University of California

Agriculture and Natural Resources

HEALTHY FOOD SYSTEMS • HEALTHY ENVIRONMENTS



UCCE/DWR Weekly Crop Water Use Report

Making a Difference for California

WEEKLY SOIL MOISTURE LOSS IN INCHES (Estimated Crop Evapotranspiration or ET_C) 08/10/18 through 08/16/18

Crops (Leafout Date)	#188 Madera II ***				#39 Parlier		#86 Lindcove			
Crops (Learout Date)	8/10- 8/16	Accum'd	8/17-8/23	8/10- 8/16	Accum'd	8/17-8/23	8/10-8/16	Accum'd	8/17-8/23	
	Water	Seasonal	Estimated	Water	Seasonal	Estimated	Water	Seasonal	Estimated	
	Use	Water Use	ETc	Use	Water Use	ETc	Use	Water Use	ETc	
Almonds (3/16) *	1.76	31.74	1.69	1.93	32.88	1.64	1.91	31.80	1.69	
Pistachio (4/21) * **	1.76	22.30	1.69	1.99	23.52	1.66	1.98	23.00	1.69	
Citrus (2/1)	1.06	25.61	0.99	1.17	26.28	0.98	1.14	25.39	0.99	
Raisin Grapes (3/16) (11 ft. row spacing)	1.34	22.70	1.27	1.51	23.55	1.26	1.49	22.85	1.27	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.55	24.60	1.48	1.72	25.61	1.45	1.70	24.91	1.48	
Walnuts (4/4)	1.83	27.31	1.76	2.06	28.53	1.73	2.05	27.70	1.76	
Stone Fruit (3/16)	1.76	25.56	1.69	1.99	26.80	1.66	1.98	26.06	1.69	
Past 7 days precipitation (inches)		0.00			0.00			0.00		
Accumulated precipitation (inches) (1/1/2018)		6.33			4.96			3.32		

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.

*** CIMIS station #188 Madera II has been taken out of service due to a conversion of the pasture to permanent crops. For the remainder of 2018 irrigation season Historical Average ETo will be used for the weekly report.

H I I I I I I I I I I I I I I I I I I I	PAST WEEK	LY APPLI	ED WATEI	R IN INCHI	ES, ADJUS'	TED FOR E	FFICIENC	CY 1				
Crops		#188 Made	era II		#39 Parlier							
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/16)	2.7	2.3	2.1	1.9	3.0	2.6	2.3	2.0	2.9	2.5	2.2	2.0
Pistachio (4/21)	2.7	2.3	2.1	1.9	3.1	2.7	2.3	2.1	3.0	2.6	2.3	2.1
Citrus (2/1)	1.6	1.4	1.2	1.1	1.8	1.6	1.4	1.2	1.8	1.5	1.3	1.2
Raisin Grapes (3/16) (11 ft. row spacing)	2.1	1.8	1.6	1.4	2.3	2.0	1.8	1.6	2.3	2.0	1.8	1.6
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	2.4	2.1	1.8	1.6	2.6	2.3	2.0	1.8	2.6	2.3	2.0	1.8
Walnuts (4/4)	2.8	2.4	2.2	1.9	3.2	2.7	2.4	2.2	3.2	2.7	2.4	2.2
Stone Fruit (3/16)	2.7	2.3	2.1	1.9	3.1	2.7	2.3	2.1	3.0	2.6	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 W	VEEKLY A	PPLIED W	ATER IN G	GALLON PI	ER TREE C	DR VINE					
Crops		#188 Madera II			#39 Parlier							
Almonds 115 Trees/A	638	543	496	449	708	614	543	472	685	590	519	472
Pistachio 106 Trees/A	673	573	523	473	772	673	573	523	747	648	573	523
Citrus 110 Trees/A	395	346	296	272	444	395	346	296	444	370	321	296
Raisin Grapes 566 Vines/A	101	86	77	67	110	96	86	77	110	96	86	77
Winegrapes 622 Vines/A	105	92	79	70	114	100	87	79	114	100	87	79
Walnuts 76 Trees/A	1000	857	786	679	1143	965	857	786	1143	965	857	786
Stonefruit 172 Trees/A	426	363	332	300	489	426	363	332	474	410	363	332
For further information concerning all counties receiving this report, contact	the Fresno C	Co. Farm Ad	visor's office	at (559) 24	1-7526.							

