

Agricultural Water Optimization Program

Hannah Freeze
Agricultural Water Optimization
Utah Department of Agriculture and Food



CURRENT APPLICATION PERIOD

December 1, 2023 – January 31, 2024

Applications will be accepted through Submittable

\$30,000,000 award opportunity

Ranking will be completed by the Agricultural Water Optimization Committee

Anticipate awarding grants starting March 2024



New Application Criteria

Canal/Irrigation companies will be ranked separately from on-farm projects

Funding cap for canal/irrigation companies raised from \$500,000 up to \$1,000,000

Canal/irrigation companies are required to have a water loss study in order to apply for funding. Water optimization can pay for studies to be completed.

All applicants are required to have a pre-consultation with DWRi to discuss any potential change applications. This also gives the applicant an opportunity to ensure their water rights are in order.

New Application Criteria

Any project costing over \$7000/ac. will be evaluated by the water opt committee for funding.

On-farm applicants will be limited to \$500,000/year, regardless of number of applications

Real-time flow meters required on every project

50/50 cost share



Agricultural Water Optimization Committee

- Craig Buttars, Commissioner, Utah Department of Agriculture & Food
- Teresa Wilhelmsen, Director, Division of Water Rights. State Engineer
- Candice Hasenyager, Director, Division of Water Resources
- Dr. Ken White, Dean of the College of Agriculture & Applied Science
- William Merkley – Water Conservancy District Representative
- Jason Morgan, Conservation District Representative
- Jeff Hardy, Vice Chairman – Northern Utah Agricultural Representative
- Brett Bunker, Chairman – Central Utah Agricultural Representative
- Brandon Yardley – Southern Utah Agricultural Representative



Agricultural Water Optimization Staff

Hannah Freeze – Program Manager

Brian Christensen – Assistant Program Manager

Liz Hamilton – Assistant Program Manager

Nick Coffey – Cache, Rich, Tooele, SLC, Utah Wasatch Counties

Ben Law – Box Elder, Weber, Davis, Morgan, Summit Counties

Hayes Mills – Millard, Sanpete, Juab, Sevier, Piute, Wayne, Beaver, Iron, Garfield, Washington,
Kane Counties

Tanner Mills – Dagget, Duchesne, Uintah, Carbon, Emery, Grand, San Juan Counties



Funding & Project Completions

333 total projects have been funding since the program started.

Annual reporting of water use is required after project completion & use for a full irrigation season (typically April 15 – Oct. 1)

65 projects have been completed and of those 24 are complete and have been in use for at least one full irrigation season.

\$65,000,000 have been contracted, only \$17,225,514 have been paid out to date

Project Highlights in Uintah Basin

Canal Work

Sprinkler Projects

Pivots

Wheel lines

Large volume of applications in the area

Current Applications

30 applications submitted

Pivots – mostly with LESA or LEPA packages

Wheel lines

Sub-surface drip

Pipe & riser

Telemetry

Micro-irrigation

Canal Work

196 - pending applications

Alfalfa

Desert plant

Drought tolerant “very resilient”

High yield

Perennial – saves on cost, carbon footprint, and air quality compared to annual crops

Water efficient – high calories, protein & fiber

Perfectly suited to Utah’s climate

- Diurnal temp variation improves quality

- Dry climate aids harvesting

- Heat, sunlight

- Salty Soils

Multiple harvest per year – improves cash flow

Nitrogen Fixing – builds soil N

Controls wind & water erosion

Established markets with local demand

International reputation

Natural pests less tolerant of Utah climate

Autotoxicity limits spread, unlike other perennial forages – Kochia & Amaranth

~\$800,000,000 input into Utah’s economy each year

Utah's Water Budget

Factor	Acre Feet
Mean annual precipitation	61,348,000
Mean annual diversion – 7.74%	4,751,000
Remaining in nature	56,597,000
Diversion to Human Use	
Ag irrigation diversion – 6.7% of total, or 79.2% of amount diverted	3,761,000
Landscape irrigation ~0.96% or 12.4% of amount diverted	589,000
Industry/Community – 0.64% or 8.33% excluding landscape irrigation	395,540

Source: Utah Division of Water Resources. 30-year period ending 2018



Questions

Hannah Freeze

Agricultural Water Optimization Program Manager

udaf-wateroptimization@utah.gov

hfreeze@utah.gov

(435) 764 - 6258

