University of California Agriculture and Natural Resources



UCCE/DWR Weekly Crop Water Use Report

Making a Difference for California

WEEKLY SOIL MOISTURE LOSS IN INCHES (Estimated Crop Evapotranspiration or ET_C) 10/19/18 through 10/25/18

Crops (Leafout Date)	#188 Madera II ***				#39 Parlier			#86 Lindcove			
	10/19- 10/25	Accum'd	10/26- 11/1	10/19- 10/25	Accum'd	10/26-11/1		10/19- 10/25	Accum'd	10/26-11/1	
	Water	Seasonal	Estimated	Water	Seasonal	Estimated		Water	Seasonal	Estimated	
	Use	Water Use	ETc	Use	Water Use	ETc		Use	Water Use	ETc	
Almonds (3/16) *	0.69	44.10	0.45	0.77	46.21	0.44		0.74	44.85	0.45	
Pistachio (4/21) * **	0.69	34.85	0.46	0.82	37.12	0.45		0.80	36.35	0.46	
Citrus (2/1)	0.49	33.72	0.38	0.58	35.10	0.37		0.56	33.98	0.38	
Raisin Grapes (3/16) (11 ft. row spacing)	0.57	32.46	0.45	0.70	34.19	0.44		0.67	33.26	0.45	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	0.70	35.67	0.52	0.79	37.63	0.51		0.77	36.69	0.52	
Walnuts (4/4)	0.36	39.06	0.28	0.44	41.18	0.28		0.42	40.17	0.28	
Stone Fruit (3/16)	0.56	38.08	0.45	0.70	40.39	0.44		0.67	39.39	0.45	
Past 7 days precipitation (inches)		0.00			0.00				0.00		
Accumulated precipitation (inches) (1/1/2018)		6.33			4.96				3.87		

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	PAST WEEK	LY APPLI	ED WATEI	R IN INCHI	ES, ADJUS	TED FOR E	FFICIENC	CY 1				
Crops		#188 Made	era II			#39 Parlier	•		#86 Lindcove			
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/16)	1.1	0.9	0.8	0.7	1.2	1.0	0.9	0.8	1.1	1.0	0.9	0.8
Pistachio (4/21)	1.1	0.9	0.8	0.7	1.3	1.1	1.0	0.9	1.2	1.1	0.9	0.8
Citrus (2/1)	0.8	0.7	0.6	0.5	0.9	0.8	0.7	0.6	0.9	0.7	0.7	0.6
Raisin Grapes (3/16) (11 ft. row spacing)	0.9	0.8	0.7	0.6	1.1	0.9	0.8	0.7	1.0	0.9	0.8	0.7
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.1	0.9	0.8	0.7	1.2	1.1	0.9	0.8	1.2	1.0	0.9	0.8
Walnuts (4/4)	0.6	0.5	0.4	0.4	0.7	0.6	0.5	0.5	0.6	0.6	0.5	0.4
Stone Fruit (3/16)	0.9	0.7	0.7	0.6	1.1	0.9	0.8	0.7	1.0	0.9	0.8	0.7

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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	PAST V	VEEKLY A	PPLIED W	ATER IN G	GALLON P	ER TREE (OR VINE					
Crops		#188 Made	ra II			#39 Parlier	,					
Almonds 115 Trees/A	260	213	189	165	283	236	213	189	260	236	213	189
Pistachio 106 Trees/A	274	224	199	174	324	274	249	224	299	274	224	199
Citrus 110 Trees/A	197	173	148	123	222	197	173	148	222	173	173	148
Raisin Grapes 566 Vines/A	43	38	34	29	53	43	38	34	48	43	38	34
Winegrapes 622 Vines/A	48	39	35	31	52	48	39	35	52	44	39	35
Walnuts 76 Trees/A	214	179	143	143	250	214	179	179	214	214	179	143
Stonefruit 172 Trees/A	142	111	111	95	174	142	126	111	158	142	126	111
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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		nated Crop	OISTURE Evapotrans 8 through 1	spiration or								
Crops (Leafout Date)	#124 Panoche #2 Five Points #15 Stratford											
	10/19- 10/25	Accum'd	10/26-11/1		10/19- 10/25	Accum'd	10/26-11/1		10/19- 10/25	Accum'd	10/26-11/1	
	Water	Seasonal	Estimated		Water	Seasonal	Estimated		Water	Seasonal	Estimated	ł
	Use	Water Use	ETc		Use	Water Use	ETc		Use	Water Use	ETc	I
Almonds (3/16) *	0.63	47.66	0.59		0.80	51.28	0.58		0.90	51.07	0.65	1
Pistachio (4/21) * **	0.66	38.06	0.60		0.84	40.86	0.59		0.92	40.55	0.66	1
Citrus (2/1)	0.46	37.06	0.45		0.60	40.19	0.44		0.69	39.89	0.51	ł
Raisin Grapes (3/16) (11 ft. row spacing)	0.55	34.66	0.56		0.73	37.20	0.56		0.83	37.04	0.58	ł
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	0.67	38.40	0.66		0.84	41.20	0.65		0.92	41.00	0.72	ł
Walnuts (4/4)	0.34	42.40	0.35		0.45	45.44	0.35		0.50	45.16	0.37	ł
Stone Fruit (3/16)	0.55	41.58	0.52		0.73	44.80	0.51		0.80	44.44	0.58	l
Past 7 days precipitation (inches)		0.00				0.00				0.00		
Accumulated precipitation (inches) (1/1/2018)		2.56				3.42				1.74		ł

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 Panoche				#2 Five Points							
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/16)	1.0	0.8	0.7	0.7	1.2	1.1	0.9	0.8	1.4	1.2	1.1	0.9
Pistachio (4/21)	1.0	0.9	0.8	0.7	1.3	1.1	1.0	0.9	1.4	1.2	1.1	1.0
Citrus (2/1)	0.7	0.6	0.5	0.5	0.9	0.8	0.7	0.6	1.1	0.9	0.8	0.7
Raisin Grapes (3/16) (11 ft. row spacing)	0.8	0.7	0.6	0.6	1.1	1.0	0.9	0.8	1.3	1.1	1.0	0.9
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.0	0.9	0.8	0.7	1.3	1.1	1.0	0.9	1.4	1.2	1.1	1.0
Walnuts (4/4)	0.5	0.5	0.4	0.4	0.7	0.6	0.5	0.5	0.8	0.7	0.6	0.5
Stone Fruit (3/16)	0.8	0.7	0.6	0.6	1.1	1.0	0.9	0.8	1.2	1.1	0.9	0.8

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 (GALLON P	ER TREE (DR VINE					
Crops		#124 Panoo	che			#2 Five Poi	ints					
Almonds 115 Trees/A	236	189	165	165	283	260	213	189	331	283	260	213
Pistachio 106 Trees/A	249	224	199	174	324	274	249	224	349	299	274	249
Citrus 110 Trees/A	173	148	123	123	222	197	173	148	272	222	197	173
Raisin Grapes 566 Vines/A	38	34	29	29	53	48	43	38	62	53	48	43
Winegrapes 622 Vines/A	44	39	35	31	57	48	44	39	61	52	48	44
Walnuts 76 Trees/A	179	179	143	143	250	214	179	179	286	250	214	179
Stonefruit 172 Trees/A	126	111	95	95	174	158	142	126	189	174	142	126
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