HEALTHY FOOD SYSTEMS . HEALTHY ENVIRONMENTS

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)

10/21/22 through 10/27/22

	#	148 Merce	d	Ŧ	#39 Parlier	•	#25	8 J
	10/21 - 10/27	Accum'd	10/28 - 11/3	10/21 - 10/27	Accum'd	10/28 - 11/3	10/21 - 10/27	ĺ
	Water	Seasonal	Estimated	Water	Seasonal	Estimated	Water	5
	Use	Water Use	ETc	Use	Water Use	ETc	Use	V
Almonds (3/1) *	0.68	48.34	0.48	0.68	49.99	0.47	0.70	
Pistachio (4/8) * **	0.56	42.67	0.42	0.57	44.39	0.41	0.58	
Citrus (2/1)	0.54	36.41	0.42	0.54	37.71	0.41	0.56	
Raisin Grapes (3/15) (11 ft. row spacing)	0.54	29.08	0.44	0.54	30.25	0.42	0.56	
Winegrapes (3/15) (10 ft. spacing on California Sprawl Trellis) ***	0.65	32.16	0.50	0.65	33.42	0.48	0.66	
Walnuts (4/8)	0.22	41.83	0.17	0.21	43.43	0.15	0.21	
Stone Fruit (3/10)	0.62	41.90	0.45	0.64	43.54	0.43	0.65	
Past 7 days precipitation (inches)	•	0.00			0.00			
Accumulated precipitation (inches) (1/1/2022)		2.90			2.05			

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.

PA	ST WEEK	LY APPLII	ED WATEF	R IN INCHE	ES. ADJUST	FED FOR E	FFICIENC	\mathbf{Y}^{1}	
Crops	1	#148 Merce			·	#39 Parlier			#2:
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%
Almonds (3/1)	1.0	0.9	0.8	0.7	1.0	0.9	0.8	0.7	1.1
Pistachio (4/8)	0.9	0.7	0.7	0.6	0.9	0.8	0.7	0.6	0.9
Citrus (2/1)	0.8	0.7	0.6	0.6	0.8	0.7	0.6	0.6	0.9
Raisin Grapes (3/15) (11 ft. row spacing)***	As	sume all gr	ape	0.6	As	sume all gr	ape	0.6	Assur
Winegrapes (3/15) (10 ft. spacing on California Sprawl Trellis) ***	irriga	ation type is	s drip	0.7	irriga	ation type is	s drip	0.7	irrigatio
Walnuts (4/8)	0.3	0.3	0.3	0.2	0.3	0.3	0.2	0.2	0.3
Stone Fruit (3/10)	1.0	0.8	0.7	0.7	1.0	0.9	0.8	0.7	1.0
Stone Fruit (3/10)	1.0	0.8	0.7	0.7	1.0	0.9	0.8	0.7	1.0

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%

	PAST W	VEEKLY A	PPLIED WA	ATER IN C	GALLON PI	ER TREE O	OR VINE		
Crops		#148 Merc	ed			#39 Parlier	•		#25
Almonds 115 Trees/A	236	213	189	165	236	213	189	165	260
Pistachio 106 Trees/A	224	174	174	149	224	199	174	149	224
Citrus 110 Trees/A	197	173	148	148	197	173	148	148	222
Raisin Grapes 566 Vines/A	As	sume all gr	ape	29	As	sume all gra	ape	29	Assun
Winegrapes 622 Vines/A	irrig	ation type is	s drip	31	irriga	ation type is	s drip	31	irrigatio
Walnuts 76 Trees/A	107	107	107	71	107	107	71	71	107
Stonefruit 172 Trees/A	158	126	111	111	158	142	126	111	158
For further information concerning all counties receiving this report, contact	t the Fresno	Co. Farm Ac	lvisor's office	e at (559) 2-	41-7526.				-

