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) 07/28/23 through 08/03/23

Crops (Leafout Date)	1	#148 Merced			#39 Parlier				#258 Lemon Cove		
	7/28- 8/3	Accum'd	8/4 - 8/10		7/28-8/3	Accum'd	8/4 - 8/10		7/28-8/3	Accum'd	8/4 - 8/10
	Water	Seasonal	Estimated		Water	Seasonal	Estimated		Water	Seasonal	Estimated
	Use	Water Use	ETc		Use	Water Use	ETc		Use	Water Use	ETc
Almonds (3/13) *	1.91	28.52	2.02		2.01	30.13	1.92		1.96	29.49	1.92
Pistachio (4/20) * **	1.96	22.69	2.09		2.08	23.89	1.98		2.02	23.68	1.96
Citrus (2/1)	1.16	22.41	1.23		1.22	23.89	1.16		1.19	23.20	1.18
Raisin Grapes (3/22) (11 ft. row spacing)	1.27	14.74	1.34		1.35	15.51	1.28		1.31	15.41	1.28
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	1.45	16.01	1.54		1.53	16.88	1.45		1.49	16.75	1.45
Walnuts (4/20)	2.03	20.72	2.16		2.15	21.87	2.05		2.09	21.73	2.03
Stone Fruit (3/19)	1.96	23.85	2.09		2.08	25.06	1.98		2.02	24.79	1.96
Past 7 days precipitation (inches)		0.00	_			0.00	_	_		0.00	
Accumulated precipitation (inches) (1/1/2023)		16.33				12.53				15.76	

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.

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PASI WHEELV	_	IRRIVING HRS		H H H I (I H N (V)
IASI WEEKLI	ALLED WAL		ADJUSTED FOR	LITICILITOI

Crops		#148 Merc	ed			#39 Parlier			#258 Lemon Cove			
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/13)	2.9	2.5	2.2	2.0	3.1	2.7	2.4	2.1	3.0	2.6	2.3	2.1
Pistachio (4/20)	3.0	2.6	2.3	2.1	3.2	2.8	2.4	2.2	3.1	2.7	2.4	2.1
Citrus (2/1)	1.8	1.5	1.4	1.2	1.9	1.6	1.4	1.3	1.8	1.6	1.4	1.3
Raisin Grapes (3/22) (11 ft. row spacing)	As	sume all gr	ape	1.3	Assume all grape 1.4			1.4	Assume all grape			1.4
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	irriga	ation type is	s drip	1.5	irrigation type is drip 1			1.6	irrigation type is drip			1.6
Walnuts (4/20)	3.1	2.7	2.4	2.1	3.3	2.9	2.5	2.3	3.2	2.8	2.5	2.2
Stone Fruit (3/19)	3.0	2.6	2.3	2.1	3.2	2.8	2.4	2.2	3.1	2.7	2.4	2.1

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

THOI WEEKELINITERED WITHKIN GREEDITER TREE OR THE												
Crops		#148 Merc	ed			#39 Parlier	•		#258 Lemon Cove			
Almonds 115 Trees/A	685	590	519	472	732	638	567	496	708	614	543	496
Pistachio 106 Trees/A	747	648	573	523	797	698	598	548	772	673	598	523
Citrus 110 Trees/A	444	370	346	296	469	395	346	321	444	395	346	321
Raisin Grapes 566 Vines/A	As	sume all gr	ape	62	Assume all grape 67			Assume all grape			67	
Winegrapes 622 Vines/A	irrig	ation type is	s drip	65	irrigation type is drip 70			70	irrigation type is drip			70
Walnuts 76 Trees/A	1108	965	857	750	1179	1036	893	822	1143	1000	893	786
Stonefruit 172 Trees/A	474	410	363	332	505	442	379	347	489	426	379	332
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.							

^{*} 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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(Estimated Crop Evapotranspiration or ET_C) 07/28/23 through 08/03/23

Crops (Leafout Date)	#124 Panoche			#2 Five Points			#15 Stratford			
	7/28 - 8/3	Accum'd	8/4 - 8/10	7/28 - 8/3	Accum'd	8/4 - 8/10	7/28 - 8/3	Accum'd	8/4 - 8/10	
	Water	Seasonal	Estimated	Water	Seasonal	Estimated	Water	Seasonal	Estimated	1
	Use	Water Use	ETc	Use	Water Use	ETc	Use	Water Use	ETc	
Almonds (3/13) *	2.08	30.81	1.99	2.01	30.14	2.16	2.20	33.06	2.15	1
Pistachio (4/20) * **	2.15	24.79	2.06	2.08	24.02	2.23	2.27	26.21	2.22	1
Citrus (2/1)	1.27	24.03	1.20	1.22	23.77	1.30	1.34	25.92	1.30	
Raisin Grapes (3/22) (11 ft. row spacing)	1.39	15.73	1.33	1.34	15.33	1.46	1.48	16.63	1.45	1
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	1.59	17.07	1.51	1.53	16.54	1.66	1.69	18.04	1.65	
Walnuts (4/20)	2.22	22.66	2.13	2.15	21.91	2.30	2.34	24.03	2.29	1
Stone Fruit (3/19)	2.15	26.13	2.06	2.08	25.43	2.23	2.27	27.85	2.14	
Past 7 days precipitation (inches)		0.00	·		0.00			0.00		
Accumulated precipitation (inches) (1/1/2023)		6.18			7.65			7.90		1

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		#124 Pano	che		#2 Five Points					#15 Stratford			
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%	
Almonds (3/13)	3.2	2.8	2.4	2.2	3.1	2.7	2.4	2.1	3.4	2.9	2.6	2.3	
Pistachio (4/20)	3.3	2.9	2.5	2.3	3.2	2.8	2.4	2.2	3.5	3.0	2.7	2.4	
Citrus (2/1)	2.0	1.7	1.5	1.3	1.9	1.6	1.4	1.3	2.1	1.8	1.6	1.4	
Raisin Grapes (3/22) (11 ft. row spacing)	As	sume all gr	ape	1.5	Assume all grape 1.4			1.4	Assume all grape			1.6	
Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis)	irriga	ation type is	s drip	1.7	irrigation type is drip			1.6	irrigation type is drip		1.8		
Walnuts (4/20)	3.4	3.0	2.6	2.3	3.3	2.9	2.5	2.3	3.6	3.1	2.8	2.5	
Stone Fruit (3/19)	3.3	2.9	2.5	2.3	3.2	2.8	2.4	2.2	3.5	3.0	2.7	2.4	

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 W	EEKLY A	PPLIED W	ATER IN C	GALLON PI	ER TREE (OR VINE						
Crops		#124 Pano	che		#2 Five Points					#15 Stratford			
Almonds 115 Trees/A	756	661	567	519	732	638	567	496	803	685	614	543	
Pistachio 106 Trees/A	822	722	623	573	797	698	598	548	872	747	673	598	
Citrus 110 Trees/A	494	420	370	321	469	395	346	321	518	444	395	346	
Raisin Grapes 566 Vines/A	As	sume all gr	ape	72	Assume all grape			67	Assume all grape			77	
Winegrapes 622 Vines/A	irrig	ation type is	s drip	74	irrigation type is drip			70	irrigation type is drip			79	
Walnuts 76 Trees/A	1215	1072	929	822	1179	1036	893	822	1286	1108	1000	893	
Stonefruit 172 Trees/A	521	458	395	363	505	442	379	347	553	474	426	379	
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