



The cumulative water requirement for stone fruit in 2010 was 38 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 irrigation system distribution uniformity.

Usable stored winter rainfall depends on the soil texture and the rooting depth of the orchard. The top two and one half feet of soil typically contain most of the roots of stone fruit trees. Available water in a fully wetted two and one half foot soil profile for soil textures common in the Llagas and Coyote Valleys is shown in the table below:

Soil	Available water (in./2 <sup>1</sup> / <sub>2</sub> ft.)	Drawdown (in./2 <sup>1</sup> / <sub>2</sub> ft.)
Loam	4.2	0.9
Silt loam	5.5	1.2
Silty clay loam	5.1	1.0
Clay loam	4.1	0.8

The drawdowns in the right column correspond to a soil moisture tension of approximately 60 centibars. Tree water use declines at higher tensions.