



GROWER RESOURCE GUIDE: AGRICULTURAL WATER CONSERVATION

The San Joaquin Sustainable Farming Project has created a grower resource guide to help growers navigate useful topics and ideas and sustainable practices from on-line resources. Each topic contains general information and where to find current and pertinent materials and web links to that information. We hope you will find these documents worthwhile and convenient to use.

Statewide, average water use is roughly 50% environmental, 40% agricultural, and 10% urban, although the percentage of water use by sector varies dramatically across regions and between wet and dry years. Approximately nine million acres of farmland in California are irrigated, representing roughly 80% of all water used for businesses and homes. Higher revenue perennial crops—nuts, grapes, and other fruit—have increased as a share of irrigated crop acreage (from 27% in 1998 to 32% in 2010 statewide, and from 33% to 40% in the southern Central Valley). This shift, plus rising crop yields, has increased the value of agricultural water used. (Public Policy Institute July 2016). - [For more detail, click here](#)

Researchers from the University of California Division of Agricultural and Natural Resources (UCANR) and farmers have been working for years on ways of reducing water use. Techniques include switching from flood to drip irrigation or sprinklers; deploying soil sensors; using deficit irrigation where a crop is subjected to stress from getting less than the required amount of water; or tapping new technology to determine the optimum schedule for watering. In a May 2016 article, Newsdeeply published [“California Farmers Innovate to Fight Drought.”](#)

California Farm Water Coalition states “From 2003 through 2010 San Joaquin Valley farmers invested almost \$2.2 billion installing upgraded irrigation systems (drip, micro sprinklers, high-efficiency pumps) on more than 1.8 million acres. High-efficiency irrigation systems deliver water to the crop in precise amounts on a schedule that meets the plant’s growing cycle. Drip irrigation systems limit the amount of water that is consumed by weeds, reducing the need for herbicides or repeated trips with a tractor and cultivator over the field, which saves fuel and helps reduce carbon emissions into the atmosphere.”

Information on California’s water use can be found at [USGS California Water Science Center](#)

[California Waterblog](#) has a broad reach and provides the most up to date information on issues and watershed science. Scientists, faculty, students and researchers at UC Davis’ Center for Watershed Sciences collaborate across the UC Davis campus and with experts from other universities, research institutes, government agencies and NGOs.