is	drip	0.8	irrigation type is drip			0.9	irrigation type is drip			0.9	
Walnuts (4/20)	1.3	1.1	1.0	0.9	1.4	1.3	1.1	1.0	1.5	1.3	1.1	1.0	
Stone Fruit (3/11)	1.6	1.4	1.2	1.1	1.8	1.5	1.4	1.2	1.8	1.5	1.3	1.2	

<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		ed		#39 Parlier			#258 Lemon Cove					
Almonds 115 Trees/A	519	449	401	354	590	519	449	401	590	519	449	401
Pistachio 106 Trees/A	299	249	224	199	324	274	249	224	324	274	249	224
Citrus 110 Trees/A	420	346	321	272	469	420	370	321	469	420	370	321
Raisin Grapes 566 Vines/A	Assume all grape			38	Assume all grape 43			43	Assume all grape			43
Winegrapes 622 Vines/A	irrig	ation type is	s drip	35	irrigation type is drip 39			39	irrigation type is drip			39
Walnuts 76 Trees/A	464	393	357	322	500	464	393	357	536	464	393	357
Stonefruit 172 Trees/A	253	221	189	174	284	237	221	189	284	237	205	189
For further information concerning all counties receiving this report, contact	t the Fresno C	o. Farm Adv	isor's office a	t (559) 241-	7526.							

<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  $ET_C$ ) 05/10/24 through 05/16/24

Crops (Leafout Date)	#124 Panoche			#2 Five Points			#15 Stratford			
	05/10- 05/16	Accum'd	05/17- 05/23	05/10- 05/16	Accum'd	05/17- 05/23	05/10- 05/16	Accum'd	05/17- 05/23	
	Water	Seasonal	Estimated	Water	Seasonal	Estimated	Water	Seasonal	Estimated	
	Use	Water Use	ETc	Use	Water Use	ETc	Use	Water Use	ETc	
Almonds (3/1) *	1.69	9.56	1.69	1.76	9.83	1.73	1.61	9.12	1.74	
Pistachio (4/20) * **	0.91	1.91	1.16	0.94	1.99	1.18	0.83	1.74	1.18	
Citrus (2/1)	1.33	10.68	1.26	1.37	11.10	1.28	1.24	10.42	1.29	
Raisin Grapes (3/11) (11 ft. row spacing)	0.91	2.73	1.01	0.94	2.83	1.05	0.85	2.57	1.05	
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	0.85	3.04	0.94	0.88	3.12	0.96	0.77	2.85	0.96	
Walnuts (4/20)	0.99	2.11	1.26	1.03	2.21	1.26	0.95	2.01	1.26	
Stone Fruit (3/11)	1.22	5.01	1.19	1.26	5.08	1.23	1.14	4.64	1.24	
Past 7 days precipitation (inches)		0.00			0.00			0.00		
Accumulated precipitation (inches) (1/1/2024)		6.60			6.86			5.43		

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 WEI	EKLY APPL	IED WATE	R IN INCHE	ES, ADJUSTI	ED FOR EFI	FICIENCY 1					
Crops	#124 Panoche					#2 Five Poi	nts					
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/1)	2.6	2.3	2.0	1.8	2.7	2.3	2.1	1.9	2.5	2.1	1.9	1.7
Pistachio (4/20)	1.4	1.2	1.1	1.0	1.4	1.3	1.1	1.0	1.3	1.1	1.0	0.9
Citrus (2/1)	2.0	1.8	1.6	1.4	2.1	1.8	1.6	1.4	1.9	1.7	1.5	1.3
Raisin Grapes (3/11) (11 ft. row spacing)	As	ssume all gra	ipe	1.0	Assume all grape			1.0	Assume all grape			0.9
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	irrig	gation type is	drip	0.9	irrigation type is drip		0.9	irrigation type is dr		drip	0.8	
Walnuts (4/20)	1.5	1.3	1.2	1.0	1.6	1.4	1.2	1.1	1.5	1.3	1.1	1.0
Stone Fruit (3/11)	1.9	1.6	1.4	1.3	1.9	1.7	1.5	1.3	1.8	1.5	1.3	1.2

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 W	ATER IN G	GALLON PE	R TREE OR	VINE					
Crops	#124 Panoche					#2 Five Poi	nts					
Almonds 115 Trees/A	614	543	472	425	638	543	496	449	590	496	449	401
Pistachio 106 Trees/A	349	299	274	249	349	324	274	249	324	274	249	224
Citrus 110 Trees/A	494	444	395	346	518	444	395	346	469	420	370	321
Raisin Grapes 566 Vines/A	As	ssume all gra	ipe	48	Assume all grape 48			48	As	43		
Winegrapes 622 Vines/A	irrig	gation type is	drip	39	irrigation type is drip			39	irrigation type is drip			35
Walnuts 76 Trees/A	536	464	429	357	572	500	429	393	536	464	393	357
Stonefruit 172 Trees/A	300	253	221	205	300	268	237	205	284	237	205	189
For further information concerning all counties receiving this report, contact	t the Fresno C	Co. Farm Advi	sor's office at	t (559) 241-7	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.