

| WEEKLY SOIL MOISTURE LOSS IN INCHES                                                                                                                                                                                                                                                                                                                                                      |                         |           |                 |     |                         |             |                 |     |                         |           |                 |     |  |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|-----------|-----------------|-----|-------------------------|-------------|-----------------|-----|-------------------------|-----------|-----------------|-----|--|--|
| (Estimated Crop Evapotranspiration or ET <sub>C</sub> )                                                                                                                                                                                                                                                                                                                                  |                         |           |                 |     |                         |             |                 |     |                         |           |                 |     |  |  |
| 10/13/23 through 10/19/23                                                                                                                                                                                                                                                                                                                                                                |                         |           |                 |     |                         |             |                 |     |                         |           |                 |     |  |  |
| Crops (Leafout Date)                                                                                                                                                                                                                                                                                                                                                                     | #148 Merced             |           |                 |     |                         | #39 Parlier |                 |     |                         |           | #258 Lemon Cove |     |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                          | 10/13 - 10/19           | Accum'd   | 10/20 - 10/26   |     | 10/13 - 10/19           | Accum'd     | 10/20 - 10/26   |     | 10/13 - 10/19           | Accum'd   | 10/20 - 10/26   |     |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                          | Water                   | Seasonal  | Estimated       |     | Water                   | Seasonal    | Estimated       |     | Water                   | Seasonal  | Estimated       |     |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                          | Use                     | Water Use | ET <sub>C</sub> |     | Use                     | Water Use   | ET <sub>C</sub> |     | Use                     | Water Use | ET <sub>C</sub> |     |  |  |
| Almonds (3/13) *                                                                                                                                                                                                                                                                                                                                                                         | 0.79                    | 42.91     | 0.61            |     | 0.76                    | 44.89       | 0.58            |     | 0.80                    | 43.57     | 0.65            |     |  |  |
| Pistachio (4/20) * **                                                                                                                                                                                                                                                                                                                                                                    | 0.76                    | 37.01     | 0.56            |     | 0.72                    | 38.63       | 0.53            |     | 0.79                    | 37.79     | 0.60            |     |  |  |
| Citrus (2/1)                                                                                                                                                                                                                                                                                                                                                                             | 0.62                    | 31.94     | 0.49            |     | 0.58                    | 33.58       | 0.46            |     | 0.66                    | 32.57     | 0.53            |     |  |  |
| Raisin Grapes (3/22) (11 ft. row spacing)                                                                                                                                                                                                                                                                                                                                                | 0.65                    | 24.64     | 0.48            |     | 0.60                    | 25.64       | 0.48            |     | 0.68                    | 25.16     | 0.51            |     |  |  |
| Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis) ***                                                                                                                                                                                                                                                                                                                      | 0.73                    | 27.23     | 0.60            |     | 0.71                    | 28.41       | 0.57            |     | 0.74                    | 27.74     | 0.63            |     |  |  |
| Walnuts (4/20)                                                                                                                                                                                                                                                                                                                                                                           | 0.79                    | 35.53     | 0.36            |     | 0.76                    | 37.09       | 0.35            |     | 0.80                    | 36.28     | 0.39            |     |  |  |
| Stone Fruit (3/19)                                                                                                                                                                                                                                                                                                                                                                       | 0.74                    | 38.44     | 0.56            |     | 0.70                    | 40.07       | 0.53            |     | 0.75                    | 39.15     | 0.60            |     |  |  |
| Past 7 days precipitation (inches)                                                                                                                                                                                                                                                                                                                                                       | 0.00                    |           |                 |     | 0.00                    |             |                 |     | 0.00                    |           |                 |     |  |  |
| Accumulated precipitation (inches) (1/1/2023)                                                                                                                                                                                                                                                                                                                                            | 19.11                   |           |                 |     | 13.14                   |             |                 |     | 16.68                   |           |                 |     |  |  |
| 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 <sup>1</sup>                                                                                                                                                                                                                                                                                                                |                         |           |                 |     |                         |             |                 |     |                         |           |                 |     |  |  |
