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Agriculture and Natural Resources

Making a Difference for California

HEALTHY FOOD SYSTEMS .

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WEEKLY SOIL MOISTURE LOSS IN INCHES (Estimated Crop Evapotranspiration or ET_C) 09/23/22 through 09/29/22

Crops (Leafout Date)	#	148 Merce	d	#39 Parlier			#258 Lemon Cove		
	9/23 - 9/29	Accum'd	9/30 - 10/6	9/23 - 9/29	Accum'd	9/30 - 10/6	9/23 - 9/29	Accum'd	9/30 - 10/6
	Water	Seasonal	Estimated	Water	Seasonal	Estimated	Water	Seasonal	Estimated
	Use	Water Use	ETc	Use	Water Use	ETc	 Use	Water Use	ETc
Almonds (3/1) *	1.21	44.91	1.11	1.27	46.42	1.11	1.12	42.99	1.07
Pistachio (4/8) * **	1.13	39.65	1.01	1.19	41.20	0.99	1.03	37.83	0.94
Citrus (2/1)	0.80	33.85	0.79	0.86	35.02	0.77	0.75	32.62	0.73
Raisin Grapes (3/15) (11 ft. row spacing)	0.86	26.44	0.80	0.91	27.51	0.78	0.79	25.25	0.77
Winegrapes (3/15) (10 ft. spacing on California Sprawl Trellis) ***	0.98	29.16	0.92	1.03	30.29	0.90	0.89	27.76	0.86
Walnuts (4/8)	1.08	40.14	0.65	1.14	41.70	0.63	0.98	38.44	0.62
Stone Fruit (3/10)	1.36	38.50	1.29	1.42	39.95	1.27	1.26	36.63	1.22
Past 7 days precipitation (inches)		0.00			0.00			0.00	
Accumulated precipitation (inches) (1/1/2022)		2.90			2.05			2.82	

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.

PA	ST WEEK	LY APPLII	ED WATEF	R IN INCHE	ES, ADJUST	FED FOR E	FFICIENC	CY 1					
Crops		#148 Merc	ed		#39 Parlier					#258 Lemon Cove			
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%	
Almonds (3/1)	1.9	1.6	1.4	1.3	2.0	1.7	1.5	1.3	1.7	1.5	1.3	1.2	
Pistachio (4/8)	1.7	1.5	1.3	1.2	1.8	1.6	1.4	1.3	1.6	1.4	1.2	1.1	
Citrus (2/1)	1.2	1.1	0.9	0.8	1.3	1.1	1.0	0.9	1.2	1.0	0.9	0.8	
Raisin Grapes (3/15) (11 ft. row spacing)***	As	sume all gr	ape	0.9	Assume all grape 1.0			1.0	As	ape	0.8		
Winegrapes (3/15) (10 ft. spacing on California Sprawl Trellis) ***	irrigation type is drip			1.0	irrigation type is drip			1.1	irrigation type is drip		0.9		
Walnuts (4/8)	1.7	1.4	1.3	1.1	1.8	1.5	1.3	1.2	1.5	1.3	1.2	1.0	
Stone Fruit (3/10)	2.1	1.8	1.6	1.4	2.2	1.9	1.7	1.5	1.9	1.7	1.5	1.3	

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	EEKLY A	PPLIED W	ATER IN C	GALLON P	ER TREE (OR VINE					
Crops		#148 Merced				#39 Parlier	•	#258 Lemon Cove				
Almonds 115 Trees/A	449	378	331	307	472	401	354	307	401	354	307	283
Pistachio 106 Trees/A	424	374	324	299	448	399	349	324	399	349	299	274
Citrus 110 Trees/A	296	272	222	197	321	272	247	222	296	247	222	197
Raisin Grapes 566 Vines/A	As	Assume all grape			Assume all grape 48			48	As	38		
Winegrapes 622 Vines/A	irrig	ation type is	s drip	44	irrigation type is drip 48			48	irrig	ation type is	s drip	39
Walnuts 76 Trees/A	607	500	464	393	643	536	464	429	536	464	429	357
Stonefruit 172 Trees/A	332	284	253	221	347	300	268	237	300	268	237	205
For further information concerning all counties receiving this report, contact	t the Fresno	Co. Farm Ad	lvisor's offic	e at (559) 24	41-7526.							