B Lemon C	ove	
Accum'd		
Seasonal	Estimated	
Water Use	ETc	
46.72	0.51	
41.18	0.44	
35.43	0.44	
28.10	0.48	
31.03	0.55	
40.26	0.21	
40.35	0.51	
0.00		
2.82		
258 Lemo	n Cove	
≠258 Lemo 75%		95%
75%	85%	95%
75% 0.9	85% 0.8	0.7
75% 0.9 0.8	85% 0.8 0.7	0.7 0.6
75% 0.9 0.8 0.7	85% 0.8 0.7 0.7	0.7 0.6 0.6
75% 0.9 0.8 0.7 ume all gra	85% 0.8 0.7 0.7 ape	0.7 0.6 0.6 0.6
75% 0.9 0.8 0.7 ume all gra ion type is	85% 0.8 0.7 0.7 ape s drip	0.7 0.6 0.6 0.6 0.7
75% 0.9 0.8 0.7 ume all gra ion type is 0.3	85% 0.8 0.7 0.7 ape s drip 0.2	0.7 0.6 0.6 0.6 0.7 0.2
75% 0.9 0.8 0.7 ume all gra ion type is 0.3 0.9	85% 0.8 0.7 0.7 ape s drip 0.2 0.8	0.7 0.6 0.6 0.7 0.2 0.7
75% 0.9 0.8 0.7 ume all gra ion type is 0.3 0.9	85% 0.8 0.7 0.7 ape s drip 0.2	0.7 0.6 0.6 0.7 0.2 0.7
75% 0.9 0.8 0.7 ume all gra ion type is 0.3 0.9	85% 0.8 0.7 0.7 ape s drip 0.2 0.8	0.7 0.6 0.6 0.7 0.2 0.7
75% 0.9 0.8 0.7 ume all gra ion type is 0.3 0.9	85% 0.8 0.7 0.7 ape s drip 0.2 0.8 er-furrow, 50%	0.7 0.6 0.6 0.7 0.2 0.7
75% 0.9 0.8 0.7 ume all gra ion type is 0.3 0.9 %; and Bord	85% 0.8 0.7 0.7 ape s drip 0.2 0.8 er-furrow, 50%	0.7 0.6 0.6 0.7 0.2 0.7
75% 0.9 0.8 0.7 ume all gra ion type is 0.3 0.9 %; and Bord	85% 0.8 0.7 0.7 ape s drip 0.2 0.8 er-furrow, 50% n Cove	0.7 0.6 0.6 0.7 0.2 0.7 0.7
75% 0.9 0.8 0.7 ume all gra ion type is 0.3 0.9 %; and Bord 258 Lemo 213	85% 0.8 0.7 0.7 ape 5 drip 0.2 0.8 er-furrow, 50% n Cove 189	0.7 0.6 0.6 0.7 0.2 0.7 5-75%.
75% 0.9 0.8 0.7 ume all gra ion type is 0.3 0.9 %; and Bord 258 Lemo 213 199 173	85% 0.8 0.7 0.7 ape 5 drip 0.2 0.8 er-furrow, 50% n Cove 189 174 173	0.7 0.6 0.6 0.7 0.2 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7
75% 0.9 0.8 0.7 ume all gra ion type is 0.3 0.9 %; and Bord 4258 Lemo 213 199 173 ume all gra	85% 0.8 0.7 0.7 ape s drip 0.2 0.8 er-furrow, 50% n Cove 189 174 173 ape	0.7 0.6 0.6 0.7 0.2 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7
75% 0.9 0.8 0.7 ume all gra ion type is 0.3 0.9 %; and Borda 213 199 173 ume all gra ion type is	85% 0.8 0.7 0.7 ape 5 drip 0.2 0.8 er-furrow, 50% n Cove 189 174 173 ape 5 drip	0.7 0.6 0.6 0.7 0.2 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7
75% 0.9 0.8 0.7 ume all gra ion type is 0.3 0.9 %; and Bord 213 199 173 ume all gra ion type is 107	85% 0.8 0.7 0.7 ape s drip 0.2 0.8 er-furrow, 50% n Cove 189 174 173 ape s drip 71	0.7 0.6 0.6 0.7 0.2 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7
75% 0.9 0.8 0.7 ume all gra ion type is 0.3 0.9 %; and Borda 213 199 173 ume all gra ion type is	85% 0.8 0.7 0.7 ape 5 drip 0.2 0.8 er-furrow, 50% n Cove 189 174 173 ape 5 drip	0.7 0.6 0.6 0.7 0.2 0.7 0.7 0.7 0.7 0.7 0.7 0.7 0.7



WEEKLY SOIL MOISTURE LOSS IN INCHES (Estimated Crop Evapotranspiration or ET_C)

