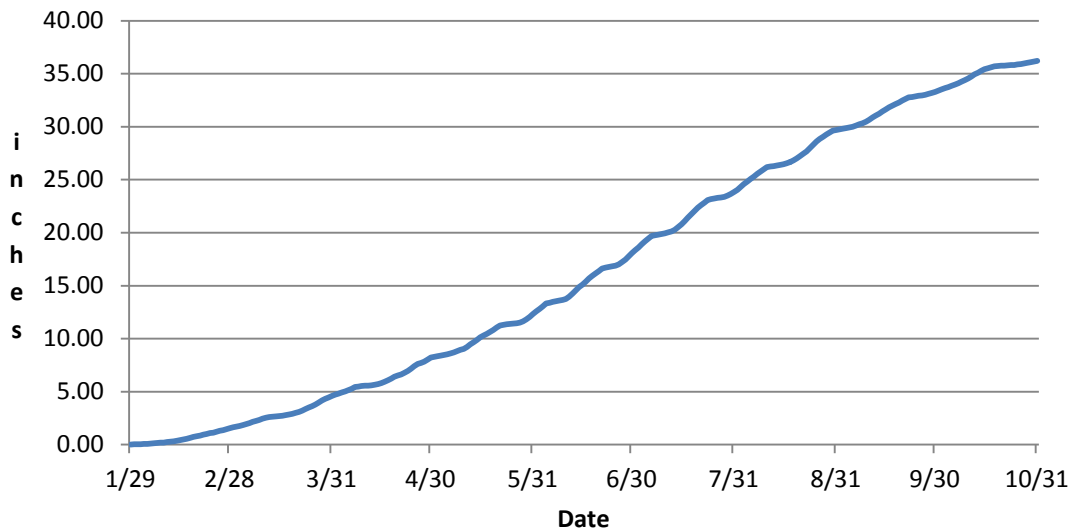


Estimated Alfalfa Cumulative Water Use (inches), 2010



The cumulative water requirement for alfalfa in 2010 was 36¹/₄ inches. This estimate is of cumulative water use, and takes cuttings 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 alfalfa. Alfalfa active feeder roots occur to a depth of six feet if no layers impede root development. Available water in a fully wetted six foot soil profile for soil textures common in the Llagas and Coyote Valleys are shown in the table below:

Soil	Available water (in. / 6 ft.)	Drawdown (in./6 ft.)
Loam	9.9	5.0
Silt loam	13.1	6.5
Silty clay loam	12.1	6.1
Clay loam	9.8	4.9
Clay	8.8	4.4

The drawdowns in the right column may be subtracted from the total water requirement to estimate the seasonal total irrigation requirement. They represent early season drawdowns to a soil moisture tension of approximately 150 centibars. This amount of tension would have been appropriate in early spring, but may have been excessive during the main part of the growing season.