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) 05/07/21 through 05/13/21

Crops (Leafout Date)	i	#148 Merced			#39 Parlier				#258 Lemon Cove		
	5/7 - 5/13	Accum'd	5/14 - 5/20		5/7 - 5/13	Accum'd	5/14 - 5/20		5/7 - 5/13	Accum'd	5/14 - 5/20
	Water	Seasonal	Estimated		Water	Seasonal	Estimated		Water	Seasonal	Estimated
	Use	Water Use	ЕТс		Use	Water Use	ETc		Use	Water Use	ETc
Almonds (3/5) *	1.53	9.63	1.49		1.58	9.87	1.49		1.56	9.54	0.94
Pistachio (4/16) * **	1.11	3.15	1.22		1.16	3.26	1.22		1.12	3.12	0.79
Citrus (2/1)	1.24	11.24	1.12		1.29	11.47	1.12		1.27	10.96	0.73
Raisin Grapes (3/12) (11 ft. row spacing)	1.05	3.17	1.05		1.09	3.33	1.05		1.07	3.15	0.66
Winegrapes (3/12) (10 ft. spacing on California Sprawl Trellis)	0.96	3.56	0.98		1.01	3.63	0.98		0.98	3.51	0.61
Walnuts (4/5)	1.40	6.06	1.38		1.45	6.23	1.38		1.41	5.99	0.88
Stone Fruit (3/10)	1.10	5.09	1.05		1.15	5.24	1.05		1.14	5.04	0.68
Past 7 days precipitation (inches)		0.00	_			0.00	_	_		0.00	
Accumulated precipitation (inches) (1/1/2021)		5.54				3.66				3.90	

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 FO	R EFFICIENCY 1
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Crops		#148 Merce	ed			#39 Parlier			#258 Lemon Cove			
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/5)	2.4	2.0	1.8	1.6	2.4	2.1	1.9	1.7	2.4	2.1	1.8	1.6
Pistachio (4/16)	1.7	1.5	1.3	1.2	1.8	1.5	1.4	1.2	1.7	1.5	1.3	1.2
Citrus (2/1)	1.9	1.7	1.5	1.3	2.0	1.7	1.5	1.4	2.0	1.7	1.5	1.3
Raisin Grapes (3/12) (11 ft. row spacing)***	1.6	1.4	1.2	1.1	1.7	1.5	1.3	1.1	1.6	1.4	1.3	1.1
Winegrapes (3/12) (10 ft. spacing on California Sprawl Trellis) ***	1.5	1.3	1.1	1.0	1.6	1.3	1.2	1.1	1.5	1.3	1.2	1.0
Walnuts (4/5)	2.2	1.9	1.6	1.5	2.2	1.9	1.7	1.5	2.2	1.9	1.7	1.5
Stone Fruit (3/10)	1.7	1.5	1.3	1.2	1.8	1.5	1.4	1.2	1.8	1.5	1.3	1.2

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%.

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PASI WEEKLY	APPLIED	WATER IN GALL	ON PER IREE	UK VINE

Crops		#148 Merce	ed			#39 Parlier	•		#258 Lemon Cove			
Almonds 115 Trees/A	567	472	425	378	567	496	449	401	567	496	425	378
Pistachio 106 Trees/A	424	374	324	299	448	374	349	299	424	374	324	299
Citrus 110 Trees/A	469	420	370	321	494	420	370	346	494	420	370	321
Raisin Grapes 566 Vines/A	77	67	58	53	82	72	62	53	77	67	62	53
Winegrapes 622 Vines/A	65	57	48	44	70	57	52	48	65	57	52	44
Walnuts 76 Trees/A	786	679	572	536	786	679	607	536	786	679	607	536
Stonefruit 172 Trees/A	268	237	205	189	284	237	221	189	284	237	205	189
For further information concerning all counties receiving this report, contact	the Fresno (Co. Farm Ad	visor's office	e at (559) 24	41-7526.							

^{*} 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) 05/07/21 through 05/13/21

Crops (Leafout Date)	#124 Panoche			#2 Five Points			#			
	5/7 - 5/13	Accum'd	5/14 - 5/20	5/7 - 5/13	Accum'd	5/14 - 5/20	5/7 - 5/13	Accum'd	5/14 - 5/20	
	Water	Seasonal	Estimated	Water	Seasonal	Estimated	Water	Seasonal	Estimated	1
	Use	Water Use	ЕТс	Use	Water Use	ETc	Use	Water Use	ETc	
Almonds (3/5) *	1.81	10.24	0.93	1.88	10.97	0.95	1.86	10.78	0.95	1
Pistachio (4/16) * **	1.33	3.58	0.82	1.36	3.76	0.84	1.36	3.68	0.84	1
Citrus (2/1)	1.48	12.34	0.72	1.53	13.19	0.74	1.51	12.81	0.74	1
Raisin Grapes (3/12) (11 ft. row spacing)	1.28	3.56	0.00	1.30	3.76	0.00	1.29	3.68	0.00	1
Winegrapes (3/12) (10 ft. spacing on California Sprawl Trellis)	1.15	3.91	0.00	1.21	4.17	0.00	1.18	4.04	0.00	1
Walnuts (4/5)	1.67	6.66	0.88	1.72	7.06	0.90	1.68	6.87	0.90	1
Stone Fruit (3/10)	1.30	5.50	0.68	1.35	5.92	0.70	1.33	5.71	0.70	
Past 7 days precipitation (inches)		0.00			0.00		 •	0.00		
Accumulated precipitation (inches) (1/1/2021)		3.83			4.65			3.06		

^{*} 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.

PA	PAST WEEKLY APPLIED WATER IN INCHES, ADJUSTED FOR EFFICIENCY 1												
Crops		#124 Pano	che			#2 Five Points				#15 Stratford			
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%	
Almonds (3/5)	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 (4/16)	2.0	1.8	1.6	1.4	2.1	1.8	1.6	1.4	2.1	1.8	1.6	1.4	
Citrus (2/1)	2.3	2.0	1.7	1.6	2.4	2.0	1.8	1.6	2.3	2.0	1.8	1.6	
Raisin Grapes (3/12) (11 ft. row spacing)	2.0	1.7	1.5	1.3	2.0	1.7	1.5	1.4	2.0	1.7	1.5	1.4	
Winegrapes (3/12) (10 ft. spacing on California Sprawl Trellis)	1.8	1.5	1.4	1.2	1.8	1.5	1.4	1.2	1.8	1.6	1.4	1.2	
Walnuts (4/5)	2.6	2.2	2.0	1.8	2.6	2.3	2.0	1.8	2.6	2.2	2.0	1.8	
Stone Fruit (3/10)	2.0	1.7	1.5	1.4	2.1	1.8	1.6	1.4	2.0	1.8	1.6	1.4	

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	ints		#15 Stratford			
Almonds 115 Trees/A	661	567	496	449	685	590	519	472	685	590	519	472
Pistachio 106 Trees/A	498	448	399	349	523	448	399	349	523	448	399	349
Citrus 110 Trees/A	568	494	420	395	592	494	444	395	568	494	444	395
Raisin Grapes 566 Vines/A	96	82	72	62	96	82	72	67	96	82	72	67
Winegrapes 622 Vines/A	79	65	61	52	79	65	61	52	79	70	61	52
Walnuts 76 Trees/A	929	786	715	643	929	822	715	643	929	786	715	643
Stonefruit 172 Trees/A	316	268	237	221	332	284	253	221	316	284	253	221
For further information concerning all counties receiving this report, contact	the Fresno (Co. Farm Ad	visor's offic	e at (559) 24	41-7526.							