

University of **California** Agriculture and Natural Resources

Making a Difference for California



Report

WEEKLY SOIL MOISTURE LOSS IN INCHES

(Estimated Crop Evapotranspiration or ET_C)

07/31/20 through 08/06/20

| Crops (Leafout Date) | | #148 Merce | d | | #39 Parlier | | #2: | 58 L |
|---|-----------|------------|------------|----------|-------------|------------|----------|------|
| | 7/31- 8/6 | Accum'd | 8/7 - 8/13 | 7/31-8/6 | Accum'd | 8/7 - 8/13 | 7/31-8/6 | A |
| | Water | Seasonal | Estimated | Water | Seasonal | Estimated | Water | S |
| | Use | Water Use | ETc | Use | Water Use | ETc | Use | W |
| Almonds (3/5) * | 1.93 | 31.69 | 1.91 | 2.06 | 32.24 | 1.82 | 1.90 | |
| Pistachio (4/13) * ** | 1.98 | 24.61 | 1.98 | 2.12 | 25.21 | 1.82 | 1.95 | |
| Citrus (2/1) | 1.17 | 25.91 | 1.14 | 1.26 | 25.90 | 1.12 | 1.15 | |
| Raisin Grapes (3/16) (11 ft. row spacing) | 1.51 | 20.62 | 1.49 | 1.62 | 21.09 | 1.40 | 1.48 | |
| Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis) *** | 1.72 | 22.51 | 1.70 | 1.85 | 23.02 | 1.61 | 1.69 | |
| Walnuts (4/8) | 2.05 | 24.42 | 2.05 | 2.19 | 25.01 | 1.89 | 2.02 | |
| Stone Fruit (3/10) | 1.98 | 25.06 | 1.98 | 2.12 | 25.64 | 1.82 | 1.95 | |
| Past 7 days precipitation (inches) | | 0.00 | | | 0.00 | | | |
| Accumulated precipitation (inches) (1/1/2020) | | 5.05 | | | 4.80 | | | |

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 stres 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 | ED WATEF | ATER IN INCHES, ADJUSTED FOR EFFICIENCY ¹ | | | | | | | | | |
|---|----------|--|-----|-----|-----|-----|-----|-----|-----|--|--|
| Crops | | #148 Merc | ed | | | #2 | | | | | |
| System Efficiency >> | 65% | 75% | 85% | 95% | 65% | 75% | 85% | 95% | 65% | | |
| Almonds (3/5) | 3.0 | 2.6 | 2.3 | 2.0 | 3.2 | 2.7 | 2.4 | 2.2 | 2.9 | | |
| Pistachio (4/13) | 3.0 | 2.6 | 2.3 | 2.1 | 3.3 | 2.8 | 2.5 | 2.2 | 3.0 | | |
| Citrus (2/1) | 1.8 | 1.6 | 1.4 | 1.2 | 1.9 | 1.7 | 1.5 | 1.3 | 1.8 | | |
| Raisin Grapes (3/16) (11 ft. row spacing)*** | 2.3 | 2.0 | 1.8 | 1.6 | 2.5 | 2.2 | 1.9 | 1.7 | 2.3 | | |
| Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis) *** | 2.6 | 2.3 | 2.0 | 1.8 | 2.8 | 2.5 | 2.2 | 1.9 | 2.6 | | |
| Walnuts (4/8) | 3.2 | 2.7 | 2.4 | 2.2 | 3.4 | 2.9 | 2.6 | 2.3 | 3.1 | | |
| Stone Fruit (3/10) | 3.0 | 2.6 | 2.3 | 2.1 | 3.3 | 2.8 | 2.5 | 2.2 | 3.0 | | |

