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) 09/20/24 through 09/26/24

Crops (Leafout Date)	#148 Merced			#39 Parlier				#258 Lemon Cove		
	09/20 - 09/26	Accum'd	09/27 - 10/03	09/20 - 09/26	Accum'd	09/27 - 10/03		09/20 - 09/26	Accum'd	09/27 - 10/03
	Water	Seasonal	Estimated	Water	Seasonal	Estimated		Water	Seasonal	Estimated
	Use	Water Use	ETc	Use	Water Use	ETc		Use	Water Use	ETc
Almonds (3/1) *	1.16	43.27	1.05	1.25	45.10	1.00		1.28	43.80	0.99
Pistachio (4/20) * **	1.09	35.77	0.99	1.20	37.33	0.94		1.23	36.30	0.93
Citrus (2/1)	0.77	31.66	0.72	0.85	33.16	0.70		0.87	32.17	0.70
Raisin Grapes (3/11) (11 ft. row spacing)	0.81	25.39	0.77	0.90	26.51	0.75		0.93	25.80	0.74
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis) ***	0.93	28.02	0.85	1.02	29.30	0.81		1.05	28.49	0.80
Walnuts (4/20)	1.12	33.86	1.05	1.20	35.42	1.00		1.23	34.44	0.99
Stone Fruit (3/11)	1.30	36.08	1.21	1.41	37.79	1.13		1.44	36.72	1.11
Past 7 days precipitation (inches)		0.00			0.00		-		0.00	
Accumulated precipitation (inches) (1/1/2024)		14.98			9.05				9.73	

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.

	PPLIED WATER IN INCHES.	AD HIGHED EAD EI	
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Crops		ed			#39 Parlier			#258 Lemon Cove				
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/1)	1.8	1.5	1.4	1.2	1.9	1.7	1.5	1.3	2.0	1.7	1.5	1.3
Pistachio (4/20)	1.7	1.5	1.3	1.1	1.8	1.6	1.4	1.3	1.9	1.6	1.4	1.3
Citrus (2/1)	1.2	1.0	0.9	0.8	1.3	1.1	1.0	0.9	1.3	1.2	1.0	0.9
Raisin Grapes (3/11) (11 ft. row spacing)***	As	sume all gra	pe	0.9	Assume all grape 0.9			0.9	Assume all grape			1.0
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis) ***	irrig	ation type is	drip	1.0	irrigation type is drip		drip	1.1	irrigation type is drip		drip	1.1
Walnuts (4/20)	1.7	1.5	1.3	1.2	1.8	1.6	1.4	1.3	1.9	1.6	1.4	1.3
Stone Fruit (3/11)	2.0	1.7	1.5	1.4	2.2	1.9	1.7	1.5	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 Merce	ed			#39 Parlier	•		#258 Lemon Cove			
Almonds 115 Trees/A	425	354	331	283	449	401	354	307	472	401	354	307
Pistachio 106 Trees/A	424	374	324	274	448	399	349	324	473	399	349	324
Citrus 110 Trees/A	296	247	222	197	321	272	247	222	321	296	247	222
Raisin Grapes 566 Vines/A	As	ssume all gra	ipe	43	Assume all grape 43			Assume all grape			48	
Winegrapes 622 Vines/A	irrig	ation type is	drip	44	irrigation type is drip		48	irrigation type is drip		48		
Walnuts 76 Trees/A	607	536	464	429	643	572	500	464	679	572	500	464
Stonefruit 172 Trees/A	316	268	237	221	347	300	268	237	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.

^{*} 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.

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WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_C) 09/20/24 through 09/26/24

Crops (Leafout Date)	#124 Panoche			#2 Five Points				#15 Stratford			
	09/20- 09/26	Accum'd	09/27- 10/03	09/20- 09/26	Accum'd	09/27- 10/03		09/20- 09/26	Accum'd	09/27- 10/03	
	Water	Seasonal	Estimated	Water	Seasonal	Estimated		Water	Seasonal	Estimated	
	Use	Water Use	ETc	Use	Water Use	ETc		Use	Water Use	ETc	
Almonds (3/1) *	1.35	46.79	1.12	1.30	47.38	1.18		1.38	45.48	1.14	
Pistachio (4/20) * **	1.28	39.29	1.07	1.23	39.62	1.17		1.31	38.33	1.13	
Citrus (2/1)	0.91	34.57	0.80	0.87	35.18	0.85		0.91	33.65	0.84	
Raisin Grapes (3/11) (11 ft. row spacing)	0.97	27.79	0.80	0.93	28.09	0.88		0.99	27.02	0.85	
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	1.09	30.69	0.92	1.05	30.88	1.00		1.11	29.85	0.97	
Walnuts (4/20)	1.28	37.22	1.10	1.23	37.46	1.17		1.31	36.51	1.13	
Stone Fruit (3/11)	1.49	39.83	1.29	1.44	40.09	1.39		1.52	38.88	1.35	
Past 7 days precipitation (inches)		0.00	_		0.00		-		0.00		
Accumulated precipitation (inches) (1/1/2024)		6.60			6.94				5.45		

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			#2 Five Poi	nts								
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/1)	2.1	1.8	1.6	1.4	2.0	1.7	1.5	1.4	2.1	1.8	1.6	1.5
Pistachio (4/20)	2.0	1.7	1.5	1.3	1.9	1.6	1.4	1.3	2.0	1.7	1.5	1.4
Citrus (2/1)	1.4	1.2	1.1	1.0	1.3	1.2	1.0	0.9	1.4	1.2	1.1	1.0
Raisin Grapes (3/11) (11 ft. row spacing)	As	ssume all gra	ipe	1.0	Assume all grape			1.0	A	1.0		
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	irrig	gation type is	drip	1.1	irrigation type is drip			1.1	irrigation type is drip			1.2
Walnuts (4/20)	2.0	1.7	1.5	1.3	1.9	1.6	1.4	1.3	2.0	1.7	1.5	1.4
Stone Fruit (3/11)	2.3	2.0	1.8	1.6	2.2	1.9	1.7	1.5	2.3	2.0	1.8	1.6

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	he			#2 Five Poi	nts		#15 Stratford			
Almonds 115 Trees/A	496	425	378	331	472	401	354	331	496	425	378	354
Pistachio 106 Trees/A	498	424	374	324	473	399	349	324	498	424	374	349
Citrus 110 Trees/A	346	296	272	247	321	296	247	222	346	296	272	247
Raisin Grapes 566 Vines/A	A	ssume all gra	ipe	48	Assume all grape 48				Assume all grape			48
Winegrapes 622 Vines/A	irrig	gation type is	drip	48	irrigation type is drip 48			irrigation type is drip			52	
Walnuts 76 Trees/A	715	607	536	464	679	572	500	464	715	607	536	500
Stonefruit 172 Trees/A	363	316	284	253	347	300	268	237	363	316	284	253
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