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) 08/23/24 through 08/29/24

Crops (Leafout Date)	#148 Merced				#39 Parlier				#258 Lemon Cove		
	08/23 - 08/29	Accum'd	08/30 - 09/05		08/23 - 08/29	Accum'd	08/30 - 09/05		08/23 - 08/29	Accum'd	08/30 - 09/05
	Water	Seasonal	Estimated		Water	Seasonal	Estimated		Water	Seasonal	Estimated
	Use	Water Use	ETc		Use	Water Use	ETc		Use	Water Use	ETc
Almonds (3/1) *	1.75	37.71	1.62		1.74	39.34	1.51		1.63	37.99	1.49
Pistachio (4/20) * **	1.75	30.26	1.65		1.74	31.61	1.58		1.66	30.51	1.56
Citrus (2/1)	1.11	27.85	1.08		1.09	29.21	1.04		1.03	28.16	1.03
Raisin Grapes (3/11) (11 ft. row spacing)	1.13	21.61	1.07		1.12	22.58	1.05		1.08	21.81	1.03
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis) ***	1.31	23.73	1.22		1.30	24.83	1.16		1.23	23.95	1.15
Walnuts (4/20)	1.82	28.21	1.69		1.81	29.55	1.62		1.73	28.51	1.60
Stone Fruit (3/11)	1.75	30.19	1.65		1.74	31.70	1.58		1.66	30.55	1.56
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

^{**} 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	A DDI IDD WATE	DD IN INCIDE	ADDITIONED BOT	
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		1212 113 1132 1112/		

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)	2.7	2.3	2.1	1.8	2.7	2.3	2.0	1.8	2.5	2.2	1.9	1.7
Pistachio (4/20)	2.7	2.3	2.1	1.8	2.7	2.3	2.0	1.8	2.6	2.2	2.0	1.7
Citrus (2/1)	1.7	1.5	1.3	1.2	1.7	1.5	1.3	1.1	1.6	1.4	1.2	1.1
Raisin Grapes (3/11) (11 ft. row spacing)***	As	sume all gra	ipe	1.2	Assume all grape 1.2			1 / 1	Assume all grape			1.1
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis) ***	irrig	ation type is	drip	1.4	irrigation type is drip			1.4	irrigation type is drip			1.3
Walnuts (4/20)	2.8	2.4	2.1	1.9	2.8	2.4	2.1	1.9	2.7	2.3	2.0	1.8
Stone Fruit (3/11)	2.7	2.3	2.1	1.8	2.7	2.3	2.0	1.8	2.6	2.2	2.0	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 Merce	ed			#39 Parlier			#258 Lemon Cove			
Almonds 115 Trees/A	638	543	496	425	638	543	472	425	590	519	449	401
Pistachio 106 Trees/A	673	573	523	448	673	573	498	448	648	548	498	424
Citrus 110 Trees/A	420	370	321	296	420	370	321	272	395	346	296	272
Raisin Grapes 566 Vines/A	Assume all grape			58	Assume all grape 58			Assume all grape			53	
Winegrapes 622 Vines/A	irrig	ation type is	drip	61	irrigation type is drip			61	irrigation type is drip			57
Walnuts 76 Trees/A	1000	857	750	679	1000	857	750	679	965	822	715	643
Stonefruit 172 Trees/A	426	363	332	284	426	363	316	284	410	347	316	268

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) 08/23/24 through 08/29/24

Crops (Leafout Date)	#124 Panoche				#2 Five Points				#15 Stratford			
	08/23- 08/29	Accum'd	08/30- 09/05		08/23- 08/29	Accum'd	08/30- 09/05		08/23- 08/29	Accum'd	08/30- 09/05	
	Water	Seasonal	Estimated		Water	Seasonal	Estimated		Water	Seasonal	Estimated	
	Use	Water Use	ETc		Use	Water Use	ETc		Use	Water Use	ETc	
Almonds (3/1) *	1.80	40.64	1.64		1.91	41.31	1.83		1.93	38.94	1.79	
Pistachio (4/20) * **	1.84	33.20	1.66		1.95	33.62	1.85		1.97	31.84	1.79	
Citrus (2/1)	1.16	30.36	1.12		1.22	31.06	1.27		1.24	29.26	1.25	
Raisin Grapes (3/11) (11 ft. row spacing)	1.19	23.61	1.07		1.27	23.97	1.20		1.28	22.58	1.16	
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	1.36	25.92	1.23		1.45	26.22	1.38		1.46	24.82	1.34	
Walnuts (4/20)	1.91	31.02	1.70		2.02	31.38	1.89		2.04	29.94	1.83	
Stone Fruit (3/11)	1.84	33.38	1.66		1.95	33.71	1.85		1.97	32.01	1.79	
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			#2 Five Poi	nts								
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/1)	2.8	2.4	2.1	1.9	2.9	2.5	2.2	2.0	3.0	2.6	2.3	2.0
Pistachio (4/20)	2.8	2.5	2.2	1.9	3.0	2.6	2.3	2.1	3.0	2.6	2.3	2.1
Citrus (2/1)	1.8	1.5	1.4	1.2	1.9	1.6	1.4	1.3	1.9	1.7	1.5	1.3
Raisin Grapes (3/11) (11 ft. row spacing)	As	ssume all gra	ipe	1.3	Assume all grape			1.3	Assume all grape			1.4
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	irrig	ation type is	drip	1.4	irrigation type is drip			1.5	irrigation type is drip		1.5	
Walnuts (4/20)	2.9	2.5	2.2	2.0	3.1	2.7	2.4	2.1	3.1	2.7	2.4	2.1
Stone Fruit (3/11)	2.8	2.5	2.2	1.9	3.0	2.6	2.3	2.1	3.0	2.6	2.3	2.1

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					
Almonds 115 Trees/A	661	567	496	449	685	590	519	472	708	614	543	472
Pistachio 106 Trees/A	698	623	548	473	747	648	573	523	747	648	573	523
Citrus 110 Trees/A	444	370	346	296	469	395	346	321	469	420	370	321
Raisin Grapes 566 Vines/A	Assume all grape			62	Assume all grape 62			62	Assume all grape			67
Winegrapes 622 Vines/A	irrig	ation type is	drip	61	irrigation type is drip 65			65	irrigation type is drip			65
Walnuts 76 Trees/A	1036	893	786	715	1108	965	857	750	1108	965	857	750
Stonefruit 172 Trees/A	442	395	347	300	474	410	363	332	474	410	363	332
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