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) 06/07/24 through 06/13/24

| Crops (Leafout Date) | # | #148 Merced | | | #39 Parlier | | | #258 Lemon Cove | | |
|---|---------------|-------------|---------------|--|---------------|-----------|---------------|-----------------|-----------|---------------|
| | 06/07 - 06/13 | Accum'd | 06/14 - 06/20 | | 06/07 - 06/13 | Accum'd | 06/14 - 06/20 | 06/07 - 06/13 | Accum'd | 06/14 - 06/20 |
| | Water | Seasonal | Estimated | | Water | Seasonal | Estimated | Water | Seasonal | Estimated |
| | Use | Water Use | ETc | | Use | Water Use | ETc | Use | Water Use | ETc |
| Almonds (3/1) * | 1.84 | 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

PAST WEEKLY APPLIED WATER IN INCHES, ADJUSTED FOR EFFICIENCY 1

| Crops | | #148 Merce | ed | | | #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) | As | sume all gra | pe | 1.4 | Assume all grape 1.5 | | | 1.5 | Assume all grape | | | 1.4 |
| Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis) | irrig | ation 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

| #148 Merced | | | | #39 Parlier | | | | #258 Lemon Cove | | | |
|------------------|---|---|---|--|---|---|---|---|---|---|--|
| 661 | 590 | 519 | 449 | 732 | 638 | 567 | 496 | 708 | 614 | 543 | 496 |
| 772 | 673 | 598 | 523 | 847 | 722 | 648 | 573 | 822 | 722 | 623 | 573 |
| 444 | 395 | 346 | 321 | 494 | 444 | 395 | 346 | 494 | 420 | 370 | 321 |
| Assume all grape | | | 67 | Assume all grape 72 | | | Assume all grape | | | 67 | |
| irrig | ation type is | drip | 61 | irrig | gation type is | drip | 70 | irrig | gation type is | drip | 65 |
| 822 | 715 | 643 | 572 | 893 | 786 | 679 | 607 | 857 | 750 | 643 | 607 |
| 347 | 300 | 268 | 237 | 395 | 347 | 300 | 268 | 379 | 332 | 300 | 268 |
| | 772 444 As irrig 822 347 | 661 590 772 673 444 395 Assume all gra irrigation type is 822 715 347 300 | 661 590 519 772 673 598 444 395 346 Assume all grape irrigation type is drip 822 715 643 347 300 268 | 661 590 519 449 772 673 598 523 444 395 346 321 Assume all grape 67 irrigation type is drip 61 822 715 643 572 347 300 268 237 | 661 590 519 449 732 772 673 598 523 847 444 395 346 321 494 Assume all grape 67 Assume all grape 61 irrig 822 715 643 572 893 347 300 268 237 395 | 661 590 519 449 732 638 772 673 598 523 847 722 444 395 346 321 494 444 Assume all grape 67 Assume all grape irrigation type is 822 715 643 572 893 786 347 300 268 237 395 347 | 661 590 519 449 732 638 567 772 673 598 523 847 722 648 444 395 346 321 494 444 395 Assume all grape 67 Assume all grape irrigation type is drip 61 irrigation type is drip 822 715 643 572 893 786 679 | 661 590 519 449 732 638 567 496 772 673 598 523 847 722 648 573 444 395 346 321 494 444 395 346 Assume all grape 67 Assume all grape 72 irrigation type is drip 61 irrigation type is drip 70 822 715 643 572 893 786 679 607 | 661 590 519 449 732 638 567 496 708 772 673 598 523 847 722 648 573 822 444 395 346 321 494 444 395 346 494 Assume all grape 67 Assume all grape 72 Assume all grape 70 irrigation type is drip 70 irrigation type is drip 70 607 857 | 661 590 519 449 732 638 567 496 708 614 772 673 598 523 847 722 648 573 822 722 444 395 346 321 494 444 395 346 494 420 Assume all grape 67 Assume all grape 72 Assume all grape irrigation type is drip 61 irrigation type is drip 70 irrigation type is 822 715 643 572 893 786 679 607 857 750 | 661 590 519 449 732 638 567 496 708 614 543 772 673 598 523 847 722 648 573 822 722 623 444 395 346 494 444 395 346 494 420 370 Assume all grape 72 Assume all grape irrigation type is drip 61 irrigation type is drip 70 irrigation type is drip 822 715 643 572 893 786 679 607 857 750 643 347 300 268 237 395 347 300 268 379 332 300 |

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

^{*} 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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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) | #124 Panoche | | | # | 2 Five Poin | ts | #15 Stratford | | | | |
|---|--------------|-----------|--------------|--------------|-------------|--------------|---------------|-----------|--------------|--|--|
| | 06/07- 06/13 | Accum'd | 06/14- 06/20 | 06/07- 06/13 | Accum'd | 06/14- 06/20 | 06/07- 06/13 | Accum'd | 06/14- 06/20 | | |
| | Water | Seasonal | Estimated | Water | Seasonal | Estimated | Water | Seasonal | Estimated | | |
| | Use | Water Use | ETc | Use | Water Use | ETc | Use | Water Use | ETc | | |
| Almonds (3/1) * | 1.97 | 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

^{**} 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 Panoc | he | | #2 Five Poi | nts | | | | | | |
| 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) | As | ssume all gra | pe | 1.4 | Assume all grape 1.5 | | | 1.5 | Assume all grape | | | 1.4 |
| Winegrapes (3/11) (10 ft. spacing on California Sprawl Trellis) | irrig | ation 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%.

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|--------------|---------------|---------------|---------------|
| PASI WHEELY | APPLIED WATER | IN CALLON PER | TRABLUK VINH. |

| | 1710 | WELKET | THI LILD V | TITLITING | TELOTTE | TILLE OIL | V II (L | | | | | |
|--|------------------|----------------|-----------------|-------------|----------------------------|-----------|---------|------------------|-------------------------|-----|-----|-----|
| Crops | #124 Panoche | | | | #2 Five Poi | nts | | #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 | irrig | gation type is | drip | 65 | irrigation type is drip 65 | | | 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 |
| For further information concerning all counties receiving this report, contact | t the Fresno C | o. Farm Advi | sor's office at | (559) 241-7 | 526. | | | | | | | |

^{*} 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.