

# Common FAQ's

- [What is Diverted Water?](#)

Diverted water is water that is taken out of its natural course—such as a river, stream, or lake—and moved for a specific use. In Utah, this usually means water diverted under a water right into canals, pipes, or ditches for irrigation, municipal supply, industry, or other purposes. It's different from "consumptive use," because not all diverted water is used up; some returns to the system as runoff, seepage, or return flows that can be used again downstream.

See [Agricultural Water Use in Utah](#) and [Understanding Utah's Agricultural Water Use](#) videos for more info.

- [Why are ag and park sprinklers on during the day?](#)  
Agricultural and park sprinklers often run during the day because the system size and available flow limit when irrigation can occur. There isn't enough capacity to deliver all the needed water just at night, so watering is spread across both day and night to ensure crops or turf receive sufficient water.
- [How do water turns work?](#)

Water is often delivered on the "turn" in most of Utah's canal systems. This means that each shareholder is on a schedule of when they can take the water in rotation along the ditch. The duration of the "turn" is proportional to the number of shares owned. Thus, time of use is measured, not quantity of water. It is essential to determine the appropriate number of shares needed to irrigate your property and to understand when the water is available. See [Water Rights in Utah](#) for more info.

- [How do I know saved water is making it to GSL?](#)  
Water can be delivered to Great Salt Lake through water shepherding, supported by recent legislation that allows leasing or purchasing water rights for instream flow or the lake. Delivery depends on detailed measurement and accounting, with Water Commissioners monitoring about 700 sites on 13 distribution systems. Improvements are underway through the Utah Division of Water Rights and USU to add measurement and telemetry equipment, share streamflow and diversion data more openly, and make water rights accounting more transparent, though challenges remain in ensuring water reaches its intended destination. See [Water Shepherding Fact Sheet](#) for more info.

- [Water right vs water share?](#)

A water right is established when the Utah Division of Water Rights gives a landowner or entity permission to use a set amount of water from a particular source for what is deemed a beneficial use, typically one that supports the economy. A water share is when a water owner, often an irrigation company, grants shareholders access to a portion of the water rights held by the company. See [Irrigation Companies and the Great Salt Lake](#) for more info.

- [Why is Utah an agriculture state when it is so dry?](#)  
Economically, irrigated agriculture is vital. In 2022, farm cash receipts in the basin totaled nearly \$881 million, with input spending estimated around \$760 million. Combined with food processing, the sector contributes over \$1.6 billion annually to Utah's economy. Utah's irrigated land mostly grows alfalfa, hay, and pasture, which are used to feed livestock. These crops make up more than 80% of what's grown on irrigated land.

See [Agricultural Water Use and Economic Value in the Great Salt Lake Basin](#) and [Agricultural Irrigated Land and Irrigation Water Use in Utah](#) for more info.

- [How much of Utah's water use is agricultural vs municipal vs industrial?](#)  
Irrigation for agriculture is responsible for nearly two-thirds of diverted water consumption in the Great Salt Lake Basin. The municipal and industrial sector accounts for about 25% of diverted water consumption, much of which is outdoor landscape irrigation. See [Agricultural Water Use in Utah](#) and [Understanding Utah's Agricultural Water Use](#) videos or read [Irrigation Companies and the Great Salt Lake](#) for more info.

- [How does groundwater recharge work? Can we run out of aquifer?](#)

Groundwater recharge happens when water moves downward through soil and rock to refill an aquifer. Aquifers can be depleted if pumping exceeds recharge over time, lowering water tables and reducing long-term storage.

See [Understanding Water Optimization, Irrigation Water Loss and Recovery](#), and [Aquifer Recharge Case Study](#) for more info about water flow in irrigation.

- [What is agriculture's economic value in the Great Salt Lake Basin?](#)  
In the Great Salt Lake Basin, irrigated agriculture provides a substantial economic contribution,

exceeding \$1.6 billion annually when receipts and inputs are considered.

See [Agricultural Water Use and Economic Value in the Great Salt Lake Basin](#) for more info.

