



The cumulative water requirement for cherries in 2010 was 38½ inches. This estimate is of cumulative water use for a fully irrigated orchard, and does not take management actions such as deficit irrigation for growth management into account. Winter rainfall stored in the soil profile must be subtracted to arrive at the cumulative irrigation requirement. This estimate does not take into account sprinkler system uniformity.

Usable stored winter rainfall depends on the soil texture and the rooting depth of the orchard. The rooting depth of cherries is 3 feet to 6½ feet if no layers impede root development. Eighty per cent of the feeder roots are typically contained within the top four feet. Available water in a fully wetted four foot soil profile for soil textures common in the Llagas and Coyote Valleys are shown in the table below:

Soil	Available water (in./4 ft.)	Drawdown (in./4 ft.)
Loam	6.8	3.4
Silt loam	8.8	4.4
Silty clay loam	8.1	3.8
Clay loam	6.6	3.0

The drawdowns in the right column represent post harvest drawdowns to a soil moisture tension of approximately 150 centibars. This amount of tension is probably inappropriate prior to harvest.