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) 10/04/24 through 10/10/24

Crops (Leafout Date)	#148 Merced			#39 Parlier				#258 Lemon Cove		
	10/04 - 10/10	Accum'd	10/11 - 10/17	10/04 - 10/10	Accum'd	10/11 - 10/17		10/04 - 10/10	Accum'd	10/11 - 10/17
	Water	Seasonal	Estimated	Water	Seasonal	Estimated		Water	Seasonal	Estimated
	Use	Water Use	ETc	Use	Water Use	ETc		Use	Water Use	ETc
Almonds (3/1) *	0.86	45.18	0.76	1.02	47.24	0.74		1.14	46.14	0.78
Pistachio (4/20) * **	0.81	37.57	0.71	0.96	39.40	0.69		1.09	38.58	0.75
Citrus (2/1)	0.67	33.05	0.58	0.77	34.76	0.56		0.86	33.90	0.61
Raisin Grapes (3/11) (11 ft. row spacing)	0.69	26.85	0.60	0.77	28.12	0.57		0.88	27.57	0.64
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis) ***	0.75	29.62	0.71	0.88	31.14	0.69		0.99	30.49	0.72
Walnuts (4/20)	0.81	35.72	0.76	0.97	37.50	0.74		1.09	36.72	0.78
Stone Fruit (3/11)	1.02	38.31	0.71	1.23	40.35	0.67		1.36	39.49	0.75
Past 7 days precipitation (inches)		0.00	·		0.00		-		0.00	
Accumulated precipitation (inches) (1/1/2024)		14.98			9.05				9.73	

Dates in parentheses above, indicate leaf out or starting date for ET accumulation for the specific crop

^{**} 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 APPLIEI	NULTED IN INCIDE	AD HIGHED EAT	
PASI WEEKLY APPLIED) WAIRR IN INCHES	ADJUST 6.11 6 CB	C H.H H I C I H.I N C Y *

Crops		#148 Merce	ed			#39 Parlier			#258 Lemon Cove			
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/1)	1.3	1.1	1.0	0.9	1.6	1.4	1.2	1.1	1.8	1.5	1.3	1.2
Pistachio (4/20)	1.2	1.1	1.0	0.9	1.5	1.3	1.1	1.0	1.7	1.5	1.3	1.1
Citrus (2/1)	1.0	0.9	0.8	0.7	1.2	1.0	0.9	0.8	1.3	1.1	1.0	0.9
Raisin Grapes (3/11) (11 ft. row spacing)***	As	sume all gra	pe	0.7	Assume all grape 0.8			0.8	Assume all grape			0.9
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis) ***	irrig	ation type is	drip	0.8	irrigation type is drip			0.9	irrigation type is drip			1.0
Walnuts (4/20)	1.2	1.1	1.0	0.9	1.5	1.3	1.1	1.0	1.7	1.5	1.3	1.1
Stone Fruit (3/11)	1.6	1.4	1.2	1.1	1.9	1.6	1.4	1.3	2.1	1.8	1.6	1.4

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 Merce	ed			#39 Parlier	•		#258 Lemon Cove			
Almonds 115 Trees/A	307	260	236	213	378	331	283	260	425	354	307	283
Pistachio 106 Trees/A	299	274	249	224	374	324	274	249	424	374	324	274
Citrus 110 Trees/A	247	222	197	173	296	247	222	197	321	272	247	222
Raisin Grapes 566 Vines/A	Assume all grape			34	Assume all grape 38			Assume all grape			43	
Winegrapes 622 Vines/A	irrig	ation type is	drip	35	irrigation type is drip 39		39	irrigation type is drip			44	
Walnuts 76 Trees/A	429	393	357	322	536	464	393	357	607	536	464	393
Stonefruit 172 Trees/A	253	221	189	174	300	253	221	205	332	284	253	221

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

^{*} 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.

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WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_C) 10/04/24 through 10/10/24

Crops (Leafout Date)	#124 Panoche			#2 Five Points			#15 Stratford			
	10/04- 10/10	Accum'd	10/11- 10/17	10/04- 10/10	Accum'd	10/11- 10/17	10/04- 10/10	Accum'd	10/11- 10/17	
	Water	Seasonal	Estimated	Water	Seasonal	Estimated	Water	Seasonal	Estimated	
	Use	Water Use	ETc	Use	Water Use	ETc	Use	Water Use	ETc	
Almonds (3/1) *	1.28	49.34	0.81	1.32	49.94	0.89	1.28	48.03	0.85	
Pistachio (4/20) * **	1.17	41.72	0.80	1.22	42.07	0.88	1.19	40.78	0.84	
Citrus (2/1)	0.94	36.44	0.67	0.98	37.05	0.75	0.95	35.52	0.71	
Raisin Grapes (3/11) (11 ft. row spacing)	0.97	29.72	0.69	0.99	30.02	0.76	0.98	28.96	0.72	
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	1.10	32.86	0.75	1.12	33.06	0.82	1.09	32.02	0.78	
Walnuts (4/20)	1.18	39.66	0.81	1.22	39.91	0.89	1.19	38.96	0.85	
Stone Fruit (3/11)	1.48	42.79	0.81	1.53	43.07	0.84	1.49	41.85	0.83	
Past 7 days precipitation (inches)		0.00			0.00			0.00		
Accumulated precipitation (inches) (1/1/2024)		6.60			6.94			5.45		

Dates in parentheses above, indicate leaf out or starting date for ET accumulation for the specific crop

^{**} 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			#2 Five Poi	nts								
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/1)	2.0	1.7	1.5	1.3	2.0	1.8	1.6	1.4	2.0	1.7	1.5	1.3
Pistachio (4/20)	1.8	1.6	1.4	1.2	1.9	1.6	1.4	1.3	1.8	1.6	1.4	1.3
Citrus (2/1)	1.4	1.3	1.1	1.0	1.5	1.3	1.2	1.0	1.5	1.3	1.1	1.0
Raisin Grapes (3/11) (11 ft. row spacing)	As	ssume all gra	pe	1.0	Assume all grape		1.0	Assume all grape		1.0		
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	irrigation type is drip			1.2	irrigation type is drip		drip	1.2	irrigation type is drip		drip	1.1
Walnuts (4/20)	1.8	1.6	1.4	1.2	1.9	1.6	1.4	1.3	1.8	1.6	1.4	1.3
Stone Fruit (3/11)	2.3	2.0	1.7	1.6	2.4	2.0	1.8	1.6	2.3	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 WEEKLY APPLIED WATER IN GALLON PER TREE OR VINE

Crops			#2 Five Poi	nts		#15 Stratford						
Almonds 115 Trees/A	472 401 354		307	472	425	378	331	472	401	354	307	
Pistachio 106 Trees/A	448	399	349	299	473	399	349	324	448	399	349	324
Citrus 110 Trees/A	346	321	272	247	370	321	296	247	370	321	272	247
Raisin Grapes 566 Vines/A	Assume all grape			48	Assume all grape 48			Assume all grape			48	
Winegrapes 622 Vines/A	irrig	ation type is	drip	52	irrigation type is drip 52			irrigation type is drip			48	
Walnuts 76 Trees/A	643	572	500	429	679	572	500	464	643	572	500	464
Stonefruit 172 Trees/A	363	316	268	253	379	316	284	253	363	316	284	253
For further information concerning all counties receiving this report, contact the Fresno Co. Farm Advisor's office at (559) 241-7526.												

^{*} 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.