## University of California **Agriculture and Natural Resources**

Making a Difference for California



# UCCE/DWR Weekly Crop Water Use

### WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET<sub>C</sub>) 07/17/20 through 07/23/20

Crops (Leafout Date)	#148 Merced			#39 Parlier			#258 Lemon Cove			
	7/17- 7/23	Accum'd	7/24- 7/30	7/17- 7/23	Accum'd	7/24- 7/30	7/17- 7/23	Accum'd	7/24- 7/30	
	Water	Seasonal	Estimated	Water	Seasonal	Estimated	Water	Seasonal	Estimated	
	Use	Water Use	ETc	Use	Water Use	ЕТс	Use	Water Use	ETc	
Almonds (3/5) *	1.94	27.79	2.02	2.04	28.09	1.91	1.96	26.42	1.92	
Pistachio (4/13) * **	2.00	20.59	2.09	2.10	20.93	1.98	2.02	19.99	1.99	
Citrus (2/1)	1.18	23.55	1.25	1.24	23.37	1.14	1.20	22.09	1.15	
Raisin Grapes (3/16) (11 ft. row spacing)	1.52	17.56	1.60	1.60	17.81	1.49	1.54	17.09	1.50	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis) ***	1.73	19.03	1.81	1.83	19.29	1.70	1.75	18.38	1.71	
Walnuts (4/8)	1.88	20.26	2.16	1.98	20.59	2.05	1.90	19.61	2.06	
Stone Fruit (3/10)	1.87	21.06	2.07	1.97	21.38	1.96	1.89	20.23	1.97	
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

#### 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)	3.0	2.6	2.3	2.0	3.1	2.7	2.4	2.1	3.0	2.6	2.3	2.1
Pistachio (4/13)	3.1	2.7	2.4	2.1	3.2	2.8	2.5	2.2	3.1	2.7	2.4	2.1
Citrus (2/1)	1.8	1.6	1.4	1.2	1.9	1.7	1.5	1.3	1.8	1.6	1.4	1.3
Raisin Grapes (3/16) (11 ft. row spacing)***	2.3	2.0	1.8	1.6	2.5	2.1	1.9	1.7	2.4	2.1	1.8	1.6
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis) ***	2.7	2.3	2.0	1.8	2.8	2.4	2.2	1.9	2.7	2.3	2.1	1.8
Walnuts (4/8)	2.9	2.5	2.2	2.0	3.0	2.6	2.3	2.1	2.9	2.5	2.2	2.0
Stone Fruit (3/10)	2.9	2.5	2.2	2.0	3.0	2.6	2.3	2.1	2.9	2.5	2.2	2.0

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	r		#258 Lemon Cove				
Almonds 115 Trees/A	708	614	543	472	732	638	567	496	708	614	543	496	
Pistachio 106 Trees/A	772	673	598	523	797	698	623	548	772	673	598	523	
Citrus 110 Trees/A	444	395	346	296	469	420	370	321	444	395	346	321	
Raisin Grapes 566 Vines/A	110	96	86	77	120	101	91	82	115	101	86	77	
Winegrapes 622 Vines/A	118	100	87	79	122	105	96	83	118	100	92	79	
Walnuts 76 Trees/A	1036	893	786	715	1072	929	822	750	1036	893	786	715	
Stonefruit 172 Trees/A	458	395	347	316	474	410	363	332	458	395	347	316	
For further information concerning all counties receiving this report, contact the Fresno Co. Farm Advisor's office at (559) 241-7526.													

<sup>\*</sup> Estimates are for orchard floor conditions where vegetation is managed by some combination 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.

<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.

## University of California Agriculture and Natural Resources



UCCE/DWR Weekly Crop Water Use Report

> 95% 2.3

Making a Difference for California

#### WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or  $ET_C$ ) 07/17/20 through 07/23/20

Crops (Leafout Date)	#124 Panoche				#2 Five Points				#			
	7/17- 7/23	Accum'd	7/24 - 7/30		7/17- 7/23	Accum'd	7/24 - 7/30		7/17- 7/23	Accum'd	7/24 - 7/30	
	Water	Seasonal	Estimated		Water	Seasonal	Estimated		Water	Seasonal	Estimated	
	Use	Water Use	ЕТс		Use	Water Use	ETc		Use	Water Use	ETc	
Almonds (3/5) *	2.14	29.82	1.97		2.06	30.15	2.10		2.15	31.17	2.10	
Pistachio (4/13) * **	2.21	22.30	2.04		2.12	22.04	2.17		2.22	22.96	2.17	
Citrus (2/1)	1.31	24.78	1.20		1.25	25.42	1.26		1.32	25.94	1.26	
Raisin Grapes (3/16) (11 ft. row spacing)	1.68	18.50	1.55		1.62	18.34	1.68		1.67	19.15	1.68	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.93	20.03	1.76		1.85	19.85	1.89		1.94	20.62	1.89	
Walnuts (4/8)	2.08	22.00	2.11		2.00	21.93	2.24		2.09	22.82	2.24	
Stone Fruit (3/10)	2.10	22.85	2.02		1.99	22.77	2.15		2.10	23.69	2.15	
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.

Crops	#124 Panoche				#2 Five Poi	ints	#15 Stratford				
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%
Almonds (3/5)	3.3	2.9	2.5	2.3	3.2	2.7	2.4	2.2	3.3	2.9	2.5
Pistachio (4/13)	3.4	2.9	2.6	2.3	3.3	2.8	2.5	2.2	3.4	3.0	2.6
G': (2/1)	• •				4.0				• •	4.0	

2.3 Citrus (2/1) 1.3 1.4 2.0 1.7 1.5 1.4 1.9 1.7 1.5 2.0 1.8 1.6 Raisin Grapes (3/16) (11 ft. row spacing) 2.2 2.0 2.5 1.9 2.2 2.6 1.8 2.2 1.7 2.6 2.0 1.8 Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis) 3.0 2.6 2.0 2.8 2.5 2.2 1.9 3.0 2.3 2.0 2.3 2.6 Walnuts (4/8) 2.7 2.1 2.5 3.2 2.8 2.4 2.2 2.4 3.2 2.8 2.2 3.1 Stone Fruit (3/10) 3.2 2.8 2.5 2.2 3.1 2.7 2.3 2.1 3.2 2.8 2.5 2.2

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%.

PAST WEEKLY	APPLIED WATER	IN GALLON PER	TREE OR VINE
I AOI WEEKLI	ALLDIED WALEN		

PAST WEEKLY APPLIED WATER IN INCHES, ADJUSTED FOR EFFICIENCY 1

Crops	#124 Panoche					#2 Five Poi	ints		#15 Stratford			
Almonds 115 Trees/A	779	685	590	543	756	638	567	519	779	685	590	543
Pistachio 106 Trees/A	847	722	648	573	822	698	623	548	847	747	648	573
Citrus 110 Trees/A	494	420	370	346	469	420	370	321	494	444	395	346
Raisin Grapes 566 Vines/A	125	106	96	86	120	106	91	82	125	106	96	86
Winegrapes 622 Vines/A	131	114	100	87	122	109	96	83	131	114	100	87
Walnuts 76 Trees/A	1143	1000	857	786	1108	965	857	750	1143	1000	893	786
Stonefruit 172 Trees/A	505	442	395	347	489	426	363	332	505	442	395	347
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.											

<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.