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)

05/31/24 through 06/06/24

Crops (Leafout Date)	#148 Merced			#39 Parlier			#258 Lemon Cove		
	05/31 - 06/06 Water Use	Accum'd Seasonal Water Use	06/07 - 06/13 Estimated ETc	05/31 - 06/06 Water Use	Accum'd Seasonal Water Use	06/07 - 06/13 Estimated ETc	05/31 - 06/06 Water Use	Accum'd Seasonal Water Use	06/07 - 06/13 Estimated ETc
Almonds (3/1) *	1.76	14.25	1.84	1.86	14.91	1.84	1.81	14.51	1.81
Pistachio (4/20) * **	1.77	5.87	2.03	1.89	6.26	2.03	1.84	6.11	2.00
Citrus (2/1)	1.19	13.38	1.19	1.25	14.08	1.19	1.21	13.69	1.17
Raisin Grapes (3/11) (11 ft. row spacing)	1.20	5.77	1.30	1.30	6.20	1.30	1.26	6.07	1.28
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	1.22	6.00	1.33	1.31	6.36	1.33	1.26	6.22	1.32
Walnuts (4/20)	1.41	5.59	1.49	1.50	5.97	1.49	1.46	5.92	1.46
Stone Fruit (3/11)	1.40	8.26	1.46	1.48	8.76	1.46	1.45	8.59	1.46
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)	2.7	2.3	2.1	1.9	2.9	2.5	2.2	2.0	2.8	2.4	2.1	1.9
Pistachio (4/20)	2.7	2.4	2.1	1.9	2.9	2.5	2.2	2.0	2.8	2.5	2.2	1.9
Citrus (2/1)	1.8	1.6	1.4	1.3	1.9	1.7	1.5	1.3	1.9	1.6	1.4	1.3
Raisin Grapes (3/11) (11 ft. row spacing)	Assume all grape			1.3	Assume all grape			1.4	Assume all grape			1.3
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	irrigation type is drip			1.3	irrigation type is drip			1.4	irrigation type is drip			1.3
Walnuts (4/20)	2.2	1.9	1.7	1.5	2.3	2.0	1.8	1.6	2.2	1.9	1.7	1.5
Stone Fruit (3/11)	2.2	1.9	1.6	1.5	2.3	2.0	1.7	1.6	2.2	1.9	1.7	1.5

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	496	449	685	590	519	472	661	567	496	449
Pistachio 106 Trees/A	673	598	523	473	722	623	548	498	698	623	548	473
Citrus 110 Trees/A	444	395	346	321	469	420	370	321	469	395	346	321
Raisin Grapes 566 Vines/A	Assume all grape			62	Assume all grape			67	Assume all grape			62
Winegrapes 622 Vines/A	irrigation type is drip			57	irrigation type is drip			61	irrigation type is drip			57
Walnuts 76 Trees/A	786	679	607	536	822	715	643	572	786	679	607	536
Stonefruit 172 Trees/A	347	300	253	237	363	316	268	253	347	300	268	237

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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05/31/24 through 06/06/24

Crops (Leafout Date)	#124 Panoche			#2 Five Points			#15 Stratford		
	05/31- 06/06 Water Use	Accum'd Seasonal Water Use	06/07- 06/13 Estimated ETc	05/31- 06/06 Water Use	Accum'd Seasonal Water Use	06/07- 06/13 Estimated ETc	05/31- 06/06 Water Use	Accum'd Seasonal Water Use	06/07- 06/13 Estimated ETc
Almonds (3/1) *	1.95	15.12	2.04	2.03	15.60	2.04	1.71	13.98	2.07
Pistachio (4/20) * **	2.01	6.68	2.25	2.09	6.95	2.25	1.74	5.87	2.28
Citrus (2/1)	1.31	14.56	1.34	1.39	15.16	1.34	1.15	13.82	1.37
Raisin Grapes (3/11) (11 ft. row spacing)	1.36	6.43	1.44	1.42	6.70	1.44	1.19	5.78	1.46
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	1.37	6.56	1.48	1.43	6.80	1.48	1.18	5.92	1.50
Walnuts (4/20)	1.58	6.30	1.66	1.66	6.59	1.66	1.38	5.66	1.69
Stone Fruit (3/11)	1.57	9.26	1.68	1.62	9.46	1.68	1.37	8.34	1.70
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

* 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	#124 Panoche				#2 Five Points				#15 Stratford			
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/1)	3.0	2.6	2.3	2.1	3.1	2.7	2.4	2.1	2.6	2.3	2.0	1.8
Pistachio (4/20)	3.1	2.7	2.4	2.1	3.2	2.8	2.5	2.2	2.7	2.3	2.0	1.8
Citrus (2/1)	2.0	1.7	1.5	1.4	2.1	1.9	1.6	1.5	1.8	1.5	1.4	1.2
Raisin Grapes (3/11) (11 ft. row spacing)	Assume all grape			1.4	Assume all grape			1.5	Assume all grape			1.3
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	irrigation type is drip			1.4	irrigation type is drip			1.4	irrigation type is drip			1.2
Walnuts (4/20)	2.4	2.1	1.9	1.7	2.6	2.2	2.0	1.7	2.1	1.8	1.6	1.5
Stone Fruit (3/11)	2.4	2.1	1.8	1.7	2.5	2.2	1.9	1.7	2.1	1.8	1.6	1.4

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 Panoche				#2 Five Points				#15 Stratford			
Almonds 115 Trees/A	708	614	543	496	732	638	567	496	614	543	472	425
Pistachio 106 Trees/A	772	673	598	523	797	698	623	548	673	573	498	448
Citrus 110 Trees/A	494	420	370	346	518	469	395	370	444	370	346	296
Raisin Grapes 566 Vines/A	Assume all grape			67	Assume all grape			72	Assume all grape			62
Winegrapes 622 Vines/A	irrigation type is drip			61	irrigation type is drip			61	irrigation type is drip			52
Walnuts 76 Trees/A	857	750	679	607	929	786	715	607	750	643	572	536
Stonefruit 172 Trees/A	379	332	284	268	395	347	300	268	332	284	253	221

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