



**WEEKLY CROP WATER USE - Based on local CIMIS Weather Stations (in inches)**  
**(Estimated Crop Evapotranspiration or ET<sub>c</sub>)**  
**03/15/24 through 03/21/24**

Crops (Leafout Date)	#148 Merced				#39 Parlier				#258 Lemon Cove		
	3/15 - 3/21 Water Use	Accum'd Seasonal Water Use	3/22 - 3/28 Estimated ETc		3/15 - 3/21 Water Use	Accum'd Seasonal Water Use	3/22 - 3/28 Estimated ETc		3/15 - 3/21 Water Use	Accum'd Seasonal Water Use	3/22 - 3/28 Estimated ETc
Almonds (3/1) *	0.71	1.48	0.65		0.69	1.50	0.65		0.69	1.41	0.60
Pistachio (TBD) * **	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	0.00
Citrus (2/1)	0.77	3.18	0.66		0.75	3.34	0.67		0.75	3.26	0.60
Raisin Grapes (3/11) (11 ft. row spacing)	0.06	0.09	0.06		0.06	0.08	0.06		0.06	0.07	0.06
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	0.12	0.16	0.12		0.11	0.15	0.12		0.12	0.15	0.12
Walnuts (TBD)	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	0.00
Stone Fruit (3/11)	0.22	0.29	0.24		0.21	0.28	0.24		0.21	0.27	0.20
<b>Past 7 days precipitation (inches)</b>	0.00				0.00				0.00		
<b>Accumulated precipitation (inches) (1/1/2024)</b>	12.82				6.25				7.24		

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.  
 \*\*\* Raisin Grapes and Winegrapes Irrigation should hold off until midday leaf water potential drops to -1.0 MPa, before that soil moisture reservoir is sufficient to supply the vine water demand. Update will be sent shortly once the county wide leaf water potential reaches approximate -1.0 MPa. Growers should adjust the irrigation start date based on the individual vineyard location and soil type.

**PAST WEEKLY APPLIED WATER IN INCHES, ADJUSTED FOR EFFICIENCY <sup>1</sup>**

Crops	#148 Merced					#39 Parlier					#258 Lemon Cove				
	System Efficiency >>	65%	75%	85%		95%	65%	75%	85%		95%	65%	75%	85%	95%
Almonds (3/1)		1.1	0.9	0.8	0.7		1.1	0.9	0.8	0.7		1.1	0.9	0.8	0.7
Pistachio (TBD)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Citrus (2/1)		1.2	0.0	0.9	0.8		1.2	1.0	0.9	0.8		1.2	1.0	0.9	0.8
Raisin Grapes (3/11) (11 ft. row spacing)		Assume all grape			0.1		Assume all grape			0.1		Assume all grape			0.1
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)		irrigation type is drip			0.1		irrigation type is drip			0.1		irrigation type is drip			0.1
Walnuts (TBD)		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0
Stone Fruit (3/11)		0.3	0.3	0.3	0.2		0.3	0.3	0.2	0.2		0.3	0.3	0.2	0.2

<sup>1</sup> 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					#258 Lemon Cove			
	260	213	189	165		260	213	189	165		260	213	189	165
Almonds 115 Trees/A	260	213	189	165		260	213	189	165		260	213	189	165
Pistachio 106 Trees/A	0	0	0	0		0	0	0	0		0	0	0	0
Citrus 110 Trees/A	296	0	222	197		296	247	222	197		296	247	222	197
Raisin Grapes 566 Vines/A	Assume all grape			5		Assume all grape			5		Assume all grape			5
Winegrapes 622 Vines/A	irrigation type is drip			4		irrigation type is drip			4		irrigation type is drip			4
Walnuts 76 Trees/A	0	0	0	0		0	0	0	0		0	0	0	0
Stonefruit 172 Trees/A	47	47	47	32		47	47	32	32		47	47	32	32

For further information concerning all counties receiving this report, contact the Fresno Co. Farm Advisor's office at (559) 241-7526.



**WEEKLY CROP WATER USE - Based on local CIMIS Weather Stations (in inches)**  
(Estimated Crop Evapotranspiration or ET<sub>c</sub>)  
03/15/24 through 03/21/24

Crops (Leafout Date)	#124 Panoche				#2 Five Points				#15 Stratford			
	3/15 - 3/21 Water Use	Accum'd Seasonal Water Use	3/22 - 3/28 Estimated ETc		3/15 - 3/21 Water Use	Accum'd Seasonal Water Use	3/22 - 3/28 Estimated ETc		3/15 - 3/21 Water Use	Accum'd Seasonal Water Use	3/22 - 3/28 Estimated ETc	
Almonds (3/1) *	0.72	1.05	0.71		0.77	1.14	0.74		0.71	1.03	0.73	
Pistachio (TBD) * **	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	0.00	
Citrus (2/1)	0.79	3.26	0.76		0.84	3.45	0.78		0.78	3.30	0.77	
Raisin Grapes (3/11) (11 ft. row spacing)	0.06	0.09	0.06		0.06	0.09	0.06		0.06	0.08	0.06	
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	0.12	0.17	0.12		0.12	0.17	0.12		0.12	0.16	0.12	
Walnuts (TBD)	0.00	0.00	0.00		0.00	0.00	0.00		0.00	0.00	0.00	
Stone Fruit (3/11)	0.15	0.27	0.26		0.17	0.17	0.27		0.16	0.16	0.27	
Past 7 days precipitation (inches)	0.00				0.00				0.00			
Accumulated precipitation (inches) (1/1/2024)	4.75				5.80				3.40			

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.

\*\*\* Raisin Grapes and Winegrapes Irrigation should hold off until midday leaf water potential drops to -1.0 MPa, before that soil moisture reservoir is sufficient to supply the vine water demand. Update will be sent shortly once the county wide leaf water potential reaches approximate -1.0 MPa. Growers should adjust the irrigation start date based on the individual vineyard location and soil type.

**PAST WEEKLY APPLIED WATER IN INCHES, ADJUSTED FOR EFFICIENCY <sup>1</sup>**

Crops	#124 Panoche				#2 Five Points				#15 Stratford			
	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/1)	1.1	1.0	0.8	0.8	1.2	1.0	0.9	0.8	1.1	0.9	0.8	0.7
Pistachio (TBD)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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 (3/11) (11 ft. row spacing)	Assume all grape			0.1	Assume all grape			0.1	Assume all grape			0.1
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	irrigation type is drip			0.1	irrigation type is drip			0.1	irrigation type is drip			0.1
Walnuts (TBD)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Stone Fruit (3/11)	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2

<sup>1</sup> 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 Points				#15 Stratford			
	260	236	189	189	283	236	213	189	260	213	189	165
Almonds 115 Trees/A	260	236	189	189	283	236	213	189	260	213	189	165
Pistachio 106 Trees/A	0	0	0	0	0	0	0	0	0	0	0	0
Citrus 110 Trees/A	296	272	222	197	321	272	247	222	296	247	222	197
Raisin Grapes 566 Vines/A	Assume all grape			5	Assume all grape			5	Assume all grape			5
Winegrapes 622 Vines/A	irrigation type is drip			4	irrigation type is drip			4	irrigation type is drip			4
Walnuts 76 Trees/A	0	0	0	0	0	0	0	0	0	0	0	0
Stonefruit 172 Trees/A	32	32	32	32	47	32	32	32	32	32	32	32

For further information concerning all counties receiving this report, contact the Fresno Co. Farm Advisor's office at (559) 241-7526.