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 | EEKLY A | PPLIED W. | ATER IN G | GALLON PI | ER TREE C | OR VINE | | | |
|--|----------------|-------------|-----------------|---------------|-----------|-----------|---------|-----|---------|--|
| Crops | | #148 Merce | ed | | | | #2: | | | |
| Almonds 115 Trees/A | 708 | 614 | 543 | 472 | 756 | 638 | 567 | 519 | 685 | |
| Pistachio 106 Trees/A | 747 | 648 | 573 | 523 | 822 | 698 | 623 | 548 | 747 | |
| Citrus 110 Trees/A | 444 | 395 | 346 | 296 | 469 | 420 | 370 | 321 | 444 | |
| Raisin Grapes 566 Vines/A | 110 | 96 | 86 | 77 | 120 | 106 | 91 | 82 | 110 | |
| Winegrapes 622 Vines/A | 114 | 100 | 87 | 79 | 122 | 109 | 96 | 83 | 114 | |
| Walnuts 76 Trees/A | 1143 | 965 | 857 | 786 | 1215 | 1036 | 929 | 822 | 1108 | |
| Stonefruit 172 Trees/A | 474 | 410 | 363 | 332 | 521 | 442 | 395 | 347 | 474 | |
| For further information concerning all counties receiving this report, contact | t the Fresno C | Co. Farm Ad | lvisor's office | e at (559) 24 | 41-7526. | | | | <u></u> | |

| Lomon C | 0.10 | |
|--------------------------------|---|-------------------------------|
| Lemon C Accum'd | 8/7 - 8/13 | - |
| Seasonal | Estimated | |
| Water Use | ETc | |
| 30.23 | 1.82 | |
| 23.90 | 1.82 | |
| 24.40 | 1.12 | |
| 20.06 | 1.40 | |
| 21.77 | 1.61 | |
| 23.66 | 1.89 | |
| 24.12 | 1.82 | |
| 0.00 | | |
| 5.61 | | |
| oss Weekh | estimates of | soil moisture |
| .55. WEEKIY | estimates of | son moisture |
| | | |
| | | |
| 258 Lemo | n Covo | |
| 75% | 85% | 95% |
| 2.5 | 2.2 | 2.0 |
| 2.6 | 2.3 | 2.1 |
| 1.5 | 1.4 | 1.2 |
| 2.0 | 1.7 | 1.6 |
| 2.3 | 2.0 | 1.8 |
| 2.7 | 2.4 | 2.1 |
| 2.6 | 2.3 | 2.1 |
| : and Borde | | |
| ., | er-furrow, 50 | %-75%. |
| | er-furrow, 50 | %-75%. |
| 258 Lemo | | %-75%. |
| 258 Lemo 590 | | %-75%. <u>472</u> |
| | n Cove | |
| 590 | n Cove 519 | 472 |
| 590 648 | n Cove 519 573 | 472 523 |
| 590 648 370 | n Cove 519 573 346 | 472 523 296 |
| 590 648 370 96 | n Cove 519 573 346 82 | 472 523 296 77 |
| 590 648 370 96 100 | n Cove 519 573 346 82 87 | 472 523 296 77 79 |

HEALTHY FOOD SYSTEMS . HEALTHY ENVIRONMENTS . HEALTHY COMMUNITIES . HEAL

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)

07/31/20 through 08/06/20

| Crops (Leafout Date) | # | # | 2 Five Poin | | #15 | | | |
|---|------------|-----------|-------------|------------|-----------|------------|------------|---|
| | 7/31 - 8/6 | Accum'd | 8/7 - 8/13 | 7/31 - 8/6 | Accum'd | 8/7 - 8/13 | 7/31 - 8/6 | |
| | Water | Seasonal | Estimated | Water | Seasonal | Estimated | Water | 1 |
| | Use | Water Use | ETc | Use | Water Use | ETc | Use | V |
| Almonds (3/5) * | 2.23 | 34.30 | 1.87 | 2.13 | 34.49 | 2.03 | 2.13 | |
| Pistachio (4/13) * ** | 2.30 | 26.92 | 1.92 | 2.19 | 26.51 | 2.10 | 2.19 | |
| Citrus (2/1) | 1.37 | 27.53 | 1.12 | 1.31 | 28.09 | 1.26 | 1.31 | |
| Raisin Grapes (3/16) (11 ft. row spacing) | 1.75 | 22.01 | 1.45 | 1.67 | 21.75 | 1.61 | 1.67 | |
| Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis) | 2.02 | 24.09 | 1.66 | 1.92 | 23.77 | 1.82 | 1.92 | |
| Walnuts (4/8) | 2.37 | 26.76 | 1.99 | 2.27 | 26.55 | 2.17 | 2.26 | |
| Stone Fruit (3/10) | 2.30 | 27.45 | 1.92 | 2.19 | 27.22 | 2.10 | 2.19 | |
| Past 7 days precipitation (inches) | | 0.00 | | | 0.00 | | | |
| Accumulated precipitation (inches) (1/1/2020) | | 2.68 | | | 4.05 | | | |

