University of California

Agriculture and Natural Resources



HEALTHY FOOD SYSTEMS + HEALTHY ENVIRONMENTS + HEALTHY COMMUNITIES + HEALTHY CALIFORNIANS

UCCE/DWR Weekly Crop Water Use Report

Making a Difference for California

WEEKLY SOIL MOISTURE LOSS IN INCHES (Estimated Crop Evapotranspiration or ET_C) 08/30/24 through 09/05/24

Crops (Leafout Date)	#148 Merced				#39 Parlier		#258 Lemon Cove				
	08/30 - 09/05	Accum'd	09/06 - 09/12	08/30 - 09/05	Accum'd	09/06 - 09/12		08/30 - 09/05	Accum'd	09/06 - 09/12	
	Water	Seasonal	Estimated	Water	Seasonal	Estimated		Water	Seasonal	Estimated	
	Use	Water Use	ETc	Use	Water Use	ETc		Use	Water Use	ETc	
Almonds (3/1) *	1.62	39.33	1.46	1.69	41.03	1.40		1.67	39.66	1.33	
Pistachio (4/20) * **	1.65	31.91	1.51	1.71	33.32	1.45		1.71	32.22	1.38	
Citrus (2/1)	1.08	28.93	1.09	1.14	30.35	1.04		1.14	29.30	0.97	
Raisin Grapes (3/11) (11 ft. row spacing)	1.07	22.68	1.00	1.10	23.68	0.95		1.11	22.92	0.89	
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis) ***	1.22	24.95	1.12	1.28	26.11	1.07		1.28	25.23	1.01	
Walnuts (4/20)	1.69	29.90	1.53	1.75	31.30	1.45		1.75	30.26	1.35	
Stone Fruit (3/11)	1.65	31.84	1.53	1.71	33.41	1.47		1.71	32.26	1.40	
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 EFFICIENCY¹

TAST WEEKET ATTENED WATER IN INCIDES, ADJUSTED FOR ENTICIENCY													
	#148 Merce	d			#39 Parlier			#258 Lemon Cove					
65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%		
2.5	2.2	1.9	1.7	2.6	2.3	2.0	1.8	2.6	2.2	2.0	1.8		
2.5	2.2	1.9	1.7	2.6	2.3	2.0	1.8	2.6	2.3	2.0	1.8		
1.7	1.4	1.3	1.1	1.8	1.5	1.3	1.2	1.8	1.5	1.3	1.2		
As	sume all gra	pe	1.1	Assume all grape 1.2			1.2	A	1.2				
irrig	ation type is	drip	1.3	irrigation type is drip		1.3	irrigation type is drip		drip	1.3			
2.6	2.3	2.0	1.8	2.7	2.3	2.1	1.8	2.7	2.3	2.1	1.8		
2.5	2.2	1.9	1.7	2.6	2.3	2.0	1.8	2.6	2.3	2.0	1.8		
	65% 2.5 2.5 1.7 As irrig 2.6	#148 Merce 65% 75% 2.5 2.2 2.5 2.2 1.7 1.4 Assume all gra irrigation type is 2.6 2.3	#148 Merced 65% 75% 85% 2.5 2.2 1.9 2.5 2.2 1.9 1.7 1.4 1.3 Assume all grape irrigation type is drip 2.6 2.3 2.0	#148 Merced 65% 75% 85% 95% 2.5 2.2 1.9 1.7 2.5 2.2 1.9 1.7 1.7 1.4 1.3 1.1 Assume all grape 1.1 1.3 2.6 2.3 2.0 1.8	#148 Merced 65% 75% 85% 95% 65% 2.5 2.2 1.9 1.7 2.6 2.6 1.7 1.8 Assume all grape 1.1 1.8 1.1 1.8 1.1 1.8 2.6 2.3 2.0 1.8 2.7 1.8 1.7	#148 Merced #39 Parlier 65% 75% 85% 95% 65% 75% 2.5 2.2 1.9 1.7 2.6 2.3 2.5 2.2 1.9 1.7 2.6 2.3 1.7 1.4 1.3 1.1 1.8 1.5 Assume all grape 1.1 Assume all grape 1.3 irrigation type is 2.6 2.3 2.0 1.8 2.7 2.3	#148 Merced #39 Parlier 65% 75% 85% 95% 65% 75% 85% 2.5 2.2 1.9 1.7 2.6 2.3 2.0 2.5 2.2 1.9 1.7 2.6 2.3 2.0 1.7 1.4 1.3 1.1 1.8 1.5 1.3 Assume all grape 1.1 Assume all grape 1.3 irrigation type is drip 2.6 2.3 2.0 1.8 2.7 2.3 2.1	#148 Merced #39 Parlier 65% 75% 85% 95% 65% 75% 85% 95% 2.5 2.2 1.9 1.7 2.6 2.3 2.0 1.8 2.5 2.2 1.9 1.7 2.6 2.3 2.0 1.8 1.7 1.4 1.3 1.1 1.8 1.5 1.3 1.2 Assume all grape 1.1 Assume all grape 1.3 irrigation type is drip 1.3 2.6 2.3 2.0 1.8 2.7 2.3 2.1 1.8	#148 Merced #39 Partier 65% 75% 85% 95% 65% 75% 85% 95% 65% 2.5 2.2 1.9 1.7 2.6 2.3 2.0 1.8 2.6 2.5 2.2 1.9 1.7 2.6 2.3 2.0 1.8 2.6 1.7 1.4 1.3 1.1 1.8 1.5 1.3 1.2 1.8 Assume all grape 1.1 Assume all grape 1.2 Astimized and the second and	#148 Merced #39 Parlier #258 Lemon 65% 75% 85% 95% 65% 75% 85% 95% 65% 75% 2.5 2.2 1.9 1.7 2.6 2.3 2.0 1.8 2.6 2.2 2.5 2.2 1.9 1.7 2.6 2.3 2.0 1.8 2.6 2.3 1.7 1.4 1.3 1.1 1.8 1.5 1.3 1.2 1.8 1.5 Assume all grape 1.1 Assume all grape 1.2 Assume all grape 1.3 irrigation type is drip 1.3 irrigation type is drip 1.3 2.7 2.3 2.1 1.8 2.7 2.3	#148 Merced #39 Parlier #258 Lemon Cove 65% 75% 85% 95% 65% 75% 85% 95% 65% 75% 85% 2.5 2.2 1.9 1.7 2.6 2.3 2.0 1.8 2.6 2.2 2.0 2.5 2.2 1.9 1.7 2.6 2.3 2.0 1.8 2.6 2.3 2.0 1.7 1.4 1.3 1.1 1.8 1.5 1.3 1.2 1.8 1.5 1.3 Assume all grape 1.1 Assume all grape 1.2 Assume all grape irrigation type is drip 1.3 irrigation type is drip 1.3 irrigation type is drip 2.7 2.3 2.1 1.8 2.7 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		#148 Merce	ed		#39 Parlier				#258 Lemon Cove				
Almonds 115 Trees/A	590	519	449	401	614	543	472	425	614	519	472	425	
Pistachio 106 Trees/A	623	548	473	424	648	573	498	448	648	573	498	448	
Citrus 110 Trees/A	420	346	321	272	444	370	321	296	444	370	321	296	
Raisin Grapes 566 Vines/A	As	ssume all gra	ipe	53	Assume all grape 58			58	A	58			
Winegrapes 622 Vines/A	irrig	ation type is	drip	57	irrigation type is drip 57			57	irrig	57			
Walnuts 76 Trees/A	929	822	715	643	965	822	750	643	965	822	750	643	
Stonefruit 172 Trees/A	395	347	300	268	410	363	316	284	410	363	316	284	
For further information concerning all counties receiving this report, contact	the Fresno Co	. Farm Advis	or's office at	(559) 241-75	526.								

