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University of California
Agriculture and Natural Resources
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UCCE

# UCCE/DWR Weekly Crop Water Use Report

## WEEKLY SOIL MOISTURE LOSS IN INCHES

**(Estimated Crop Evapotranspiration or $ET_C$)**

**06/07/24 through 06/13/24**

| Crops (Leafout Date) | #148 Merced | | | #39 Parlier | | | #258 Lemon Cove | | |
|---|---|---|---|---|---|---|---|---|---|
| | 06/07 - 06/13 Water Use | Accum'd Seasonal Water Use | 06/14 - 06/20 Estimated ETc | 06/07 - 06/13 Water Use | Accum'd Seasonal Water Use | 06/14 - 06/20 Estimated ETc | 06/07 - 06/13 Water Use | Accum'd Seasonal Water Use | 06/14 - 06/20 Estimated ETc |
| Almonds (3/1) * | 1.84 | 16.09 | 1.95 | 2.01 | 16.92 | 1.96 | 1.96 | 16.47 | 1.96 |
| Pistachio (4/20) * ** | 2.03 | 7.90 | 2.09 | 2.20 | 8.46 | 2.10 | 2.15 | 8.26 | 2.10 |
| Citrus (2/1) | 1.19 | 14.57 | 1.25 | 1.32 | 15.40 | 1.26 | 1.28 | 14.97 | 1.26 |
| Raisin Grapes (3/11) (11 ft. row spacing) | 1.29 | 7.06 | 1.36 | 1.39 | 7.59 | 1.36 | 1.35 | 7.42 | 1.36 |
| Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis) | 1.35 | 7.35 | 1.48 | 1.49 | 7.85 | 1.49 | 1.45 | 7.67 | 1.49 |
| Walnuts (4/20) | 1.49 | 7.08 | 1.60 | 1.62 | 7.59 | 1.61 | 1.57 | 7.49 | 1.61 |
| Stone Fruit (3/11) | 1.46 | 9.72 | 1.60 | 1.62 | 10.38 | 1.61 | 1.58 | 10.17 | 1.61 |
| **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

* 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.

## 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 | 2.5 | 2.2 | 1.9 | 3.1 | 2.7 | 2.4 | 2.1 | 3.0 | 2.6 | 2.3 | 2.1 |
| Pistachio (4/20) | 3.1 | 2.7 | 2.4 | 2.1 | 3.4 | 2.9 | 2.6 | 2.3 | 3.3 | 2.9 | 2.5 | 2.3 |
| Citrus (2/1) | 1.8 | 1.6 | 1.4 | 1.3 | 2.0 | 1.8 | 1.6 | 1.4 | 2.0 | 1.7 | 1.5 | 1.3 |
| Raisin Grapes (3/11) (11 ft. row spacing) | Assume all grape | | | 1.4 | Assume all grape | | | 1.5 | Assume all grape | | | 1.4 |
| Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis) | irrigation type is drip | | | 1.4 | irrigation type is drip | | | 1.6 | irrigation type is drip | | | 1.5 |
| Walnuts (4/20) | 2.3 | 2.0 | 1.8 | 1.6 | 2.5 | 2.2 | 1.9 | 1.7 | 2.4 | 2.1 | 1.8 | 1.7 |
| Stone Fruit (3/11) | 2.2 | 1.9 | 1.7 | 1.5 | 2.5 | 2.2 | 1.9 | 1.7 | 2.4 | 2.1 | 1.9 | 1.7 |

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 Merced | | | | #39 Parlier | | | | #258 Lemon Cove | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Almonds 115 Trees/A | 661 | 590 | 519 | 449 | 732 | 638 | 567 | 496 | 708 | 614 | 543 | 496 |
| Pistachio 106 Trees/A | 772 | 673 | 598 | 523 | 847 | 722 | 648 | 573 | 822 | 722 | 623 | 573 |
| Citrus 110 Trees/A | 444 | 395 | 346 | 321 | 494 | 444 | 395 | 346 | 494 | 420 | 370 | 321 |
| Raisin Grapes 566 Vines/A | Assume all grape | | | 67 | Assume all grape | | | 72 | Assume all grape | | | 67 |
| Winegrapes 622 Vines/A | irrigation type is drip | | | 61 | irrigation type is drip | | | 70 | irrigation type is drip | | | 65 |
| Walnuts 76 Trees/A | 822 | 715 | 643 | 572 | 893 | 786 | 679 | 607 | 857 | 750 | 643 | 607 |
| Stonefruit 172 Trees/A | 347 | 300 | 268 | 237 | 395 | 347 | 300 | 268 | 379 | 332 | 300 | 268 |

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

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## WEEKLY SOIL MOISTURE LOSS IN INCHES