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 Pano | che | | | #2 Five Poi | ints | | | #15 Stratfo | ord | |
| System Efficiency >> | 65% | 75% | 85% | 95% | 65% | 75% | 85% | 95% | 65% | 75% | 85% | 95% |
| Almonds (3/5) | 3.4 | 3.0 | 2.6 | 2.3 | 3.3 | 2.8 | 2.5 | 2.2 | 3.3 | 2.8 | 2.5 | 2.2 |
| Pistachio (4/13) | 3.5 | 3.1 | 2.7 | 2.4 | 3.4 | 2.9 | 2.6 | 2.3 | 3.4 | 2.9 | 2.6 | 2.3 |
| Citrus (2/1) | 2.1 | 1.8 | 1.6 | 1.4 | 2.0 | 1.7 | 1.5 | 1.4 | 2.0 | 1.7 | 1.5 | 1.4 |
| Raisin Grapes (3/16) (11 ft. row spacing) | 2.7 | 2.3 | 2.1 | 1.8 | 2.6 | 2.2 | 2.0 | 1.8 | 2.6 | 2.2 | 2.0 | 1.8 |
| Winegrapes (3/16) (10 ft. spacing on California Sprawl Trellis) | 3.1 | 2.7 | 2.4 | 2.1 | 3.0 | 2.6 | 2.3 | 2.0 | 3.0 | 2.6 | 2.3 | 2.0 |
| Walnuts (4/8) | 3.6 | 3.2 | 2.8 | 2.5 | 3.5 | 3.0 | 2.7 | 2.4 | 3.5 | 3.0 | 2.7 | 2.4 |
| Stone Fruit (3/10) | 3.5 | 3.1 | 2.7 | 2.4 | 3.4 | 2.9 | 2.6 | 2.3 | 3.4 | 2.9 | 2.6 | 2.3 |

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 | VEEKLY A | PPLIED W | ATER IN (| FALLON P | ER TREE (| DR VINE | | | | | |
| Crops | | #124 Pano | che | | | #2 Five Poi | ints | | | #15 Stratfo | ord | |
| Almonds 115 Trees/A | 803 | 708 | 614 | 543 | 779 | 661 | 590 | 519 | 779 | 661 | 590 | 519 |
| Pistachio 106 Trees/A | 872 | 772 | 673 | 598 | 847 | 722 | 648 | 573 | 847 | 722 | 648 | 573 |
| Citrus 110 Trees/A | 518 | 444 | 395 | 346 | 494 | 420 | 370 | 346 | 494 | 420 | 370 | 346 |
| Raisin Grapes 566 Vines/A | 130 | 110 | 101 | 86 | 125 | 106 | 96 | 86 | 125 | 106 | 96 | 86 |
| Winegrapes 622 Vines/A | 135 | 118 | 105 | 92 | 131 | 114 | 100 | 87 | 131 | 114 | 100 | 87 |
| Walnuts 76 Trees/A | 1286 | 1143 | 1000 | 893 | 1251 | 1072 | 965 | 857 | 1251 | 1072 | 965 | 857 |
| Stonefruit 172 Trees/A | 553 | 489 | 426 | 379 | 537 | 458 | 410 | 363 | 537 | 458 | 410 | 363 |
| For further information concerning all counties receiving this report, contact the Fresno Co. Farm Advisor's office at (559) 241-7526. | | | | | | | | | | | | |

| 15 Stratfor | 4 | |
|-------------|-----------------|--|
| Accum'd | u 8/7 - 8/13 | |
| Seasonal | Estimated | |
| Water Use | ETc | |
| 35.51 | 2.02 | |
| 27.42 | 2.09 | |
| 28.60 | 1.25 | |
| 22.55 | 1.60 | |
| 24.53 | 1.81 | |
| 27.42 | 2.16 | |
| 28.13 | 2.05 | |
| 0.00 | | |
| 3.13 | | |