HEALTHY FOOD SYSTEMS • HEALTHY ENVIRONMENTS • HEALTHY COMMUNITIES • HEALTHY CALIFORNIANS

University of California
Agriculture and Natural Resources
Making a Difference for California

UCCE

UCCE/DWR Weekly Crop Water Use Report

WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_C)

05/05/23 through 05/11/23

Crops (Leafout Date)	#148 Merced			#39 Parlier			#258 Lemon Cove		
	5/5 - 5/11 Water Use	Accum'd Seasonal Water Use	5/12 - 5/18 Estimated ETc	5/5 - 5/11 Water Use	Accum'd Seasonal Water Use	5/12 - 5/18 Estimated ETc	5/5 - 5/11 Water Use	Accum'd Seasonal Water Use	5/12 - 5/18 Estimated ETc
Almonds (3/13) *	1.17	7.15	1.64	1.24	7.74	1.71	1.10	7.15	1.64
Pistachio (4/20) * **	0.71	1.59	1.14	0.75	1.72	1.15	0.65	1.58	1.08
Citrus (2/1)	0.94	8.62	1.26	1.00	9.30	1.33	0.88	8.67	1.26
Raisin Grapes (3/22) (11 ft. row spacing)	0.37	1.02	0.59	0.37	1.09	0.60	0.35	1.04	0.57
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	0.40	1.44	0.60	0.42	1.57	0.60	0.36	1.43	0.58
Walnuts (4/20)	0.80	1.77	1.26	0.85	1.95	1.26	0.75	1.83	1.19
Stone Fruit (3/19)	0.90	4.20	1.28	0.94	4.50	1.35	0.85	4.20	1.28
Past 7 days precipitation (inches)		0.02			0.00			0.00	
Accumulated precipitation (inches) (1/1/2023)		16.25			12.53			15.57	

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

* 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.

** 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	#148 Merced				#39 Parlier				#258 Lemon Cove			
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/13)	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)	1.1	0.9	0.8	0.7	1.2	1.0	0.9	0.8	1.0	0.9	0.8	0.7
Citrus (2/1)	1.4	1.3	1.1	1.0	1.5	1.3	1.2	1.1	1.4	1.2	1.0	0.9
Raisin Grapes (3/22) (11 ft. row spacing)	Assume all grape			0.4	Assume all grape			0.4	Assume all grape			0.4
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	irrigation type is drip			0.4	irrigation type is drip			0.4	irrigation type is drip			0.4
Walnuts (4/20)	1.2	1.1	0.9	0.8	1.3	1.1	1.0	0.9	1.2	1.0	0.9	0.8
Stone Fruit (3/19)	1.4	1.2	1.1	0.9	1.4	1.3	1.1	1.0	1.3	1.1	1.0	0.9

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	274	224	199	174	299	249	224	199	249	224	199	174
Citrus 110 Trees/A	346	321	272	247	370	321	296	272	346	296	247	222
Raisin Grapes 566 Vines/A	Assume all grape			19	Assume all grape			19	Assume all grape			19
Winegrapes 622 Vines/A	irrigation type is drip			17	irrigation type is drip			17	irrigation type is drip			17
Walnuts 76 Trees/A	429	393	322	286	464	393	357	322	429	357	322	286
Stonefruit 172 Trees/A	221	189	174	142	221	205	174	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.

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05/05/23 through 05/11/23

Crops (Leafout Date)	#124 Panoche				#2 Five Points				#15 Stratford			
	5/5 - 5/11 Water Use	Accum'd Seasonal Water Use	5/12 - 5/18 Estimated ETc		5/5 - 5/11 Water Use	Accum'd Seasonal Water Use	5/12 - 5/18 Estimated ETc		5/5 - 5/11 Water Use	Accum'd Seasonal Water Use	5/12 - 5/18 Estimated ETc	
Almonds (3/13) *	1.16	7.40	1.72		0.59	7.10	1.86		1.26	8.28	1.86	
Pistachio (4/20) * **	0.70	1.59	1.15		0.36	1.35	1.22		0.75	1.84	1.22	
Citrus (2/1)	0.91	8.91	1.33		0.47	8.86	1.40		1.01	9.98	1.40	
Raisin Grapes (3/22) (11 ft. row spacing)	0.32	0.93	0.54		0.17	0.82	0.60		0.36	1.07	0.60	
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	0.36	1.37	0.57		0.18	1.28	0.60		0.40	1.58	0.60	
Walnuts (4/20)	0.80	1.77	1.26		0.40	1.47	1.40		0.86	2.05	1.40	
Stone Fruit (3/19)	0.88	4.33	1.38		0.45	4.12	1.49		0.94	4.89	1.49	
Past 7 days precipitation (inches)		0.00				0.00				0.00		
Accumulated precipitation (inches) (1/1/2023)		6.12				7.65				7.90		

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Almonds (3/13)	1.8	1.5	1.4	1.2	0.9	0.8	0.7	0.6	1.9	1.7	1.5	1.3
Pistachio (4/20)	1.1	0.9	0.8	0.7	0.6	0.5	0.4	0.4	1.2	1.0	0.9	0.8
Citrus (2/1)	1.4	1.2	1.1	1.0	0.7	0.6	0.6	0.5	1.6	1.3	1.2	1.1
Raisin Grapes (3/22) (11 ft. row spacing)	Assume all grape			0.3	Assume all grape			0.2	Assume all grape			0.4
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	irrigation type is drip			0.4	irrigation type is drip			0.4	irrigation type is drip			0.4
Walnuts (4/20)	1.2	1.1	0.9	0.8	0.6	0.5	0.5	0.4	1.3	1.1	1.0	0.9
Stone Fruit (3/19)	1.4	1.2	1.0	0.9	0.7	0.6	0.5	0.5	1.4	1.3	1.1	1.0

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Pistachio 106 Trees/A	274	224	199	174	149	125	100	100	299	249	224	199
Citrus 110 Trees/A	346	296	272	247	173	148	148	123	395	321	296	272
Raisin Grapes 566 Vines/A	Assume all grape			14	Assume all grape			10	Assume all grape			19
Winegrapes 622 Vines/A	irrigation type is drip			17	irrigation type is drip			17	irrigation type is drip			17
Walnuts 76 Trees/A	429	393	322	286	214	179	179	143	464	393	357	322
Stonefruit 172 Trees/A	221	189	158	142	111	95	79	79	221	205	174	158

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