

Water Use Report

University of California

Agriculture and Natural Resources

Making a Difference for California

	WEEKL	Y SOIL M	OISTURE	LOSS IN	INCHES								
	(Estir	nated Crop	Evapotrans	spiration or	ET _C)								
		06/07/1	9 through 0	6/13/19									
Crops (Leafout Date)	#	#148 Merce	h			#39 Parlier				#258 Lemon Cove			
crops (Demon Date)	6/7 - 6/13	Accum'd	6/14-6/20		6/7 - 6/13	Accum'd	6/14- 6/20		6/7 - 6/13	Accum'd	6/14-6/20		
	Water	Seasonal	Estimated		Water	Seasonal	Estimated		Water	Seasonal	Estimated		
	Use	Water Use	ETc		Use	Water Use	ETc		Use	Water Use	ETc		
Almonds (3/10) *	1.77	13.74	1.87		1.85	14.71	1.86		1.88	13.85	1.83		
Pistachio (4/19) * **	1.76	6.58	2.04		1.85	6.89	2.03		1.90	6.55	2.00		
Citrus (2/1)	1.17	13.67	1.26		1.25	14.66	1.25		1.28	13.71	1.22		
Raisin Grapes (3/16) (11 ft. row spacing)	1.50	7.91	1.54		1.57	8.29	1.54		1.62	7.89	1.54		
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	1.57	8.02	1.68		1.66	8.56	1.67		1.69	8.09	1.64		
Walnuts (4/15)	1.44	6.92	1.61		1.52	7.33	1.60		1.54	6.91	1.57		
Stone Fruit (3/20)	1.43	7.85	1.49		1.49	8.30	1.48		1.53	7.79	1.45		
Past 7 days precipitation (inches)		0.00				0.00				0.00			
Accumulated precipitation (inches) (1/1/2019)		11.08				7.89				10.81			

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.

P.	AST WEEK	LY APPLI	ED WATEI	R IN INCHE	ES, ADJUS	FED FOR E	FFICIENC	Y ¹					
Crops	#148 Merced					#39 Parlier			#258 Lemon Cove				
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%	
Almonds (3/10)	2.7	2.4	2.1	1.9	2.8	2.5	2.2	1.9	2.9	2.5	2.2	2.0	
Pistachio (4/19)	2.7	2.3	2.1	1.9	2.7	2.3	2.1	1.9	2.7	2.3	2.1	1.9	
Citrus (2/1)	1.8	1.6	1.4	1.2	1.9	1.7	1.5	1.3	2.0	1.7	1.5	1.3	
Raisin Grapes (3/16) (11 ft. row spacing)	2.3	2.0	1.8	1.6	2.4	2.1	1.8	1.7	2.5	2.2	1.9	1.7	
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	2.4	2.1	1.8	1.7	2.6	2.2	2.0	1.7	2.6	2.3	2.0	1.8	
Walnuts (4/15)	2.2	1.9	1.7	1.5	2.3	2.0	1.8	1.6	2.4	2.1	1.8	1.6	
Stone Fruit (3/20)	2.2	1.9	1.7	1.5	2.3	2.0	1.8	1.6	2.4	2.0	1.8	1.6	

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 V	PAST WEEKLY APPLIED WATER IN GALLON PER TREE OR VINE												
Crops		#148 Merced #39 Parlier								#86 Lindcove				
Almonds 115 Trees/A	638	567	496	449	661	590	519	449	685	590	519	472		
Pistachio 106 Trees/A	673	573	523	473	673	573	523	473	673	573	523	473		
Citrus 110 Trees/A	444	395	346	296	469	420	370	321	494	420	370	321		
Raisin Grapes 566 Vines/A	110	96	86	77	115	101	86	82	120	106	91	82		
Winegrapes 622 Vines/A	105	92	79	74	114	96	87	74	114	100	87	79		
Walnuts 76 Trees/A	786	679	607	536	822	715	643	572	857	750	643	572		
Stonefruit 172 Trees/A	347	300	268	237	363	316	284	253	379	316	284	253		
For further information concerning all counties receiving this report, conta	ct the Fresno	Co. Farm Ad	visor's office	e at (559) 24	1-7526.									