10/21/22 through 10/27/22

Crops (Leafout Date)	#	124 Panoch	e	#2	2 Five Poin	ts	#	15
	10/21-10/27	Accum'd	10/28-11/3	10/21-10/27	Accum'd	10/28-11/3	10/21-10/27	F
	Water	Seasonal	Estimated	Water	Seasonal	Estimated	Water	S
	Use	Water Use	ETc	Use	Water Use	ETc	Use	W
Almonds (3/1) *	0.82	53.75	0.50	0.83	55.79	0.57	0.82	
Pistachio (4/8) * **	0.71	47.27	0.44	0.72	48.88	0.50	0.70	
Citrus (2/1)	0.67	40.55	0.44	0.66	42.14	0.50	0.66	
Raisin Grapes (3/15) (11 ft. row spacing)	0.69	32.23	0.47	0.69	33.40	0.49	0.68	
Winegrapes (3/15) (10 ft. spacing on California Sprawl Trellis)	0.78	35.50	0.54	0.78	36.77	0.60	0.77	
Walnuts (4/8)	0.26	46.15	0.20	0.27	47.87	0.21	0.27	
Stone Fruit (3/10)	0.78	46.39	0.50	0.78	48.04	0.57	0.76	
Past 7 days precipitation (inches)		0.00			0.00			
Accumulated precipitation (inches) (1/1/2022)	•	1.25			1.76			

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 stre 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 WATER	R IN INCHE	ES, ADJUST	TED FOR E	FFICIENC	CY 1	
Crops		#124 Pano	che			#2 Five Poi	ints		#15
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%
Almonds (3/1)	1.3	1.1	1.0	0.9	1.3	1.1	1.0	0.9	1.3
Pistachio (4/8)	1.1	0.9	0.8	0.7	1.1	1.0	0.8	0.8	1.1
Citrus (2/1)	1.0	0.9	0.8	0.7	1.0	0.9	0.8	0.7	1.0
Raisin Grapes (3/15) (11 ft. row spacing)	As	sume all gr	ape	0.7	As	sume all gr	ape	0.7	Assun
Winegrapes (3/15) (10 ft. spacing on California Sprawl Trellis)	irriga	ation type is	s drip	0.8	irriga	ation type is	s drip	0.8	irrigation
Walnuts (4/8)	0.4	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.4
Stone Fruit (3/10)	1.2	1.0	0.9	0.8	1.2	1.0	0.9	0.8	1.2

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%

	PAST W	EEKLY A	PPLIED W	ATER IN G	GALLON PI	ER TREE O	OR VINE			
Crops		#124 Pano	che			#2 Five Poi	ints		#1	5
Almonds 115 Trees/A	307	260	236	213	307	260	236	213	307	
Pistachio 106 Trees/A	274	224	199	174	274	249	199	199	274	
Citrus 110 Trees/A	247	222	197	173	247	222	197	173	247	
Raisin Grapes 566 Vines/A	As	sume all gr	ape	34	Ass	sume all gra	ape	34	Assu	n
Winegrapes 622 Vines/A	irriga	ation type is	s drip	35	irriga	ation type is	s drip	35	irrigatio	51
Walnuts 76 Trees/A	143	107	107	107	143	143	107	107	143	
Stonefruit 172 Trees/A	189	158	142	126	189	158	142	126	189	
For further information concerning all counties receiving this report, contact	the Fresno	Co. Farm Ad	lvisor's office	e at (559) 24	41-7526.					

