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) 08/16/24 through 08/22/24

Crops (Leafout Date)	#148 Merced				#39 Parlier				#258 Lemon Cove		
	08/16 - 08/22	Accum'd	08/23 - 08/29		08/16 - 08/22	Accum'd	08/23 - 08/29		08/16 - 08/22	Accum'd	08/23 - 08/29
	Water	Seasonal	Estimated		Water	Seasonal	Estimated		Water	Seasonal	Estimated
	Use	Water Use	ETc		Use	Water Use	ETc		Use	Water Use	ETc
Almonds (3/1) *	1.81	35.96	1.75		1.87	37.60	1.66		1.76	36.36	1.53
Pistachio (4/20) * **	1.81	28.51	1.75		1.91	29.87	1.67		1.77	28.85	1.60
Citrus (2/1)	1.11	26.74	1.11		1.13	28.12	1.03		1.05	27.13	0.98
Raisin Grapes (3/11) (11 ft. row spacing)	1.18	20.48	1.13		1.23	21.46	1.07		1.14	20.73	1.06
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis) ***	1.36	22.42	1.31		1.41	23.53	1.24		1.32	22.72	1.18
Walnuts (4/20)	1.88	26.39	1.82		1.98	27.74	1.74		1.84	26.78	1.67
Stone Fruit (3/11)	1.81	28.44	1.75		1.91	29.96	1.67		1.77	28.89	1.60
Past 7 days precipitation (inches)		0.00		-		0.00		-		0.00	
Accumulated precipitation (inches) (1/1/2024)		14.98				8.98				9.71	

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

PAST WEEKLY APPLIED WATER IN INCHES, ADJUSTED FOR EFFICIENCY 1

Crops	#148 Merced					#39 Parlier			#258 Lemon Cove			
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/1)	2.8	2.4	2.1	1.9	2.9	2.5	2.2	2.0	2.7	2.3	2.1	1.9
Pistachio (4/20)	2.8	2.4	2.1	1.9	2.9	2.5	2.2	2.0	2.7	2.4	2.1	1.9
Citrus (2/1)	1.7	1.5	1.3	1.2	1.7	1.5	1.3	1.2	1.6	1.4	1.2	1.1
Raisin Grapes (3/11) (11 ft. row spacing)***	As	ssume all gra	pe	1.2	Assume all grape 1.3			1.3	Assume all grape			1.2
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis) ***	irrig	ation type is	drip	1.4	irrigation type is drip		drip	1.5	irrigation type is drip		drip	1.4
Walnuts (4/20)	2.9	2.5	2.2	2.0	3.0	2.6	2.3	2.1	2.8	2.5	2.2	1.9
Stone Fruit (3/11)	2.8	2.4	2.1	1.9	2.9	2.5	2.2	2.0	2.7	2.4	2.1	1.9

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			#39 Parlier			#258 Lemon Cove						
Almonds 115 Trees/A	661	567	496	449	685	590	519	472	638	543	496	449
Pistachio 106 Trees/A	698	598	523	473	722	623	548	498	673	598	523	473
Citrus 110 Trees/A	420	370	321	296	420	370	321	296	395	346	296	272
Raisin Grapes 566 Vines/A	Assume all grape			58	Assume all grape 62			Assume all grape			58	
Winegrapes 622 Vines/A	irrig	ation type is	drip	61	irrigation type is drip 65			irrigation type is drip			61	
Walnuts 76 Trees/A	1036	893	786	715	1072	929	822	750	1000	893	786	679
Stonefruit 172 Trees/A	442	379	332	300	458	395	347	316	426	379	332	300
For further information concerning all counties receiving this report, contact	ct the Fresno C	o. Farm Adv	isor's office at	t (559) 241-7	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.

^{**} 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.

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(Estimated Crop Evapotranspiration or ET_C) 08/16/24 through 08/22/24

Crops (Leafout Date)	#124 Panoche			#2 Five Points			#15 Stratford			
	08/16- 08/22	Accum'd	08/23- 08/29	08/16- 08/22	Accum'd	08/23- 08/29	08/16- 08/22	Accum'd	08/23- 08/29	
	Water	Seasonal	Estimated	Water	Seasonal	Estimated	Water	Seasonal	Estimated	
	Use	Water Use	ETc	Use	Water Use	ETc	Use	Water Use	ETc	
Almonds (3/1) *	2.00	38.84	1.75	1.97	39.40	1.90	2.05	37.01	1.88	
Pistachio (4/20) * **	2.06	31.36	1.75	2.02	31.67	1.97	2.12	29.87	1.94	
Citrus (2/1)	1.23	29.20	1.14	1.22	29.84	1.22	1.26	28.02	1.21	
Raisin Grapes (3/11) (11 ft. row spacing)	1.33	22.42	1.13	1.31	22.71	1.26	1.37	21.30	1.24	
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	1.52	24.56	3.04	1.50	24.78	1.44	1.56	23.36	1.42	
Walnuts (4/20)	2.13	29.11	1.82	2.09	29.36	2.04	2.19	27.90	2.01	
Stone Fruit (3/11)	2.06	31.54	1.75	2.02	31.76	1.97	2.12	30.04	1.94	
Past 7 days precipitation (inches)		0.00			0.00			0.00		
Accumulated precipitation (inches) (1/1/2024)		6.60			6.86			5.43		

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 WEI	EKLY APPL	IED WATE	R IN INCHE	ES, ADJUSTI	ED FOR EFF	TICIENCY 1					
Crops	#124 Panoche					#2 Five Poi	nts					
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/1)	3.1	2.7	2.4	2.1	3.0	2.6	2.3	2.1	3.2	2.7	2.4	2.2
Pistachio (4/20)	3.2	2.7	2.4	2.2	3.1	2.7	2.4	2.1	3.3	2.8	2.5	2.2
Citrus (2/1)	1.9	1.6	1.4	1.3	1.9	1.6	1.4	1.3	1.9	1.7	1.5	1.3
Raisin Grapes (3/11) (11 ft. row spacing)	As	ssume all gra	ipe	1.4	Assume all grape 1			1.4	Assume all grape			1.4
Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis)	irrig	ation type is	drip	1.6	irrigation type is drip		drip	1.6	irrigation type is drip		drip	1.6
Walnuts (4/20)	3.3	2.8	2.5	2.2	3.2	2.8	2.5	2.2	3.4	2.9	2.6	2.3
Stone Fruit (3/11)	3.2	2.7	2.4	2.2	3.1	2.7	2.4	2.1	3.3	2.8	2.5	2.2

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	T WEEKLY .	APPLIED W	ATER IN G	GALLON PE	R TREE OR	VINE					
Crops	#124 Panoche					#2 Five Poi	nts					
Almonds 115 Trees/A	732	638	567	496	708	614	543	496	756	638	567	519
Pistachio 106 Trees/A	797	673	598	548	772	673	598	523	822	698	623	548
Citrus 110 Trees/A	469	395	346	321	469	395	346	321	469	420	370	321
Raisin Grapes 566 Vines/A	A	ssume all gra	ape	67	Assume all grape 67			As	67			
Winegrapes 622 Vines/A	irrig	gation type is	drip	70	irrigation type is drip 70			70	irrigation type is drip			70
Walnuts 76 Trees/A	1179	1000	893	786	1143	1000	893	786	1215	1036	929	822
Stonefruit 172 Trees/A	505	426	379	347	489	426	379	332	521	442	395	347
For further information concerning all counties receiving this report, cont	act the Fresno (Co. Farm Adv	isor's office a	t (559) 241-7	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.