WEEKLY SOIL MOISTURE LOSS IN INCHES (Estimated Crop Evapotranspiration or ET _C) 06/07/19 through 06/13/19													
Crops (Leafout Date)	#124 Panoche #2 Five Points #15 Stratford												
	6/7 - 6/13	Accum'd	6/14-6/20		6/7 - 6/13	Accum'd	6/14-6/20		6/7 - 6/13	Accum'd	6/14- 6/20		
	Water	Seasonal	Estimated		Water	Seasonal	Estimated		Water	Seasonal	Estimated		
	Use	Water Use	ETc		Use	Water Use	ETc		Use	Water Use	ETc		
Almonds (3/10) *	2.25	15.90	2.03		2.10	16.46	2.08		2.01	15.29	2.08		
Pistachio (4/19) * **	2.25	7.84	2.20		2.11	7.61	2.25		2.01	7.05	2.25		
Citrus (2/1)	1.52	15.67	1.35		1.42	16.65	1.40		1.36	15.22	1.40		
Raisin Grapes (3/16) (11 ft. row spacing)	1.91	9.28	1.70		1.79	9.23	1.75		1.71	8.53	1.75		
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	2.01	9.50	1.84		1.85	9.53	1.89		1.78	8.80	1.89		
Walnuts (4/15)	1.83	8.14	1.77		1.71	8.02	1.82		1.62	7.39	1.82		
Stone Fruit (3/20)	1.81	9.14	1.63		1.70	9.23	1.64		1.62	8.61	1.64		
Past 7 days precipitation (inches)		0.00				0.00				0.00			
Accumulated precipitation (inches) (1/1/2019)		4.80				7.42				7.08			

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 Poi	ints					
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/10)	3.5	3.0	2.6	2.4	3.2	2.8	2.5	2.2	3.1	2.7	2.4	2.1
Pistachio (4/19)	3.5	3.0	2.6	2.4	3.2	2.8	2.5	2.2	3.1	2.7	2.4	2.1
Citrus (2/1)	2.3	2.0	1.8	1.6	2.2	1.9	1.7	1.5	2.1	1.8	1.6	1.4
Raisin Grapes (3/16) (11 ft. row spacing)	2.9	2.5	2.2	2.0	2.8	2.4	2.1	1.9	2.6	2.3	2.0	1.8
Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis)	3.1	2.7	2.4	2.1	3.1	2.7	2.4	2.1	2.7	2.4	2.1	1.9
Walnuts (4/15)	2.8	2.4	2.2	1.9	2.6	2.3	2.0	1.8	2.5	2.2	1.9	1.7
Stone Fruit (3/20)	2.8	2.4	2.1	1.9	2.6	2.3	2.0	1.8	2.5	2.2	1.9	1.7

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 W	VEEKLY A	PPLIED W	ATER IN G	GALLON P	ER TREE C	DR VINE					
Crops		#124 Panoo	che		#2 Five Poi	ints						
Almonds 115 Trees/A	826	708	614	567	756	661	590	519	732	638	567	496
Pistachio 106 Trees/A	872	747	648	598	797	698	623	548	772	673	598	523
Citrus 110 Trees/A	568	494	444	395	543	469	420	370	518	444	395	346
Raisin Grapes 566 Vines/A	139	120	106	96	134	115	101	91	125	110	96	86
Winegrapes 622 Vines/A	135	118	105	92	135	118	105	92	118	105	92	83
Walnuts 76 Trees/A	1000	857	786	679	929	822	715	643	893	786	679	607
Stonefruit 172 Trees/A	442	379	332	300	410	363	316	284	395	347	300	268
For further information concerning all counties receiving this report, contact	the Fresno C	Co. Farm Ad	visor's office	at (559) 24	1-7526.							