5 Stratfor	d	
Accum'd	10/28-11/3	
Seasonal	Estimated	
Water Use	ETc	
57.39	0.56	
50.45	0.49	
43.03	0.49	
34.43	0.48	
37.96	0.60	
49.38	0.21	
49.58	0.56	
0.00		
1.33		
ess. Weekly	v estimates of s	oil moisture
ess. Weekly <u>+15 Stratfo</u> 75%		95%
15 Stratfo	rd	
+ <mark>15 Stratfo</mark> 75%	o <mark>rd</mark> 85%	95%
15 Stratfo 75% 1.1	rd 85% 1.0	95% 0.9
² 15 Stratfo 75% 1.1 0.9	ord 85% 1.0 0.8 0.8	95% 0.9 0.7
15 Stratfo 75% 1.1 0.9 0.9	rd 85% 1.0 0.8 0.8 ape	95% 0.9 0.7 0.7
415 Stratfo 75% 1.1 0.9 0.9 ume all gra	rd 85% 1.0 0.8 0.8 ape	95% 0.9 0.7 0.7 0.7
15 Stratfo 75% 1.1 0.9 0.9 ume all gra ion type is	rd 85% 1.0 0.8 0.8 ape s drip	95% 0.9 0.7 0.7 0.7 0.7 0.8
15 Stratfo 75% 1.1 0.9 0.9 ume all gra ion type is 0.4 1.0	ord 85% 1.0 0.8 0.8 ape s drip 0.3	95% 0.9 0.7 0.7 0.7 0.7 0.8 0.3 0.8
15 Stratfo 75% 1.1 0.9 0.9 ume all gra ion type is 0.4 1.0 %; and Bord	rd 85% 1.0 0.8 0.8 ape 5 drip 0.3 0.9 er-furrow, 50%	95% 0.9 0.7 0.7 0.7 0.7 0.8 0.3 0.8
15 Stratfo 75% 1.1 0.9 0.9 ume all gra ion type is 0.4 1.0 %; and Bord 415 Stratfo	ord 85% 1.0 0.8 0.8 ape 5 drip 0.3 0.9 er-furrow, 50% ord	95% 0.9 0.7 0.7 0.7 0.8 0.3 0.8 6-75%.
15 Stratfo 75% 1.1 0.9 0.9 ume all gra ion type is 0.4 1.0 %; and Bord 415 Stratfo 260	ord 85% 1.0 0.8 0.8 ape s drip 0.3 0.9 er-furrow, 50% ord 236	95% 0.9 0.7 0.7 0.7 0.8 0.3 0.8 6-75%. 213
415 Stratfo 75% 1.1 0.9 ume all gration type is 0.4 1.0 %; and Bord 415 Stratfo 260 224	rd 85% 1.0 0.8 0.8 ape 5 drip 0.3 0.9 er-furrow, 50% rd 236 199	95% 0.9 0.7 0.7 0.7 0.8 0.3 0.8 6-75%. 213 174
#15 Stratfo 75% 1.1 0.9 0.9 ume all gration type is 0.4 1.0 %; and Bord #15 Stratfo 260 224 222	rd 85% 1.0 0.8 0.8 ape s drip 0.3 0.9 er-furrow, 50% rd 236 199 197	95% 0.9 0.7 0.7 0.7 0.8 0.3 0.8 6-75%. 213 174 173
#15 Stratfo 75% 1.1 0.9 ume all gration type is 0.4 1.0 %; and Bord #15 Stratfo 260 224 222 ume all grating	rd 85% 1.0 0.8 0.8 ape s drip 0.3 0.9 er-furrow, 50% rd 236 199 197 ape	95% 0.9 0.7 0.7 0.7 0.8 0.3 0.8 0.3 0.8 0-75%. 213 174 173 34
#15 Stratfo 75% 1.1 0.9 0.9 ume all gration type is 0.4 1.0 %; and Border #15 Stratfo 260 224 222 ume all gration type is 100	ord 85% 1.0 0.8 0.8 ape s drip 0.3 0.9 er-furrow, 50% ord 236 199 197 ape s drip	95% 0.9 0.7 0.7 0.7 0.8 0.3 0.8 6-75%. 213 174 173 34 35
15 Stratfo 75% 1.1 0.9 ume all gration type is 0.4 1.0 %; and Bord 415 Stratfo 260 224 222 ume all gration type is ion type is 143	ord 85% 1.0 0.8 0.8 ape s drip 0.3 0.9 er-furrow, 50% ord 236 199 197 ape s drip 107	95% 0.9 0.7 0.7 0.7 0.8 0.3 0.8 0.3 0.8 0-75%. 213 174 173 34 35 107
#15 Stratfo 75% 1.1 0.9 0.9 ume all gration type is 0.4 1.0 %; and Border #15 Stratfo 260 224 222 ume all gration type is 100	ord 85% 1.0 0.8 0.8 ape s drip 0.3 0.9 er-furrow, 50% ord 236 199 197 ape s drip	95% 0.9 0.7 0.7 0.7 0.8 0.3 0.8 6-75%. 213 174 173 34 35