University of California Agriculture and Natural Resources

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UCCE/DWR Weekly Crop Water Use Report

WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_C) 05/03/24 through 05/09/24

Crops (Leafout Date)	#	#148 Merced			#39 Parlier				#25	8 Lemon C	ove
	05/03 - 05/09	Accum'd	05/10 - 05/16		05/03 - 05/09	Accum'd	05/10 - 05/16		05/03 - 05/09	Accum'd	05/10 - 05/16
	Water	Seasonal	Estimated		Water	Seasonal	Estimated		Water	Seasonal	Estimated
	Use	Water Use	ETc		Use	Water Use	ETc		Use	Water Use	ETc
Almonds (3/1) *	1.31	7.86	1.46		1.20	7.98	1.46		1.24	7.69	1.50
Pistachio (4/20) * **	0.51	0.93	0.76		0.48	0.91	0.76		0.49	0.88	0.78
Citrus (2/1)	1.05	8.86	1.08		0.96	9.12	1.08		0.99	8.81	1.12
Raisin Grapes (3/11) (11 ft. row spacing)	0.57	1.75	0.68		0.54	1.78	0.68		0.54	1.72	0.71
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	0.56	2.12	0.63		0.50	2.11	0.63		0.53	2.06	0.65
Walnuts (4/20)	0.80	1.07	0.84		0.73	1.06	0.84		0.75	1.08	0.84
Stone Fruit (3/11)	0.80	3.52	1.02		0.73	3.57	1.02		0.75	3.49	1.02
Past 7 days precipitation (inches)		0.00		•		0.34		_		0.59	_
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

^{**} 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	R IN INCHES, A	ADJUSTED FO	R EFFICIENCY 1

Crops		#148 Merce			#39 Parlier			#258 Lemon Cove				
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/1)	2.0	1.7	1.5	1.4	1.8	1.6	1.4	1.3	1.9	1.7	1.5	1.3
Pistachio (4/20)	0.8	0.7	0.6	0.5	0.7	0.6	0.6	0.5	0.8	0.7	0.6	0.5
Citrus (2/1)	1.6	1.4	1.2	1.1	1.5	1.3	1.1	1.0	1.5	1.3	1.2	1.0
Raisin Grapes (3/11) (11 ft. row spacing)	As	ssume all gra	pe	0.6	Assume all grape 0.6			0.6	Assume all grape			0.6
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	irrig	ation type is	drip	0.6	irrigation type is drip		drip	0.5	irrigation type is drip		drip	0.6
Walnuts (4/20)	1.2	1.1	0.9	0.8	1.1	1.0	0.9	0.8	1.2	1.0	0.9	0.8
Stone Fruit (3/11)	1.2	1.1	0.9	0.8	1.1	1.0	0.9	0.8	1.2	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 GA	LLON PER TREE OR VINE

Crops	#148 Merced					#39 Parlier			#258 Lemon Cove			
Almonds 115 Trees/A	472	401	354	331	425	378	331	307	449	401	354	307
Pistachio 106 Trees/A	199	174	149	125	174	149	149	125	199	174	149	125
Citrus 110 Trees/A	395	346	296	272	370	321	272	247	370	321	296	247
Raisin Grapes 566 Vines/A	As	sume all gra	пре	29	Assume all grape 29			29	Assume all grape			29
Winegrapes 622 Vines/A	irrig	ation type is	drip	26	irrigation type is drip 22			22	irrigation type is drip			26
Walnuts 76 Trees/A	429	393	322	286	393	357	322	286	429	357	322	286
Stonefruit 172 Trees/A	189	174	142	126	174	158	142	126	189	158	142	126

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

^{*} 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.





WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_C) 05/03/24 through 05/09/24

Crops (Leafout Date)	#	124 Panoch	e	#2 Five Points			#				
	05/03- 05/09	Accum'd	05/10- 05/16	05/03- 05/09	Accum'd	05/10- 05/16		05/03- 05/09	Accum'd	05/10- 05/16	
	Water	Seasonal	Estimated	Water	Seasonal	Estimated		Water	Seasonal	Estimated	
	Use	Water Use	ETc	Use	Water Use	ETc		Use	Water Use	ETc	
Almonds (3/1) *	1.24	7.87	1.62	1.30	8.07	1.62		1.15	7.51	1.62	
Pistachio (4/20) * **	0.52	1.00	0.85	0.53	1.05	0.85		0.47	0.91	0.85	
Citrus (2/1)	1.01	9.35	1.26	1.06	9.73	1.26		0.94	9.18	1.26	
Raisin Grapes (3/11) (11 ft. row spacing)	0.54	1.82	0.77	0.55	1.89	0.77		0.50	1.72	0.77	
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	0.51	2.19	0.71	0.54	2.24	0.71		0.48	2.08	0.71	
Walnuts (4/20)	0.76	1.12	0.94	0.80	1.18	0.95		0.71	1.06	0.96	
Stone Fruit (3/11)	0.76	3.79	1.15	0.80	3.82	1.15		0.71	3.50	1.15	
Past 7 days precipitation (inches)		0.19			0.17				0.14		
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

^{**} 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.

	INCHES, ADJUSTED	

TAST WEEKET ATTERED WATER IN INCHES, ADJUSTED FOR EFFICIENCY												
Crops	#124 Panoche				#2 Five Points				#15 Stratford			
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/1)	1.9	1.7	1.5	1.3	2.0	1.7	1.5	1.4	1.8	1.5	1.4	1.2
Pistachio (4/20)	0.8	0.7	0.6	0.5	0.8	0.7	0.6	0.6	0.7	0.6	0.6	0.5
Citrus (2/1)	1.6	1.3	1.2	1.1	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	sume all gra	pe	0.6	Assume all grape 0.6			0.6	Assume all grape			0.5
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			0.5
Walnuts (4/20)	1.2	1.0	0.9	0.8	1.2	1.1	0.9	0.8	1.1	0.9	0.8	0.7
Stone Fruit (3/11)	1.2	1.0	0.9	0.8	1.2	1.1	0.9	0.8	1.1	0.9	0.8	0.7

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		#124 Panoc		#2 Five Poi	nts		#15 Stratford					
Almonds 115 Trees/A	449	449 401 354		307	472	401	354	331	425	354	331	283
Pistachio 106 Trees/A	199	174	149	125	199	174	149	149	174	149	149	125
Citrus 110 Trees/A	395	321	296	272	395	346	296	272	346	321	272	247
Raisin Grapes 566 Vines/A	Assume all grape			29	Assume all grape 29			29	Assume all grape			24
Winegrapes 622 Vines/A	irrig	gation type is	drip	22	irrigation type is drip 22			22	irrigation type is drip			22
Walnuts 76 Trees/A	429	357	322	286	429	393	322	286	393	322	286	250
Stonefruit 172 Trees/A	189	158	142	126	189	174	142	126	174	142	126	111
For further information concerning all counties receiving this report, contact	t the Fresno C	o. Farm Advis	sor's office at	(559) 241-75	26.							

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