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WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_C)

09/23/22 through 09/29/22

Crops (Leafout Date)	#	124 Panoch	#	2 Five Poin	ts	#15 Stratford				
	9/23-9/29	Accum'd	9/30 - 10/6	9/23-9/29	Accum'd	9/30 - 10/6	9/23-9/29	Accum'd	9/30 - 10/6	
	Water	Seasonal	Estimated	Water	Seasonal	Estimated	Water	Seasonal	Estimated	
	Use	Water Use	ETc	Use	Water Use	ETc	Use	Water Use	ETc	
Almonds (3/1) *	1.29	49.80	1.17	1.35	51.72	1.29	1.47	53.32	1.23	
Pistachio (4/8) * **	1.23	43.65	1.10	1.27	45.16	1.22	1.39	46.73	1.16	
Citrus (2/1)	0.89	37.48	0.84	0.93	39.01	0.94	1.01	39.87	0.90	
Raisin Grapes (3/15) (11 ft. row spacing)	0.94	29.10	0.88	0.98	30.20	0.98	1.06	31.21	0.93	
Winegrapes (3/15) (10 ft. spacing on California Sprawl Trellis)	1.06	31.98	0.99	1.11	33.15	1.10	1.22	34.35	1.05	
Walnuts (4/8)	1.17	44.18	0.70	1.21	45.85	0.78	1.30	47.33	0.74	
Stone Fruit (3/10)	1.46	42.37	1.38	1.52	43.92	1.50	1.64	45.45	1.44	
Past 7 days precipitation (inches)		0.00			0.00			0.00		
Accumulated precipitation (inches) (1/1/2022)		1.25			1.76			1.33		

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.

