

TimesNews Column 2/2023 - *What's The Deal With Water?*

As most everyone is aware of, these past few years the state of Utah and the west have been in a distressing drought. During this time there has been much debate, political advising, and major recommendations and changes made with water use. This is not the first time our state has dealt with drought, nor will it be the last. Much of the talk around water use has been structured around the amount that is allocated to Agriculture. There have been lots of numbers thrown out about how much, its use, and opinions on what is actually needed. With all of those numbers and opinions, it can be hard to know what is accurate and what is rounded. This may be a helpful breakdown to help you understand water allocation for Agriculture in our state and why it is important;

First a few things to understand:

- Acre Feet is equal to "a unit of volume equal to a sheet of water one acre (0.405 hectare) in area and one foot (30.48 cm) in depth; 43,560 cubic feet (1233.5 cu m)". (google definition)
- Everyone eats 3 meals a day - those meals are produced by the farmers and ranchers that makeup Agriculture - Agriculture in the state of UT feeds you and your family so that makes it essential.

In the state of Utah, the mean annual precipitation is 61,348,000 acre feet. Of that, 4,751,000 acre feet is diverted (which comes out to 7.74% of the total annual precipitation in the state). The diversion amount of 4,751,000 acre feet was then split again into three categories:

Agricultural irrigation diversion - 3,761,000 acre feet

Landscape irrigation diversion - 589,000 acre feet

Industry/Community diversion - 395,540 acre feet

(these add up to that 7.74% or 4,751,000 acre feet diversion of annual precipitation diversion as stated above give or take some rounding accounting for 5,460 acre feet)

This leaves 56,597,000 acre feet of our annual precipitation remaining in nature. So, in total 91.6% of all diversions are for irrigation (all types) and 8.4% of diversions are for Industry/Community water use. (Source: UtahDivisionOfWaterResources.com)

Many times, studies on water put out through the media may state that irrigation accounts for 91.6% of water. While this is a correct number, if not explained, it can be taken as "wow, Agriculture is sucking up all our water!", when in reality that is not the case and that percentage only accounts for diverted water and includes all irrigation including agriculture and landscapes.

Many times, things can be exaggerated and it is important to run the numbers for yourself before believing everything you see at first glance.

In conclusion, water is essential and so is Agriculture. It generates a living for 592 families in Juab County, according to the 2017 census, and boosts the economy in our county and the state of Utah.

Agriculture is essential to Utah and therefore it is essential to provide enough water to Agriculture for it to remain a job supplier, family and economy supporter, and for everyone to eat.

The good news is that Agriculture is always improving. There have been multiple grants and legislative support behind the implementation of water meters. That has resulted in a 20-30% water usage reduction in Utah Agriculture. There has been and are constantly been improvements in irrigation methods by utilizing data collected from new technology on evaporation and water application techniques to make Agriculture more efficient with less water. Seed variety improvements have also been successful in being more efficient. By genetically improving crops,

they then have a better ability to survive harsh conditions, while increasing yields and their ability to survive pest and environmental damage. Crops also shield bare ground from the UV Rays that cause extensive evaporation. More crops equal less evaporation of soil water quantity which helps locally with environmental warming.

Those above are just a few examples of Ag's ever evolving methods of increasing efficiency while decreasing emissions and footprint. If you care about the water situation, then you should care about Agriculture. Do your research and make sure you know what your opinion is based on, where your facts are coming from, and what you will eventually be voting on. I hope this helps to understand the water situation in Utah and why Agriculture should be in the conversation. More information can be found at "[UtahDivisionofWaterResources.com](http://UtahDivisionofWaterResources.com)".