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Kern UCCE/DWR Weekly Crop Water Use Report

WEEKLY CROP WATER USE - Based on local CIMIS Weather Stations (in inches)

(Estimated Crop Evapotranspiration or ETc)

09/09/24 through 09/15/24

*SEE NOTE BELOW*****

Crops (Leafout Date)	#5 Shafter			#125 Arvin-Edison			#146 Belridge		
	09/02 -09/08 Water Use	Accum'd Seasonal Water Use	09/09 -09/15 Estimated ETc	09/02 -09/08 Water Use	Accum'd Seasonal Water Use	09/09 -09/15 Estimated ETc	09/02 -09/08 Water Use	Accum'd Seasonal Water Use	09/09 -09/15 Estimated ETc
Almonds (3/1) *	1.60	41.42	1.49	1.96	46.62	1.57	1.69	42.81	1.44
Pistachio (4/1) * **	1.64	34.53	1.56	2.03	39.47	1.64	1.73	35.57	1.51
Citrus (2/1)	1.07	31.35	1.11	1.32	34.33	1.14	1.16	32.33	1.08
Grapes (3/18) (late season table, 75% cover)	1.78	35.84	1.70	2.17	41.28	1.78	1.92	37.14	1.65
Winegrapes (3/18) (50% cover) ***	0.77	20.57	0.72	0.93	23.02	0.77	0.82	21.17	0.70
Alfalfa (2/1)	1.50	44.80	1.35	1.77	49.32	1.43	1.59	46.20	1.30
Cotton (5/13)	1.73	23.78	1.53	2.08	28.36	1.61	1.84	24.81	1.48
Past 7 days precipitation (inches)		0.00			0.00			0.00	
Accumulated precipitation (inches) (since 1/1/2024)		5.63			7.71			7.80	

Accumulations started on the approximate leafout date for a specific orchard crop as indicated in parentheses. Criteria for beginning this report are based on the season's last significant rainfall event where the soil moisture profile is estimated to be near its highest level for the new season.

* 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.

*** Winegrapes irrigated at 50% of ETo starting June 1 to end of September.

**** Due to poor conditions 5 Shafter currently has insufficient vegetative cover to provide accurate ETo data. Starting June 15, 2024, 5 Shafter data for the past seven days will be the 20+ year average (normal year) ETo. The "Estimated ET" for next week is based on the 20+ year average (normal year) ETo for that station and is still valid. 125 Arvin-Edison and 146 Belridge are providing the best ETo data for Kern County.

PAST WEEKLY APPLIED WATER IN INCHES, ADJUSTED FOR EFFICIENCY [1]

Crops	#5 Shafter				#125 Arvin-Edison				#146 Belridge			
System Efficiency >>	65%	75%	85%	95%	65%	75%	85%	95%	65%	75%	85%	95%
Almonds (3/1)	2.5	2.1	1.9	1.7	3.0	2.6	2.3	2.1	2.6	2.3	2.0	1.8
Pistachio (4/1)	2.5	2.2	1.9	1.7	3.1	2.7	2.4	2.1	2.7	2.3	2.0	1.8
Citrus (2/1)	1.6	1.4	1.3	1.1	2.0	1.8	1.6	1.4	1.8	1.5	1.4	1.2
Grapes (3/18) (late season table, 75% cover)	2.7	2.4	2.1	1.9	3.3	2.9	2.6	2.3	3.0	2.6	2.3	2.0
Winegrapes (3/18) (50% cover)	1.2	1.0	0.9	0.8	1.4	1.2	1.1	1.0	1.3	1.1	1.0	0.9
Alfalfa (2/1)	2.3	2.0	1.8	1.6	2.7	2.4	2.1	1.9	2.4	2.1	1.9	1.7
Cotton (5/13)	2.7	2.3	2.0	1.8	3.2	2.8	2.4	2.2	2.8	2.5	2.2	1.9

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%.

For further information concerning all counties receiving this report, contact the Kern Co. Farm Advisor's office at 661-868-6200.