

Making a Difference for California

University of California

**Agriculture and Natural Resources** 

## WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET<sub>C</sub>) 08/21/20 through 08/27/20

Crops (Leafout Date)	#148 Merced			#39 Parlier				#258 Lemon Cove		
	8/21 - 8/27	Accum'd	8/28 - 9/3	8/21 - 8/27	Accum'd	8/28 - 9/3		8/21 - 8/27	Accum'd	8/28 - 9/3
	Water	Seasonal	Estimated	Water	Seasonal	Estimated		Water	Seasonal	Estimated
	Use	Water Use	ETc	Use	Water Use	ЕТс		Use	Water Use	ETc
Almonds (3/5) *	1.41	36.44	1.71	1.59	37.53	1.53		1.43	35.12	1.55
Pistachio (4/13) * **	1.44	29.45	1.71	1.60	30.61	1.60		1.47	28.87	1.61
Citrus (2/1)	0.85	28.79	1.07	0.96	29.11	0.98		0.87	27.35	0.98
Raisin Grapes (3/16) (11 ft. row spacing)	1.09	24.31	1.29	1.22	25.21	1.25		1.12	23.84	1.25
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis) ***	1.24	26.71	1.50	1.40	27.71	1.39		1.26	26.08	1.40
Walnuts (4/8)	1.49	29.44	1.78	1.67	30.61	1.67		1.52	28.81	1.68
Stone Fruit (3/10)	1.44	29.90	1.71	1.60	31.04	1.60		1.47	29.09	1.61
Past 7 days precipitation (inches)		0.00			0.00		·		0.00	
Accumulated precipitation (inches) (1/1/2020)		5.05			4.80				5.61	

Dates in parentheses above, indicate leaf out or starting date for ET accumulation for the specific crop

<sup>\*\*</sup> 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	#148 Merced					#39 Parlier				#258 Lemon Cove			
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%	
Almonds (3/5)	2.2	1.9	1.7	1.5	2.4	2.1	1.9	1.7	2.2	1.9	1.7	1.5	
Pistachio (4/13)	2.2	1.9	1.7	1.5	2.5	2.1	1.9	1.7	2.3	2.0	1.7	1.5	
Citrus (2/1)	1.3	1.1	1.0	0.9	1.5	1.3	1.1	1.0	1.3	1.2	1.0	0.9	
Raisin Grapes (3/16) (11 ft. row spacing)***	1.7	1.5	1.3	1.1	1.9	1.6	1.4	1.3	1.7	1.5	1.3	1.2	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis) ***	1.9	1.7	1.5	1.3	2.2	1.9	1.6	1.5	1.9	1.7	1.5	1.3	
Walnuts (4/8)	2.3	2.0	1.8	1.6	2.6	2.2	2.0	1.8	2.3	2.0	1.8	1.6	
Stone Fruit (3/10)	2.2	1.9	1.7	1.5	2.5	2.1	1.9	1.7	2.3	2.0	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 Merced					#39 Parlier				#258 Lemon Cove			
Almonds 115 Trees/A	519	449	401	354	567	496	449	401	519	449	401	354	
Pistachio 106 Trees/A	548	473	424	374	623	523	473	424	573	498	424	374	
Citrus 110 Trees/A	321	272	247	222	370	321	272	247	321	296	247	222	
Raisin Grapes 566 Vines/A	82	72	62	53	91	77	67	62	82	72	62	58	
Winegrapes 622 Vines/A	83	74	65	57	96	83	70	65	83	74	65	57	
Walnuts 76 Trees/A	822	715	643	572	929	786	715	643	822	715	643	572	
Stonefruit 172 Trees/A	347	300	268	237	395	332	300	268	363	316	268	237	
For further information concerning all counties receiving this report, contact	the Fresno	Co. Farm Ad	lvisor's offic	e at (559) 24	41-7526.				7				

<sup>\*</sup> 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.

## UCCE/DWR Weekly Crop Water Use





Making a Difference for California

## WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or  $ET_C$ ) 08/21/20 through 08/27/20

Crops (Leafout Date)	#124 Panoche			#2 Five Points			#			
	8/21- 8/27	Accum'd	8/28-9/3	8/21-8/27	Accum'd	8/28-9/3	8/21- 8/27	Accum'd	8/28-9/3	
	Water	Seasonal	Estimated	Water	Seasonal	Estimated	Water	Seasonal	Estimated	1
	Use	Water Use	ETc	Use	Water Use	ETc	Use	Water Use	ЕТс	
Almonds (3/5) *	1.50	39.52	1.64	1.68	40.14	1.85	1.68	41.10	1.80	
Pistachio (4/13) * **	1.53	32.27	1.66	1.70	32.29	1.88	1.71	33.15	1.80	
Citrus (2/1)	0.92	30.71	1.05	1.02	31.51	1.19	1.03	32.01	1.14	
Raisin Grapes (3/16) (11 ft. row spacing)	1.17	26.10	1.26	1.30	26.17	1.43	1.30	26.93	1.38	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.32	28.73	3.36	1.48	28.80	1.64	1.48	29.51	1.59	
Walnuts (4/8)	1.57	32.28	1.73	1.76	32.53	1.95	1.77	33.36	1.87	
Stone Fruit (3/10)	1.53	32.80	1.66	1.70	33.00	1.88	1.71	33.86	1.80	
Past 7 days precipitation (inches)		0.00			0.00			0.00		
Accumulated precipitation (inches) (1/1/2020)		2.68			4.05			3.13		

Dates in parentheses above, indicate leaf out or starting date for ET accumulation for the specific crop

<sup>\*\*</sup> 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	WAT	ER IN INCHES.	ADJUSTED FOR	R EFFICIENCY 1

Crops		#124 Pano	che		#2 Five Points							
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/5)	2.3	2.0	1.8	1.6	2.6	2.2	2.0	1.8	2.6	2.2	2.0	1.8
Pistachio (4/13)	2.4	2.0	1.8	1.6	2.6	2.3	2.0	1.8	2.6	2.3	2.0	1.8
Citrus (2/1)	1.4	1.2	1.1	1.0	1.6	1.4	1.2	1.1	1.6	1.4	1.2	1.1
Raisin Grapes (3/16) (11 ft. row spacing)	1.8	1.6	1.4	1.2	2.0	1.7	1.5	1.4	2.0	1.7	1.5	1.4
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	2.0	1.8	1.6	1.4	2.3	2.0	1.7	1.6	2.3	2.0	1.7	1.6
Walnuts (4/8)	2.4	2.1	1.8	1.7	2.7	2.3	2.1	1.9	2.7	2.4	2.1	1.9
Stone Fruit (3/10)	2.4	2.0	1.8	1.6	2.6	2.3	2.0	1.8	2.6	2.3	2.0	1.8

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
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Crops		#124 Panoc	che			#2 Five Poi	ints		#15 Stratford			
Almonds 115 Trees/A	543	472	425	378	614	519	472	425	614	519	472	425
Pistachio 106 Trees/A	598	498	448	399	648	573	498	448	648	573	498	448
Citrus 110 Trees/A	346	296	272	247	395	346	296	272	395	346	296	272
Raisin Grapes 566 Vines/A	86	77	67	58	96	82	72	67	96	82	72	67
Winegrapes 622 Vines/A	87	79	70	61	100	87	74	70	100	87	74	70
Walnuts 76 Trees/A	857	750	643	607	965	822	750	679	965	857	750	679
Stonefruit 172 Trees/A	379	316	284	253	410	363	316	284	410	363	316	284
For further information concerning all counties receiving this report, contact	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.