University of California Agriculture and Natural Resources

Making a Difference for California



UCCE/DWR Weekly Crop Water Use Report

WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_C) 05/24/24 through 05/30/24

Crops (Leafout Date)	#	#148 Merced			#39 Parlier			#258 Lemon Cove			
	05/24 - 05/30	Accum'd	05/31 - 06/06		05/24 - 05/30	Accum'd	05/31 - 06/06	05/24 - 05/30	Accum'd	05/31 - 06/06	
	Water	Seasonal	Estimated		Water	Seasonal	Estimated	Water	Seasonal	Estimated	
	Use	Water Use	ETc		Use	Water Use	ETc	Use	Water Use	ETc	
Almonds (3/1) *	1.63	12.49	1.76		1.74	13.05	1.76	1.70	12.70	1.72	
Pistachio (4/20) * **	1.39	4.10	1.77		1.48	4.37	1.77	1.44	4.27	1.73	
Citrus (2/1)	1.13	12.19	1.19		1.23	12.83	1.19	1.21	12.48	1.16	
Raisin Grapes (3/11) (11 ft. row spacing)	1.09	4.57	1.21		1.18	4.90	1.21	1.16	4.81	1.18	
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	1.05	4.78	1.19		1.13	5.05	1.19	1.11	4.97	1.16	
Walnuts (4/20)	1.15	4.18	1.41		1.26	4.47	1.41	1.24	4.46	1.37	
Stone Fruit (3/11)	1.27	6.86	1.40		1.36	7.28	1.40	1.32	7.14	1.37	
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)	2.5	2.2	1.9	1.7	2.7	2.3	2.0	1.8	2.6	2.3	2.0	1.8	
Pistachio (4/20)	2.1	1.9	1.6	1.5	2.3	2.0	1.7	1.6	2.2	1.9	1.7	1.5	
Citrus (2/1)	1.7	1.5	1.3	1.2	1.9	1.6	1.4	1.3	1.9	1.6	1.4	1.3	
Raisin Grapes (3/11) (11 ft. row spacing)	As	ssume all gra	pe	1.1	Assume all grape 1.2			1.2	As	1.2			
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	irrig	ation type is	drip	1.1	irrig	irrigation type is drip		1.2	irrigation type is drip		drip	1.2	
Walnuts (4/20)	1.8	1.5	1.4	1.2	1.9	1.7	1.5	1.3	1.9	1.7	1.5	1.3	
Stone Fruit (3/11)	2.0	1.7	1.5	1.3	2.1	1.8	1.6	1.4	2.0	1.8	1.6	1.4	

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			#39 Parlier			#258 Lemon Cove						
Almonds 115 Trees/A	590	519	449	401	638	543	472	425	614	543	472	425
Pistachio 106 Trees/A	523	473	399	374	573	498	424	399	548	473	424	374
Citrus 110 Trees/A	420	370	321	296	469	395	346	321	469	395	346	321
Raisin Grapes 566 Vines/A	Assume all grape			53	Assume all grape 58			Assume all grape			58	
Winegrapes 622 Vines/A	irrig	ation type is	drip	48	irrig	irrigation type is drip 52			irrig	52		
Walnuts 76 Trees/A	643	536	500	429	679	607	536	464	679	607	536	464
Stonefruit 172 Trees/A	316	268	237	205	332	284	253	221	316	284	253	221
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 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.

^{**} 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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(Estimated Crop Evapotranspiration or ET_C) 05/24/24 through 05/30/24

Crops (Leafout Date)	#124 Panoche			#	2 Five Poin	ts	#15 Stratford				
	05/24- 05/30	Accum'd	05/31- 06/06	5/26 - 6/1	Accum'd	6/2 - 6/8		5/26 - 6/1	Accum'd	6/2 - 6/8	
	Water	Seasonal	Estimated	Water	Seasonal	Estimated		Water	Seasonal	Estimated	
	Use	Water Use	ETc	Use	Water Use	ETc		Use	Water Use	ETc	
Almonds (3/1) *	1.84	13.17	1.88	1.92	13.57	1.93		1.60	12.27	1.94	
Pistachio (4/20) * **	1.57	4.67	1.95	1.64	4.86	2.00		1.37	4.13	2.01	
Citrus (2/1)	1.28	13.25	1.27	1.34	13.77	1.30		1.13	12.67	1.31	
Raisin Grapes (3/11) (11 ft. row spacing)	1.23	5.07	1.31	1.30	5.28	1.34		1.07	4.59	1.35	
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	1.16	5.20	1.28	1.22	5.37	1.30		1.01	4.74	1.31	
Walnuts (4/20)	1.33	4.72	1.53	1.39	4.93	1.58		1.17	4.28	1.59	
Stone Fruit (3/11)	1.44	7.69	1.53	1.49	7.84	1.58		1.26	6.97	1.59	
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

^{**} 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)	2.8	2.5	2.2	1.9	3.0	2.6	2.3	2.0	2.5	2.1	1.9	1.7	
Pistachio (4/20)	2.4	2.1	1.8	1.7	2.5	2.2	1.9	1.7	2.1	1.8	1.6	1.4	
Citrus (2/1)	2.0	1.7	1.5	1.3	2.1	1.8	1.6	1.4	1.7	1.5	1.3	1.2	
Raisin Grapes (3/11) (11 ft. row spacing)	As	sume all gra	ape	1.3	Assume all grape 1.4			1.4	As	1.1			
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	irrig	ation type is	drip	1.2	irrigation type is drip		s drip	1.2	irriga	ation type is	drip	1.1	
Walnuts (4/20)	2.0	1.8	1.6	1.4	2.1	1.9	1.6	1.5	1.8	1.6	1.4	1.2	
Stone Fruit (3/11)	2.2	1.9	1.7	1.5	2.3	2.0	1.8	1.6	1.9	1.7	1.5	1.3	

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								
Almonds 115 Trees/A	661	590	519	449	708	614	543	472	590	496	449	401	
Pistachio 106 Trees/A	598	523	448	424	623	548	473	424	523	448	399	349	
Citrus 110 Trees/A	494	420	370	321	518	444	395	346	420	370	321	296	
Raisin Grapes 566 Vines/A	As	ssume all gra	ape	62	Assume all grape 67			67	Assume all grape			53	
Winegrapes 622 Vines/A	irrig	ation type is	s drip	52	irrigation type is drip		52	irrigation type is drip		s drip	48		
Walnuts 76 Trees/A	715	643	572	500	750	679	572	536	643	572	500	429	
Stonefruit 172 Trees/A	347	300	268	237	363	316	284	253	300	268	237	205	
For further information concerning all counties receiving this report, contact	or 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 moving 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.