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)

06/14/24 through 06/20/24

Crops (Leafout Date)	#148 Merced			#39 Parlier			#258 Lemon Cove		
	06/14 - 06/20 Water Use	Accum'd Seasonal Water Use	06/21 - 06/27 Estimated ETc	06/14 - 06/20 Water Use	Accum'd Seasonal Water Use	06/21 - 06/27 Estimated ETc	06/14 - 06/20 Water Use	Accum'd Seasonal Water Use	06/21 - 06/27 Estimated ETc
Almonds (3/1) *	1.95	18.04	2.01	2.12	19.04	1.98	1.98	18.45	1.98
Pistachio (4/20) * **	2.09	9.99	2.13	2.26	10.72	2.10	2.12	10.38	2.10
Citrus (2/1)	1.25	15.82	1.26	1.34	16.74	1.26	1.25	16.22	1.26
Raisin Grapes (3/11) (11 ft. row spacing)	1.35	8.42	1.39	1.46	9.05	1.37	1.37	8.79	1.37
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	1.47	8.82	1.51	1.59	9.44	1.49	1.49	9.16	1.49
Walnuts (4/20)	1.60	8.68	1.72	1.78	9.37	1.69	1.63	9.12	1.69
Stone Fruit (3/11)	1.60	11.32	1.68	1.78	12.16	1.65	1.63	11.80	1.65
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

* 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 (3/1)	3.0	2.6	2.3	2.1	3.3	2.8	2.5	2.2	3.0	2.6	2.3	2.1
Pistachio (4/20)	3.2	2.8	2.5	2.2	3.5	3.0	2.7	2.4	3.3	2.8	2.5	2.2
Citrus (2/1)	1.9	1.7	1.5	1.3	2.1	1.8	1.6	1.4	1.9	1.7	1.5	1.3
Raisin Grapes (3/11) (11 ft. row spacing)	Assume all grape			1.4	Assume all grape			1.5	Assume all grape			1.4
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	irrigation type is drip			1.5	irrigation type is drip			1.7	irrigation type is drip			1.6
Walnuts (4/20)	2.5	2.1	1.9	1.7	2.7	2.4	2.1	1.9	2.5	2.2	1.9	1.7
Stone Fruit (3/11)	2.5	2.1	1.9	1.7	2.7	2.4	2.1	1.9	2.5	2.2	1.9	1.7

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	#148 Merced				#39 Parlier				#258 Lemon Cove			
Almonds 115 Trees/A	708	614	543	496	779	661	590	519	708	614	543	496
Pistachio 106 Trees/A	797	698	623	548	872	747	673	598	822	698	623	548
Citrus 110 Trees/A	469	420	370	321	518	444	395	346	469	420	370	321
Raisin Grapes 566 Vines/A	Assume all grape			67	Assume all grape			72	Assume all grape			67
Winegrapes 622 Vines/A	irrigation type is drip			65	irrigation type is drip			74	irrigation type is drip			70
Walnuts 76 Trees/A	893	750	679	607	965	857	750	679	893	786	679	607
Stonefruit 172 Trees/A	395	332	300	268	426	379	332	300	395	347	300	268

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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WEEKLY SOIL MOISTURE LOSS IN INCHES

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06/14/24 through 06/20/24

Crops (Leafout Date)	#124 Panoche			#2 Five Points			#15 Stratford		
	06/14- 06/20 Water Use	Accum'd Seasonal Water Use	06/21- 06/27 Estimated ETc	06/14- 06/20 Water Use	Accum'd Seasonal Water Use	06/21- 06/27 Estimated ETc	06/14- 06/20 Water Use	Accum'd Seasonal Water Use	06/21- 06/27 Estimated ETc
Almonds (3/1) *	2.27	19.36	2.16	2.37	19.99	2.24	1.87	17.73	2.27
Pistachio (4/20) * **	2.42	11.28	2.27	2.54	11.72	2.31	2.01	9.97	2.34
Citrus (2/1)	1.44	17.30	1.36	1.50	17.99	1.40	1.17	16.23	1.40
Raisin Grapes (3/11) (11 ft. row spacing)	1.56	9.37	1.51	1.64	9.75	1.55	1.29	8.39	1.56
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	1.71	9.73	1.63	1.79	10.07	1.67	1.39	8.70	1.69
Walnuts (4/20)	1.90	9.80	1.86	1.99	10.21	1.90	1.57	8.75	1.93
Stone Fruit (3/11)	1.90	12.76	1.82	1.99	13.10	1.86	1.57	11.43	1.89
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

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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)	3.5	3.0	2.7	2.4	3.6	3.2	2.8	2.5	2.9	2.5	2.2	2.0
Pistachio (4/20)	3.7	3.2	2.8	2.5	3.9	3.4	3.0	2.7	3.1	2.7	2.4	2.1
Citrus (2/1)	2.2	1.9	1.7	1.5	2.3	2.0	1.8	1.6	1.8	1.6	1.4	1.2
Raisin Grapes (3/11) (11 ft. row spacing)	Assume all grape			1.6	Assume all grape			1.7	Assume all grape			1.4
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	irrigation type is drip			1.8	irrigation type is drip			1.9	irrigation type is drip			1.5
Walnuts (4/20)	2.9	2.5	2.2	2.0	3.1	2.7	2.3	2.1	2.4	2.1	1.8	1.7
Stone Fruit (3/11)	2.9	2.5	2.2	2.0	3.1	2.7	2.3	2.1	2.4	2.1	1.8	1.7

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PAST WEEKLY APPLIED WATER IN GALLON PER TREE OR VINE

Crops	#124 Panoche				#2 Five Points				#15 Stratford			
Almonds 115 Trees/A	826	708	638	567	850	756	661	590	685	590	519	472
Pistachio 106 Trees/A	922	797	698	623	972	847	747	673	772	673	598	523
Citrus 110 Trees/A	543	469	420	370	568	494	444	395	444	395	346	296
Raisin Grapes 566 Vines/A	Assume all grape			77	Assume all grape			82	Assume all grape			67
Winegrapes 622 Vines/A	irrigation type is drip			79	irrigation type is drip			83	irrigation type is drip			65
Walnuts 76 Trees/A	1036	893	786	715	1108	965	822	750	857	750	643	607
Stonefruit 172 Trees/A	458	395	347	316	489	426	363	332	379	332	284	268

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