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	WEEKLY SOIL MOISTURE LOSS IN INCHES													
(Estimated Crop Evapotranspiration or ET_{C})														
	08/10/18 through 08/16/18													
rops (Leafout Date) #124 Panoche #2 Five Points #15 Stratford														
Crops (Leafout Date)			-							15 Stratfor				
	8/10- 8/16	Accum'd	8/17-8/23		8/10- 8/16	Accum'd	8/17-8/23		8/10- 8/16	Accum'd	8/17-8/23			
	Water	Seasonal	Estimated		Water	Seasonal	Estimated		Water	Seasonal	Estimated			
	Use	Water Use	ETc		Use	Water Use	ETc		Use	Water Use	ETc			
Almonds (3/16) *	1.92	34.78	1.78		2.10	36.62	1.91		1.80	36.41	1.94			
Pistachio (4/21) * **	1.97	24.92	1.78		2.17	25.89	1.98		1.81	25.59	2.01			
Citrus (2/1)	1.17	28.59	1.08		1.29	30.46	1.14		1.09	30.15	1.17			
Raisin Grapes (3/16) (11 ft. row spacing)	1.50	24.48	1.36		1.64	25.53	1.49		1.38	25.33	1.52			
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.71	26.72	1.57		1.89	27.87	1.70		1.59	27.70	1.73			
Walnuts (4/4)	2.04	30.09	1.85		2.24	31.50	2.05		1.88	31.24	2.08			
Stone Fruit (3/16)	1.97	28.43	1.78		2.17	29.76	1.98		1.81	29.44	2.01			
Past 7 days precipitation (inches)		0.00				0.00				0.00				
Accumulated precipitation (inches) (1/1/2018)		2.56				3.04				1.62				

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 ¹												
Crops		#124 Pano	che			#2 Five Poi	ints					
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/16)	3.0	2.6	2.3	2.0	3.2	2.8	2.5	2.2	2.8	2.4	2.1	1.9
Pistachio (4/21)	3.0	2.6	2.3	2.1	3.3	2.9	2.6	2.3	2.8	2.4	2.1	1.9
Citrus (2/1)	1.8	1.6	1.4	1.2	2.0	1.7	1.5	1.4	1.7	1.5	1.3	1.1
Raisin Grapes (3/16) (11 ft. row spacing)	2.3	2.0	1.8	1.6	2.5	2.2	1.9	1.7	2.1	1.8	1.6	1.5
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	2.6	2.3	2.0	1.8	2.9	2.5	2.2	2.0	2.4	2.1	1.9	1.7
Walnuts (4/4)	3.1	2.7	2.4	2.1	3.4	3.0	2.6	2.4	2.9	2.5	2.2	2.0
Stone Fruit (3/16)	3.0	2.6	2.3	2.1	3.3	2.9	2.6	2.3	2.8	2.4	2.1	1.9

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 V	VEEKLY A	PPLIED W	ATER IN C	GALLON P	ER TREE O	R VINE					
Crops		#124 Pano	che			#2 Five Poi	nts					
Almonds 115 Trees/A	708	614	543	472	756	661	590	519	661	567	496	449
Pistachio 106 Trees/A	747	648	573	523	822	722	648	573	698	598	523	473
Citrus 110 Trees/A	444	395	346	296	494	420	370	346	420	370	321	272
Raisin Grapes 566 Vines/A	110	96	86	77	120	106	91	82	101	86	77	72
Winegrapes 622 Vines/A	114	100	87	79	127	109	96	87	105	92	83	74
Walnuts 76 Trees/A	1108	965	857	750	1215	1072	929	857	1036	893	786	715
Stonefruit 172 Trees/A	474	410	363	332	521	458	410	363	442	379	332	300
For further information concerning all counties receiving this report, contac	t the Fresno (Co. Farm Ad	visor's office	at (559) 24	1-7526.				-			