University of California

Agriculture and Natural Resources

Making a Difference for California



UCCE/DWR Weekly Crop Water Use Report

WEEKLY SOIL MOISTURE LOSS IN INCHES (Estimated Crop Evapotranspiration or ET_C)

10/23/20 through 10/29/20

Crops (Leafout Date)	#	148 Merce	d	,	#39 Parlier	•	#25	8 I
	10/23 - 10/29	Accum'd	10/30 - 11/5	10/23 - 10/29	Accum'd	10/30 - 11/5	10/23 - 10/29	F
	Water	Seasonal	Estimated	Water	Seasonal	Estimated	Water	S
	Use	Water Use	ETc	Use	Water Use	ETc	Use	W
Almonds (3/5) *	0.59	45.77	0.47	0.61	46.74	0.45	0.64	
Pistachio (4/13) * **	0.57	38.70	0.48	0.58	39.75	0.45	0.62	
Citrus (2/1)	0.46	35.22	0.41	0.49	35.48	0.39	0.51	
Raisin Grapes (3/16) (11 ft. row spacing)	0.57	32.16	0.49	0.58	32.91	0.46	0.60	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis) ***	0.67	35.57	0.56	0.69	36.46	0.53	0.72	
Walnuts (4/8)	0.36	38.56	0.29	0.36	39.59	0.28	0.37	
Stone Fruit (3/10)	0.53	39.52	0.43	0.55	40.53	0.42	0.58	
Past 7 days precipitation (inches)		0.00			0.00			
Accumulated precipitation (inches) (1/1/2020)		5.05			4.80			

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 stre 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	#148 Merced					#39 Parlier	r					
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/5)	0.9	0.8	0.7	0.6	0.9	0.8	0.7	0.6	1.0	0.9	0.8	0.7
Pistachio (4/13)	0.9	0.8	0.7	0.6	0.9	0.8	0.7	0.6	1.0	0.8	0.7	0.7
Citrus (2/1)	0.7	0.6	0.5	0.5	0.8	0.7	0.6	0.5	0.8	0.7	0.6	0.5
Raisin Grapes (3/16) (11 ft. row spacing)***	0.9	0.8	0.7	0.6	0.9	0.8	0.7	0.6	0.9	0.8	0.7	0.6
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis) ***	1.0	0.9	0.8	0.7	1.1	0.9	0.8	0.7	1.1	1.0	0.8	0.8
Walnuts (4/8)	0.6	0.5	0.4	0.4	0.6	0.5	0.4	0.4	0.6	0.5	0.4	0.4
Stone Fruit (3/10)	0.8	0.7	0.6	0.6	0.8	0.7	0.6	0.6	0.9	0.8	0.7	0.6

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	•					
Almonds 115 Trees/A	213	189	165	142	213	189	165	142	236	213	189	165
Pistachio 106 Trees/A	224	199	174	149	224	199	174	149	249	199	174	174
Citrus 110 Trees/A	173	148	123	123	197	173	148	123	197	173	148	123
Raisin Grapes 566 Vines/A	43	38	34	29	43	38	34	29	43	38	34	29
Winegrapes 622 Vines/A	44	39	35	31	48	39	35	31	48	44	35	35
Walnuts 76 Trees/A	214	179	143	143	214	179	143	143	214	179	143	143
Stonefruit 172 Trees/A	126	111	95	95	126	111	95	95	142	126	111	95
For further information concerning all counties receiving this report, contact	or further information concerning all counties receiving this report, contact the Fresno Co. Farm Advisor's office at (559) 241-7526.											

8 Lemon C		
Accum'd	10/30 - 11/5	
Seasonal	Estimated	
Water Use 43.96	ЕТс 0.45	
37.70	0.45	
33.52	0.39	
31.30	0.46	
34.56	0.53	
37.46	0.28	
38.22	0.42	
0.00		
5.61		
ess. Weekly	v estimates of	soil moisture
#258 Lemo	n Covo	
74.20 1.0110	11 1.076	

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UCCE/DWR Weekly Crop Water Use Report

	WEEKL	Y SOIL M	OISTURE	LOSS IN	INCHES							
	(Estin	nated Crop	Evapotrans	spiration or	r ET _C)							
10/23/20 through 10/29/20												
Crops (Leafout Date)	#	124 Panoch	ie		#2 Five Points				#15 Stratford			
	10/23-10/29	Accum'd	10/30-11/5		10/23-10/29	Accum'd	10/30-11/5		10/23- 10/29	Accum'd	10/30-11/5	
	Water	Seasonal	Estimated		Water	Seasonal	Estimated		Water	Seasonal	Estimated	
	Use	Water Use	ETc		Use	Water Use	ETc		Use	Water Use	ETc	
Almonds (3/5) *	0.70	49.98	0.48		0.76	51.61	0.52		0.72	52.13	0.52	
Pistachio (4/13) * **	0.68	42.70	0.51		0.73	43.75	0.58		0.70	44.15	0.58	
Citrus (2/1)	0.57	38.03	0.42		0.61	39.58	0.45		0.58	39.75	0.45	
Raisin Grapes (3/16) (11 ft. row spacing)	0.66	34.84	0.52		0.71	35.77	0.56		0.70	36.16	0.56	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	0.78	38.66	0.59		0.84	39.69	0.66		0.80	39.96	0.66	
Walnuts (4/8)	0.41	42.39	0.31		0.45	43.65	0.35		0.44	44.03	0.35	
Stone Fruit (3/10)	0.65	43.57	0.45		0.70	44.82	0.52		0.67	45.23	0.52	
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

* 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.

Crops		#124 Panoche					ints					
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/5)	1.1	0.9	0.8	0.7	1.2	1.0	0.9	0.8	1.1	1.0	0.8	0.8
Pistachio (4/13)	1.0	0.9	0.8	0.7	1.1	1.0	0.9	0.8	1.1	0.9	0.8	0.7
Citrus (2/1)	0.9	0.8	0.7	0.6	0.9	0.8	0.7	0.6	0.9	0.8	0.7	0.6
Raisin Grapes (3/16) (11 ft. row spacing)	1.0	0.9	0.8	0.7	1.1	0.9	0.8	0.7	1.1	0.9	0.8	0.7
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.2	1.0	0.9	0.8	1.3	1.1	1.0	0.9	1.2	1.1	0.9	0.8
Walnuts (4/8)	0.6	0.5	0.5	0.4	0.7	0.6	0.5	0.5	0.7	0.6	0.5	0.5
Stone Fruit (3/10)	1.0	0.9	0.8	0.7	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%.

PAST WEEKLY APPLIED WATER IN GALLON PER TREE OR VINE												
Crops	#124 Panoche					#2 Five Poi	nts					
Almonds 115 Trees/A	260	213	189	165	283	236	213	189	260	236	189	189
Pistachio 106 Trees/A	249	224	199	174	274	249	224	199	274	224	199	174
Citrus 110 Trees/A	222	197	173	148	222	197	173	148	222	197	173	148
Raisin Grapes 566 Vines/A	48	43	38	34	53	43	38	34	53	43	38	34
Winegrapes 622 Vines/A	52	44	39	35	57	48	44	39	52	48	39	35
Walnuts 76 Trees/A	214	179	179	143	250	214	179	179	250	214	179	179
Stonefruit 172 Trees/A	158	142	126	111	174	142	126	111	158	142	126	111
or further information concerning all counties receiving this report, contact the Fresno Co. Farm Advisor's office at (559) 241-7526.												