**(Estimated Crop Evapotranspiration or $ET_C$)**

**06/07/24 through 06/13/24**

| Crops (Leafout Date) | #124 Panoche | | | #2 Five Points | | | #15 Stratford | | |
|---|---|---|---|---|---|---|---|---|---|
| | 06/07- 06/13 Water Use | Accum'd Seasonal Water Use | 06/14- 06/20 Estimated ETc | 06/07- 06/13 Water Use | Accum'd Seasonal Water Use | 06/14- 06/20 Estimated ETc | 06/07- 06/13 Water Use | Accum'd Seasonal Water Use | 06/14- 06/20 Estimated ETc |
| Almonds (3/1) * | 1.97 | 17.09 | 2.17 | 2.02 | 17.62 | 2.17 | 1.88 | 15.86 | 2.17 |
| Pistachio (4/20) * ** | 2.18 | 8.86 | 2.31 | 2.23 | 9.18 | 2.31 | 2.09 | 7.96 | 2.31 |
| Citrus (2/1) | 1.30 | 15.86 | 1.40 | 1.33 | 16.49 | 1.40 | 1.24 | 15.06 | 1.40 |
| Raisin Grapes (3/11) (11 ft. row spacing) | 1.38 | 7.81 | 1.52 | 1.41 | 8.11 | 1.52 | 1.32 | 7.10 | 1.52 |
| Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis) | 1.46 | 8.03 | 1.62 | 1.49 | 8.29 | 1.62 | 1.39 | 7.30 | 1.62 |
| Walnuts (4/20) | 1.60 | 7.90 | 1.82 | 1.63 | 8.22 | 1.82 | 1.52 | 7.18 | 1.82 |
| Stone Fruit (3/11) | 1.60 | 10.86 | 1.82 | 1.65 | 11.11 | 1.82 | 1.52 | 9.86 | 1.82 |
| **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

* 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.

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

| Crops | #124 Panoche | | | | #2 Five Points | | | | #15 Stratford | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| System Efficiency >> | 65% | 75% | 85% | 95% | 65% | 75% | 85% | 95% | 65% | 75% | 85% | 95% |
| Almonds (3/1) | 3.0 | 2.6 | 2.3 | 2.1 | 3.1 | 2.7 | 2.4 | 2.1 | 2.9 | 2.5 | 2.2 | 2.0 |
| Pistachio (4/20) | 3.4 | 2.9 | 2.6 | 2.3 | 3.4 | 3.0 | 2.6 | 2.3 | 3.2 | 2.8 | 2.5 | 2.2 |
| Citrus (2/1) | 2.0 | 1.7 | 1.5 | 1.4 | 2.0 | 1.8 | 1.6 | 1.4 | 1.9 | 1.7 | 1.5 | 1.3 |
| Raisin Grapes (3/11) (11 ft. row spacing) | Assume all grape | | | 1.4 | Assume all grape | | | 1.5 | Assume all grape | | | 1.4 |
| Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis) | irrigation type is drip | | | 1.5 | irrigation type is drip | | | 1.5 | irrigation type is drip | | | 1.5 |
| Walnuts (4/20) | 2.5 | 2.1 | 1.9 | 1.7 | 2.5 | 2.2 | 1.9 | 1.7 | 2.3 | 2.0 | 1.8 | 1.6 |
| Stone Fruit (3/11) | 2.5 | 2.1 | 1.9 | 1.7 | 2.5 | 2.2 | 1.9 | 1.7 | 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 | #124 Panoche | | | | #2 Five Points | | | | #15 Stratford | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Almonds 115 Trees/A | 708 | 614 | 543 | 496 | 732 | 638 | 567 | 496 | 685 | 590 | 519 | 472 |
| Pistachio 106 Trees/A | 847 | 722 | 648 | 573 | 847 | 747 | 648 | 573 | 797 | 698 | 623 | 548 |
| Citrus 110 Trees/A | 494 | 420 | 370 | 346 | 494 | 444 | 395 | 346 | 469 | 420 | 370 | 321 |
| Raisin Grapes 566 Vines/A | Assume all grape | | | 67 | Assume all grape | | | 72 | Assume all grape | | | 67 |
| Winegrapes 622 Vines/A | irrigation type is drip | | | 65 | irrigation type is drip | | | 65 | irrigation type is drip | | | 65 |
| Walnuts 76 Trees/A | 893 | 750 | 679 | 607 | 893 | 786 | 679 | 607 | 822 | 715 | 643 | 572 |
| Stonefruit 172 Trees/A | 395 | 332 | 300 | 268 | 395 | 347 | 300 | 268 | 363 | 316 | 284 | 253 |

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