- [What economic impact does the Great Salt Lake have?](#)

The Great Salt Lake contributes an estimated \$1.9 billion annually through mineral industries, wildlife habitat, recreation, and dust mitigation.

See [Agricultural Water Use and Economic Value in the Great Salt Lake Basin](#) for more info.

- [Why are farmers using inefficient and archaic surface \(flood\) irrigation systems?](#)

Surface irrigation can be economical and highly efficient on flat fields. Mechanical systems may be more expensive and less effective in some conditions.

See [Utah Surface Irrigation Water Optimization Opportunities and Barriers](#) and [Irrigation Water Loss and Recovery in Utah](#) for more info.

- [How much more water would reach the Great Salt Lake if all flood irrigation was converted to sprinklers?](#)

Converting flood irrigation to sprinklers would likely not increase water reaching the lake because sprinklers often increase consumptive use.

See [Understanding Water Optimization](#) for more info about water flow in irrigation.

- [Why is drip irrigation not required for crop production like in California?](#)

Drip irrigation requires pressurization, filtration, and significant maintenance, making it impractical in some Utah fields.

See [50 Common Questions About Field Crops](#) for more info.

- [How much alfalfa is exported from Utah, and what percentage of the water used is shipped overseas?](#)

Alfalfa exports range from about 9% to 22% annually. Actual water exported is less due to return flows and moisture loss during drying.

See [50 Common Questions About Field Crops](#) for more info.

- [When and where are some types of irrigation better than others?](#)

Surface, sprinkler, and drip irrigation systems each perform better under specific crop, soil, climate, and management conditions.

See [Understanding Water Optimization](#) for more info about water flow in irrigation.

- [Why is alfalfa grown in Utah, is it subsidized, and what benefits does it offer?](#)

Alfalfa is productive, drought tolerant, and supports livestock, pollinators, and wildlife, making it a resilient crop across Utah.

See [50 Common Questions About Field Crops](#) for more info.

- [Could sagebrush be used as a livestock feed to offset water used on irrigated cropland?](#)

Sagebrush is important wildlife habitat but is generally poor livestock feed and unsuitable as a large-scale alternative.

See [50 Common Questions About Field Crops](#) for more info.

- [Do alfalfa roots go deeper with surface \(flood\) or sprinkler irrigation?](#)

Less frequent irrigation, common in surface systems, can encourage deeper root growth compared to frequent sprinkler applications.

See [50 Common Questions About Field Crops](#) for more info.

- [How should management differ for dryland vs irrigated pastures?](#)

Irrigated pastures allow higher plant density and more frequent harvests, while dryland pastures rely on lower inputs and yields.

See [50 Common Questions About Field Crops](#) for more info.

- [How do you measure seepage from canals?](#)

Seepage is measured using inflow-outflow measurements or ponding tests on sealed canal sections.

See [Understanding Water Optimization](#) and [50 Common Questions About Field Crops](#) for more info.

- [What crop should I grow if I only have water for a short season?](#)

Cool-season crops and forages such as small grains (wheat, barley, oats, triticale) and alfalfa are best suited for short irrigation seasons in Utah.

Read [Defense against Drought, Deficit Irrigation of Pastures](#), or [Deficit Irrigation of Forage Crops](#) for more info.

- [What is the best approach for deficit irrigation?](#)

Deficit irrigation strategies depend on the crop, with alfalfa performing best when fully irrigated early and allowed to go dormant later.

See [Deficit Irrigation of Pastures](#) and [Deficit Irrigation of Forage Crops](#) for more info.

- [What grass should I plant to have a good pasture if I have limited irrigation water?](#)

Intermediate wheatgrass, tall wheatgrass, tall fescue, and smooth brome are good pasture options under limited irrigation.

Read [Defense against Drought, Deficit Irrigation of Pastures](#), or [Deficit Irrigation of Forage Crops](#) for more info.

- [How much of Utah's irrigated farmland is owned by international companies?](#)

International ownership represents a minority of Utah's irrigated acreage, around 3.6% of privately owned agricultural land. Most irrigated land is owned by Utah farmers.

See [this Utah Farm Bureau article](#) for more info.