

¹ Record the date any time soil moisture readings are taken, an irrigation is applied, or a rainfall occurs, not to exceed one week.

² Record the crop root depth throughout the season. Monitoring this depth will ensure that crops can access the moisture reported from the sensors.

³ Record the the soil moisture reading for each depth monitored, and total the moisture that is available in the root zone. This would be the number or value that indicates the rootzone soil moisture at that site. Electrical resistance device readings (usually given in centibars) can be calibrated to estimate inches or water needed to refill the root zone.

⁴ Record “how dry” you are willing to let the soil get before irrigating. When irrigating with surface or conventional sprinkler a good target is to irrigate when about ½ of the root zone Available Water Holding Capacity (AWC) has been depleted. When irrigating with micro (drip or spray) it’s generally recommended to irrigate when less than a ¼ of the AWC has been depleted. This threshold is referred to as the Management Allowed Depletion (MAD).

⁵ Record the inches of water applied each irrigation calculated as:

$$\text{Inches} = \frac{96.3 \times Q \times T}{A}$$

Q = flow rate in gallons per minute

T = the time water is applied in hours

A = the size of the irrigated area in ft²