How is water being conserved in agriculture?

Answered by: Brent Hunter, Agricultural Producer, and Board Chair of the Central Iron County Water Conservancy District

Question: How is water being conserved in agriculture?

Answer: The Cedar Valley’s agricultural history is an important part of the area’s heritage, and agriculture producers work hard to optimize water use while sustaining a good yield.

Agriculture irrigation accounts for approximately 75 percent of the water usage in our valley according to numbers from the Utah Division of Water Rights. The Central Iron County Water Conservancy District focuses a large part of its conservation efforts on agriculture water optimization because that is where conservation can have one of the largest impacts in our valley.

Farmers are continually looking for more efficient ways to irrigate. It saves water, as well as electricity and other expenses. One of the biggest changes in the past 20 to 30 years has been converting flood irrigation systems on farms to sprinkler systems that save more water and are 60-80 percent more efficient.

Agriculture is always changing: new methods, practices, and technologies are being developed to make agriculture more efficient. One example of these more recent updates in technology are the (Low Elevation Spray Application) LESA systems that have been developed and the research that is being conducted at SUU Farm and that was conducted on my farm.

In 2018, the E&I Conservation District & the Water District acquired money from the legislature and started a program to convert traditional pivot nozzles to high-efficiency LESA nozzles that research shows can achieve 95 percent efficiency. To date, more than 2,000 acres of alfalfa fields in the Cedar Valley have been converted, which equates to a potential savings of 800-1,000 acre-feet per year (calculated at 20 percent).
As a board member of the E&I Conservation District and the Central Iron County Water Conservancy District, I have been involved with several agriculture water efficiency studies. For several years, Utah State University Extension conducted a study on my farm to test several different sprinkler systems.

Currently USU Extension and Southern Utah University (SUU) are involved with a research project that will help determine the most water-efficient ways to use agricultural land in Utah. This research is happening locally on the SUU Farm as well as at several other locations in the state. Data from the local research will be beneficial to Cedar Valley farmers.

The scarcity of water affects all residents in the Cedar Valley, but those involved in agriculture see the challenges on a day-to-day basis. Water is a precious resource, and we are using more out of the aquifer each year than is being replaced. It is important that we conserve, recharge, reuse and import water for the future of the Cedar Valley.

Several special interest groups have recently moved their focus to Cedar Valley water and have been spreading misinformation. The Central Iron County Water Conservancy District was created by a vote of Cedar Valley residents more than two decades ago. It has consistently been dedicated to developing and stabilizing the valley’s water supply through conservation, recharge, reuse, and importing of water for the benefit of all current and future water users in the region. The District utilizes scientists, experts and professionals to understand the valley’s underground aquifer and to determine responsible solutions for the community as it strives to meet local water challenges. For reliable information on the Pine Valley Water Supply Project specifically and the Cedar Valley’s water situation in general, please visit https://cicwcd.org/. For more detailed information about the Pine Valley Water Supply Project and the Draft Environmental Impact Statement, please visit https://eplanning.blm.gov/eplanning-ui/project/1503915/570.