ALTHY FOOD SYSTEMS

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Agriculture and Natural Resources

Making a Difference for California

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UCCE/DWR Weekly Crop Water Use Report

WEEKLY SOIL MOISTURE LOSS IN INCHES														
	(Estimated Crop Evapotranspiration or ET_C)													
08/30/24 through 09/05/24														
Crops (Leafout Date) #124 Panoche #2 Five Points #15 Stratford														
	08/30- 09/05	Accum'd	09/06- 09/12		08/30- 09/05	Accum'd	09/06- 09/12		08/30- 09/05	Accum'd	09/06- 09/12			
	Water	Seasonal	Estimated		Water	Seasonal	Estimated		Water	Seasonal	Estimated			
	Use	Water Use	ETc		Use	Water Use	ETc		Use	Water Use	ETc			
Almonds (3/1) *	1.81	42.45	1.49		1.87	43.18	1.63		1.91	40.85	1.60			
Pistachio (4/20) * **	1.83	35.03	1.54		1.90	35.52	1.68		1.96	33.80	1.65			
Citrus (2/1)	1.26	31.62	1.06		1.30	32.36	1.16		1.32	30.58	1.14			
Raisin Grapes (3/11) (11 ft. row spacing)	1.18	24.79	1.03		1.23	25.20	1.10		1.27	23.85	1.08			
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	1.36	27.28	1.15		1.41	27.64	1.27		1.45	26.27	1.24			
Walnuts (4/20)	1.86	32.88	1.56		1.93	33.31	1.70		1.99	31.93	1.67			
Stone Fruit (3/11)	1.83	35.21	1.56		1.90	35.61	1.70		1.96	33.97	1.67			
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 '														
Crops	#124 Panoche					#2 Five Poin	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	2.9	2.5	2.2	2.0		
Pistachio (4/20)	2.8	2.4	2.2	1.9	2.9	2.5	2.2	2.0	3.0	2.6	2.3	2.1		
Citrus (2/1)	1.9	1.7	1.5	1.3	2.0	1.7	1.5	1.4	2.0	1.8	1.6	1.4		
Raisin Grapes (3/11) (11 ft. row spacing)	As	ssume all gra	pe	1.2	Assume all grape 1			1.3	A	1.3				
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	irrig	ation type is	drip	1.4	irrigation type is drip		drip	1.5	irrigation type is drip		drip	1.5		
Walnuts (4/20)	2.9	2.5	2.2	2.0	3.0	2.6	2.3	2.0	3.1	2.7	2.3	2.1		
Stone Fruit (3/11)	2.8	2.4	2.2	1.9	2.9	2.5	2.2	2.0	3.0	2.6	2.3	2.1		

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	PAS	T WEEKLY	APPLIED W	ATER IN G	GALLON PER	TREE OR	VINE					
Crops		#124 Panoc	he			#2 Five Point	nts					
Almonds 115 Trees/A	661	567	496	449	685	590	519	472	685	590	519	472
Pistachio 106 Trees/A	698	598	548	473	722	623	548	498	747	648	573	523
Citrus 110 Trees/A	469	420	370	321	494	420	370	346	494	444	395	346
Raisin Grapes 566 Vines/A	Assume all grape			58	Assume all grape 62			62	As	62		
Winegrapes 622 Vines/A	irrig	ation type is	drip	61	irrigation type is drip			65	irrigation type is drip		drip	65
Walnuts 76 Trees/A	1036	893	786	715	1072	929	822	715	1108	965	822	750
Stonefruit 172 Trees/A	442	379	347	300	458	395	347	316	474	410	363	332
For further information concerning all counties receiving this report, contact	the Fresno Co	. Farm Advis	or's office at	(559) 241-75	26.							