| Crops                                                                                                                                                                                                                                                                                                                                                                                    | #148 Merced             |           |                 |     | #39 Parlier             |             |                 |     | #258 Lemon Cove         |           |                 |     |  |  |
| System Efficiency >>>                                                                                                                                                                                                                                                                                                                                                                    | 65%                     | 75%       | 85%             | 95% | 65%                     | 75%         | 85%             | 95% | 65%                     | 75%       | 85%             | 95% |  |  |
| Almonds (3/13)                                                                                                                                                                                                                                                                                                                                                                           | 1.2                     | 1.1       | 0.9             | 0.8 | 1.2                     | 1.0         | 0.9             | 0.8 | 1.2                     | 1.1       | 0.9             | 0.8 |  |  |
| Pistachio (4/20)                                                                                                                                                                                                                                                                                                                                                                         | 1.2                     | 1.0       | 0.9             | 0.8 | 1.1                     | 1.0         | 0.8             | 0.8 | 1.2                     | 1.1       | 0.9             | 0.8 |  |  |
| Citrus (2/1)                                                                                                                                                                                                                                                                                                                                                                             | 1.0                     | 0.8       | 0.7             | 0.7 | 0.9                     | 0.8         | 0.7             | 0.6 | 1.0                     | 0.9       | 0.8             | 0.7 |  |  |
| Raisin Grapes (3/22) (11 ft. row spacing)***                                                                                                                                                                                                                                                                                                                                             | Assume all grape        |           |                 | 0.7 | Assume all grape        |             |                 | 0.6 | Assume all grape        |           |                 | 0.7 |  |  |
| Winegrapes (3/22) (10 ft. spacing on California Sprawl Trellis) ***                                                                                                                                                                                                                                                                                                                      | irrigation type is drip |           |                 | 0.8 | irrigation type is drip |             |                 | 0.7 | irrigation type is drip |           |                 | 0.8 |  |  |
| Walnuts (4/20)                                                                                                                                                                                                                                                                                                                                                                           | 1.2                     | 1.1       | 0.9             | 0.8 | 1.2                     | 1.0         | 0.9             | 0.8 | 1.2                     | 1.1       | 0.9             | 0.8 |  |  |
| Stone Fruit (3/19)                                                                                                                                                                                                                                                                                                                                                                       | 1.1                     | 1.0       | 0.9             | 0.8 | 1.1                     | 0.9         | 0.8             | 0.7 | 1.2                     | 1.0       | 0.9             | 0.8 |  |  |
| 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                                                                                                                                                                                                                                                                                                                                                                      | 283                     | 260       | 213             | 189 | 283                     | 236         | 213             | 189 | 283                     | 260       | 213             | 189 |  |  |
| Pistachio 106 Trees/A                                                                                                                                                                                                                                                                                                                                                                    | 299                     | 249       | 224             | 199 | 274                     | 249         | 199             | 199 | 299                     | 274       | 224             | 199 |  |  |
| Citrus 110 Trees/A                                                                                                                                                                                                                                                                                                                                                                       | 247                     | 197       | 173             | 173 | 222                     | 197         | 173             | 148 | 247                     | 222       | 197             | 173 |  |  |
| Raisin Grapes 566 Vines/A                                                                                                                                                                                                                                                                                                                                                                | Assume all grape        |           |                 | 34  | Assume all grape        |             |                 | 29  | Assume all grape        |           |                 | 34  |  |  |
| Winegrapes 622 Vines/A                                                                                                                                                                                                                                                                                                                                                                   | irrigation type is drip |           |                 | 35  | irrigation type is drip |             |                 | 31  | irrigation type is drip |           |                 | 35  |  |  |
| Walnuts 76 Trees/A                                                                                                                                                                                                                                                                                                                                                                       | 429                     | 393       | 322             | 286 | 429                     | 357         | 322             | 286 | 429                     | 393       | 322             | 286 |  |  |
| Stonefruit 172 Trees/A                                                                                                                                                                                                                                                                                                                                                                   | 174                     | 158       | 142             | 126 | 174                     | 142         | 126             | 111 | 189                     | 158       | 142             | 126 |  |  |
| 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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