AST WEEK	LY APPLII	ED WATEF	R IN INCHE	ES, ADJUST	FED FOR F	FFICIENC	CY 1				
	#124 Pano	che			#2 Five Poi	ints					
65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
2.0	1.7	1.5	1.4	2.1	1.8	1.6	1.4	2.3	2.0	1.7	1.5
1.9	1.6	1.4	1.3	2.0	1.7	1.5	1.3	2.1	1.9	1.6	1.5
1.4	1.2	1.0	0.9	1.4	1.2	1.1	1.0	1.6	1.3	1.2	1.1
As	sume all gr	ape	1.0	Assume all grape 1.0			1.0	As	ape	1.1	
irrig	ation type is	s drip	1.1	irrigation type is drip 1.2			1.2	irrigation type is drip			1.3
1.8	1.6	1.4	1.2	1.9	1.6	1.4	1.3	2.0	1.7	1.5	1.4
2.2	1.9	1.7	1.5	2.3	2.0	1.8	1.6	2.5	2.2	1.9	1.7
	65% 2.0 1.9 1.4 As irriga 1.8	#124 Pano 65% 75% 2.0 1.7 1.9 1.6 1.4 1.2 Assume all gr irrigation type is 1.8 1.6	#124 Panoche 65% 75% 85% 2.0 1.7 1.5 1.9 1.6 1.4 1.4 1.2 1.0 Assume all grape irrigation type is drip 1.8 1.6 1.4	#124 Panoche 65% 75% 85% 95% 2.0 1.7 1.5 1.4 1.9 1.6 1.4 1.3 1.4 1.2 1.0 0.9 Assume all grape 1.0 irrigation type is drip 1.1 1.8 1.6 1.4 1.2	#124 Panoche 65% 65% 75% 85% 95% 65% 2.0 1.7 1.5 1.4 2.1 1.9 1.6 1.4 1.3 2.0 1.4 1.2 1.0 0.9 1.4 Assume all grape 1.0 Ass irrigation type is drip 1.1 1.8 1.6 1.4 1.2 1.9	#124 Panoche#2 Five Point 65% 75% 85% 95% 65% 75% 2.0 1.7 1.5 1.4 2.1 1.8 1.9 1.6 1.4 1.3 2.0 1.7 1.4 1.2 1.0 0.9 1.4 1.2 Assume all grape 1.0 Assume all grape 1.0 Assume all grapeirrigation type is drip 1.1 irrigation type is 1.8 1.6 1.4 1.2 1.9 1.6	#124 Panoche#2 Five Points 65% 75% 85% 95% 65% 75% 85% 2.0 1.7 1.5 1.4 2.1 1.8 1.6 1.9 1.6 1.4 1.3 2.0 1.7 1.5 1.4 1.2 1.0 0.9 1.4 1.2 1.1 Assume all grape 1.0 Assume all grapeargeirrigation type is drip 1.1 irrigation type is drip 1.8 1.6 1.4 1.2 1.9 1.6 1.4 1.2 1.9 1.6	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	#124 Panoche#2 Five Points 65% 75% 85% 95% 65% 75% 85% 95% 65% 2.0 1.7 1.5 1.4 2.1 1.8 1.6 1.4 2.3 1.9 1.6 1.4 1.3 2.0 1.7 1.5 1.3 2.1 1.4 1.2 1.0 0.9 1.4 1.2 1.1 1.0 1.6 Assume all grape 1.0 $Assume all grape$ 1.0 $Assume all grape$ 1.0 $Assume all grape$ 1.8 1.6 1.4 1.2 1.9 1.6 1.4 1.3 2.0	#124 Panoche#2 Five Points#15 Stratform 65% 75% 85% 95% 65% 75% 85% 95% 65% 75% 2.0 1.7 1.5 1.4 2.1 1.8 1.6 1.4 2.3 2.0 1.9 1.6 1.4 1.3 2.0 1.7 1.5 1.3 2.1 1.9 1.4 1.2 1.0 0.9 1.4 1.2 1.1 1.0 1.6 1.3 Assume all grape 1.0 Assume all grape 1.0 Assume all grape 1.0 Assume all grape 1.8 1.6 1.4 1.2 1.9 1.6 1.4 1.3 2.0 1.7	#124 Panoche#2 Five Points#15 Stratford 65% 75% 85% 95% 65% 75% 85% 95% 65% 75% 85% 2.0 1.7 1.5 1.4 2.1 1.8 1.6 1.4 2.3 2.0 1.7 1.9 1.6 1.4 1.3 2.0 1.7 1.5 1.3 2.1 1.9 1.6 1.4 1.2 1.0 0.9 1.4 1.2 1.1 1.0 1.6 1.3 1.2 Assume all grape 1.0 Assume all grape 1.0 Assume all grape 1.0 Assume all grapeirrigation type is drip 1.1 irrigation type is drip 1.2 irrigation type is drip 1.8 1.6 1.4 1.2 1.9 1.6 1.4 1.3 2.0 1.7

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	PAST W	EEKLY A	PPLIED W	ATER IN C	GALLON P	ER TREE (OR VINE					
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Pistachio 106 Trees/A	473	399	349	324	498	424	374	324	523	473	399	374
Citrus 110 Trees/A	346	296	247	222	346	296	272	247	395	321	296	272
Raisin Grapes 566 Vines/A	As	Assume all grape			Assume all grape 48			48	As	53		
Winegrapes 622 Vines/A	irrig	ation type is	s drip	48	irrigation type is drip 5.			52	irriga	ation type is	s drip	57
Walnuts 76 Trees/A	643	572	500	429	679	572	500	464	715	607	536	500
Stonefruit 172 Trees/A	347	300	268	237	363	316	284	253	395	347	300	268
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