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)
07/20/18 through 07/26/18

Crops (Leafout Date)	#18	#188 Madera II ***				#39 Parlier		#86 Lindcove				
• • •	7/20- 7/26	Accum'd	7/27-8/2		7/20-7/26	Accum'd	7/27-8/2	7/20- 7/26	Accum'd	7/27-8/2		
	Water	Seasonal	Estimated		Water	Seasonal	Estimated	Water	Seasonal	Estimated		
	Use	Water Use	ETc		Use	Water Use	ETc	Use	Water Use	ETc		
Almonds (3/16) *	1.96	26.32	1.81		2.06	26.95	1.83	2.07	25.97	1.86		
Pistachio (4/21) * **	2.03	16.83	1.81		2.12	17.40	1.84	2.14	16.98	1.90		
Citrus (2/1)	1.19	22.34	1.11		1.26	22.69	1.12	1.26	21.88	1.12		
Raisin Grapes (3/16) (11 ft. row spacing)	1.54	18.54	1.39		1.61	18.90	1.41	1.64	18.28	1.44		
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.75	19.81	1.60		1.85	20.31	1.62	1.86	19.71	1.65		
Walnuts (4/4)	2.10	21.63	1.88		2.19	22.20	1.91	2.21	21.47	1.97		
Stone Fruit (3/16)	1.89	20.17	1.77		2.01	20.75	1.79	2.01	20.10	1.82		
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.

P	AST WEEK	LY APPLI	ED WATEI	R IN INCHI	ES, ADJUS'	TED FOR E	FFICIENC	CY 1					
Crops		#188 Madera II				#39 Parlier				#86 Lindcove			
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%	
Almonds (3/16)	3.0	2.6	2.3	2.1	3.2	2.7	2.4	2.2	3.2	2.8	2.4	2.2	
Pistachio (4/21)	3.1	2.7	2.4	2.1	3.3	2.8	2.5	2.2	3.3	2.9	2.5	2.3	
Citrus (2/1)	1.8	1.6	1.4	1.3	1.9	1.7	1.5	1.3	1.9	1.7	1.5	1.3	
Raisin Grapes (3/16) (11 ft. row spacing)	2.4	2.1	1.8	1.6	2.5	2.1	1.9	1.7	2.5	2.2	1.9	1.7	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	2.7	2.3	2.1	1.8	2.8	2.5	2.2	1.9	2.9	2.5	2.2	2.0	
Walnuts (4/4)	3.2	2.8	2.5	2.2	3.4	2.9	2.6	2.3	3.4	2.9	2.6	2.3	
Stone Fruit (3/16)	2.9	2.5	2.2	2.0	3.1	2.7	2.4	2.1	3.1	2.7	2.4	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 V	VEEKLY AI	PPLIED W	ATER IN G	GALLON P	ER TREE O	DR VINE						
Crops	#188 Madera II #39 Parlier									#86 Lindcove			
Almonds 115 Trees/A	708	614	543	496	756	638	567	519	756	661	567	519	
Pistachio 106 Trees/A	772	673	598	523	822	698	623	548	822	722	623	573	
Citrus 110 Trees/A	444	395	346	321	469	420	370	321	469	420	370	321	
Raisin Grapes 566 Vines/A	115	101	86	77	120	101	91	82	120	106	91	82	
Winegrapes 622 Vines/A	118	100	92	79	122	109	96	83	127	109	96	87	
Walnuts 76 Trees/A	1143	1000	893	786	1215	1036	929	822	1215	1036	929	822	
Stonefruit 172 Trees/A	458	395	347	316	489	426	379	332	489	426	379	332	
For further information concerning all counties receiving this report, contact	the Fresno C	Co. Farm Adv	visor's office	at (559) 24	1-7526.				•				

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WEEKLY SOIL MOISTURE LOSS IN INCHES												
(Estimated Crop Evapotranspiration or ET_C)												
		07/20/1	8 through (7/26/18								
	· · · · ·			r				r				1
Crops (Leafout Date)		124 Panoch				2 Five Poin				15 Stratfor		l
	7/20- 7/26	Accum'd	7/27- 8/2		7/20- 7/26	Accum'd	7/27-8/2		7/20- 7/26	Accum'd	7/27-8/2	i
	Water	Seasonal	Estimated		Water	Seasonal	Estimated		Water	Seasonal	Estimated	i
	Use	Water Use	ETc		Use	Water Use	ETc		Use	Water Use	ETc	L
Almonds (3/16) *	2.25	28.78	1.94		2.33	30.01	2.09		2.35	30.20	2.10	1
Pistachio (4/21) * **	2.31	18.75	2.01		2.38	19.10	2.16		2.39	19.24	2.17	ĺ
Citrus (2/1)	1.38	24.93	1.17		1.42	26.45	1.26		1.42	26.36	1.26	i i
Raisin Grapes (3/16) (11 ft. row spacing)	1.76	19.81	1.52		1.81	20.38	1.61		1.82	20.50	1.61	i i
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	2.03	21.35	1.73		2.10	21.92	1.88		2.11	22.13	1.89	i i
Walnuts (4/4)	2.38	23.71	2.08		2.47	24.49	2.23		2.48	24.68	2.24	i i
Stone Fruit (3/16)	2.22	22.34	1.93		2.30	23.03	2.08		2.30	23.15	2.09	
Past 7 days precipitation (inches)		0.00				0.00				0.00		
Accumulated precipitation (inches) (1/1/2018)		2.56				3.04				1.62		i i

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 Points								
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%	
Almonds (3/16)	3.5	3.0	2.6	2.4	3.6	3.1	2.7	2.5	3.6	3.1	2.8	2.5	
Pistachio (4/21)	3.6	3.1	2.7	2.4	3.7	3.2	2.8	2.5	3.7	3.2	2.8	2.5	
Citrus (2/1)	2.1	1.8	1.6	1.5	2.2	1.9	1.7	1.5	2.2	1.9	1.7	1.5	
Raisin Grapes (3/16) (11 ft. row spacing)	2.7	2.3	2.1	1.9	2.8	2.4	2.1	1.9	2.8	2.4	2.1	1.9	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	3.1	2.7	2.4	2.1	3.2	2.8	2.5	2.2	3.2	2.8	2.5	2.2	
Walnuts (4/4)	3.7	3.2	2.8	2.5	3.8	3.3	2.9	2.6	3.8	3.3	2.9	2.6	
Stone Fruit (3/16)	3.4	3.0	2.6	2.3	3.5	3.1	2.7	2.4	3.5	3.1	2.7	2.4	

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 V	VEEKLY A	PPLIED W.	ATER IN G	ALLON PI	ER TREE C	R VINE					
Crops	#124 Panoche					#2 Five Poi	nts					
Almonds 115 Trees/A	826	708	614	567	850	732	638	590	850	732	661	590
Pistachio 106 Trees/A	897	772	673	598	922	797	698	623	922	797	698	623
Citrus 110 Trees/A	518	444	395	370	543	469	420	370	543	469	420	370
Raisin Grapes 566 Vines/A	130	110	101	91	134	115	101	91	134	115	101	91
Winegrapes 622 Vines/A	135	118	105	92	140	122	109	96	140	122	109	96
Walnuts 76 Trees/A	1322	1143	1000	893	1358	1179	1036	929	1358	1179	1036	929
Stonefruit 172 Trees/A	537	474	410	363	553	489	426	379	553	489	426	379
For further information concerning all counties receiving this report, contact	the Fresno (Co. Farm Ad	visor's office	at (559) 24	1-7526.				-			