University of California Agriculture and Natural Resources



UCCE/DWR Weekly Crop Water Use Report

Making a Difference for California

WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_C) 05/17/24 through 05/23/24

Crops (Leafout Date)	#148 Merced				#39 Parlier				#25	8 Lemon C	ove
	05/17 - 05/23	Accum'd	05/24 - 05/30		05/17 - 05/23	Accum'd	05/24 - 05/30		05/17 - 05/23	Accum'd	05/24 - 05/30
	Water	Seasonal	Estimated		Water	Seasonal	Estimated		Water	Seasonal	Estimated
	Use	Water Use	ETc		Use	Water Use	ETc		Use	Water Use	ETc
Almonds (3/1) *	1.54	10.86	1.63		1.70	11.31	1.65		1.69	11.00	1.61
Pistachio (4/20) * **	1.02	2.71	1.39		1.13	2.89	1.41		1.11	2.83	1.37
Citrus (2/1)	1.12	11.06	1.13		1.23	11.60	1.15		1.22	11.27	1.12
Raisin Grapes (3/11) (11 ft. row spacing)	0.96	3.49	1.07		1.06	3.71	1.09		1.05	3.66	1.05
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis) ***	0.89	3.73	1.01		1.00	3.92	1.03		0.99	3.86	0.99
Walnuts (4/20)	1.12	3.03	1.15		1.21	3.21	1.17		1.19	3.22	1.15
Stone Fruit (3/11)	1.05	5.59	1.27		1.20	5.92	1.29		1.19	5.82	1.25
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 Merced					#39 Parlier			#258 Lemon Cove			
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/1)	2.4	2.1	1.8	1.6	2.6	2.3	2.0	1.8	2.6	2.3	2.0	1.8
Pistachio (4/20)	1.6	1.4	1.2	1.1	1.7	1.5	1.3	1.2	1.7	1.5	1.3	1.2
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	1.0	Assume all grape 1.1			1.1	As	1.1		
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis) ***	irrig	ation type is	drip	0.9	irrigation type is drip			1.1	irrigation type is drip		drip	1.0
Walnuts (4/20)	1.7	1.5	1.3	1.2	1.9	1.6	1.4	1.3	1.8	1.6	1.4	1.3
Stone Fruit (3/11)	1.6	1.4	1.2	1.1	1.8	1.6	1.4	1.3	1.8	1.6	1.4	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		#148 Merce	ed		#39 Parlier	•		#258 Lemon Cove				
Almonds 115 Trees/A	567	496	425	378	614	543	472	425	614	543	472	425
Pistachio 106 Trees/A	399	349	299	274	424	374	324	299	424	374	324	299
Citrus 110 Trees/A	420	370	321	296	469	395	346	321	469	395	346	321
Raisin Grapes 566 Vines/A	Assume all grape			48	Assume all grape 53			53	Assume all grape			53
Winegrapes 622 Vines/A	irrig	gation type is	s drip	39	irrigation type is drip 48			48	irrigation type is drip			44
Walnuts 76 Trees/A	607	536	464	429	679	572	500	464	643	572	500	464
Stonefruit 172 Trees/A	253	221	189	174	284	253	221	205	284	253	221	205
For further information concerning all counties receiving this report, contact	t the Fresno C	Co. Farm Adv	isor's office a	t (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.

^{**} 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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WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_C) 05/17/24 through 05/23/24

Crops (Leafout Date)	#124 Panoche				#2 Five Points			#15 Stratford			
	05/17- 05/23	Accum'd	05/24- 05/30		05/17- 05/23	Accum'd	05/24- 05/30	05/17- 05/23	Accum'd	05/24- 05/30	
	Water	Seasonal	Estimated		Water	Seasonal	Estimated	Water	Seasonal	Estimated	
	Use	Water Use	ETc		Use	Water Use	ETc	Use	Water Use	ETc	
Almonds (3/1) *	1.77	11.33	1.78		1.82	11.65	1.88	1.55	10.67	1.88	
Pistachio (4/20) * **	1.19	3.10	1.49		1.23	3.22	1.59	1.02	2.76	1.59	
Citrus (2/1)	1.29	11.97	1.26		1.33	12.43	1.30	1.12	11.54	1.30	
Raisin Grapes (3/11) (11 ft. row spacing)	1.11	3.84	1.16		1.15	3.98	1.22	0.95	3.52	1.22	
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	1.00	4.04	1.09		1.04	4.16	1.14	0.88	3.72	1.14	
Walnuts (4/20)	1.28	3.39	1.29		1.33	3.54	1.35	1.10	3.11	1.35	
Stone Fruit (3/11)	1.24	6.25	1.37		1.27	6.35	1.46	1.07	5.71	1.46	
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 WEI	EKLY APPI	LIED WATE	R IN INCHE	ES, ADJUSTI	ED FOR EFF	ICIENCY 1					
Crops		#124 Panoc	he			#2 Five Poin	nts					
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/1)	2.7	2.4	2.1	1.9	2.8	2.4	2.1	1.9	2.4	2.1	1.8	1.6
Pistachio (4/20)	1.8	1.6	1.4	1.3	1.9	1.6	1.4	1.3	1.6	1.4	1.2	1.1
Citrus (2/1)	2.0	1.7	1.5	1.4	2.0	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	ipe	1.2	Assume all grape 1.2			1.2	As	1.0		
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	irrigation type is drip			1.1	irrigation type is drip		1.1	irrigation type is drip		drip	0.9	
Walnuts (4/20)	2.0	1.7	1.5	1.3	2.0	1.8	1.6	1.4	1.7	1.5	1.3	1.2
Stone Fruit (3/11)	1.9	1.7	1.5	1.3	2.0	1.7	1.5	1.3	1.6	1.4	1.3	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	T WEEKLY	APPLIED W	VATER IN G	GALLON PE	R TREE OR	VINE					
Crops	#124 Panoche					#2 Five Poi	nts					
Almonds 115 Trees/A	638	567	496	449	661	567	496	449	567	496	425	378
Pistachio 106 Trees/A	448	399	349	324	473	399	349	324	399	349	299	274
Citrus 110 Trees/A	494	420	370	346	494	444	395	346	420	370	321	296
Raisin Grapes 566 Vines/A	As	ssume all gra	ipe	58	Assume all grape 58			58	A	48		
Winegrapes 622 Vines/A	irrig	gation type is	drip	48	irrigation type is drip		48	irrigation type is drip		drip	39	
Walnuts 76 Trees/A	715	607	536	464	715	643	572	500	607	536	464	429
Stonefruit 172 Trees/A	300	268	237	205	316	268	237	205	253	221	205	174
For further information concerning all counties receiving this report, contact	t the Fresno C	o. Farm Advi	sor's office at	(559) 241-7:	526.							

^{*} 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.