

2024

AGRICULTURAL WATER OPTIMIZATION STRATEGIC PLAN



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Our Mission and Vision

Mission: To help agricultural producers optimize their water use to improve water resiliency in Utah.

Vision: The Agricultural Water Optimization Program improves the use of water resources and maintains viable agriculture without increasing depletions through innovative agricultural practices and the funding of new and updated infrastructure.

Core Values

Agriculture: We believe in supporting producers through the carefully considered funding of agricultural water optimization projects.

Innovation: We value the identification and implementation of improved agricultural water savings solutions through practical and proven research.

Collaboration: We cultivate inter-agency partnerships and value agricultural producer input.

Integrity: We are committed to providing superior service and timely, transparent information.

Agricultural Water Optimization Program Overview

The Agricultural Water Optimization Program was originally created with a \$3,000,000 dollar appropriation from the legislature in 2019 with the focus of the program aiming to identify and fund projects that used new technologies, reduced consumptive use and could be scalable across a large geographic area. Since then the program has received significant funding investments from the legislature totaling \$276,000,000 to date.

During the 2023 general legislative session, the Agricultural Water Optimization Program was reworked to better define the purpose of the program, establish an Agricultural Water Optimization Committee, and provide a place for saved water, defined in an approved change application by the State Engineer, to be recognized as a beneficial use.

In July of 2023 the Agricultural Water Optimization Committee was formed and created new rule and policy to move the program forward. As defined in the Agricultural Water Optimization Grant Program Policies and Procedures, the purpose of the program is to:

- Maintain viable agriculture without increasing water depletion to enhance water availability and minimize impacts on water supply, water quality, and the environment.
- Provide increased operational flexibility to agricultural water users.
- Provide the opportunity for saved water to be considered a beneficial use if a change application is filed with the State Engineer.
- Provide additional nonuse protection if a change application is filed.
- Improve water quantification through:
 - Showing accurate, real-time measurements of water use; and
 - Documenting actual water savings in cubic feet per second (CFS) or acre-feet.

Each year, working with UDAF staff, the Agricultural Water Optimization Committee establishes an application period and creates funding criteria and ranking priorities. The Spring 2023 application period had the largest response to date in terms of application numbers and dollars requested from the program. 389 applications were received requesting over \$65,000,000 in funding dollars. The Agricultural Water Optimization Committee recommended to the Utah Conservation Commission that 221 projects be funded, allocating over \$49,000,000.



GOALS & OBJECTIVES

Goal 1: Support agricultural water use resilience.

Objectives

1.1

Measure agricultural water use, quantify water savings, and share information in a useful way that leads to understanding of diversion and depletion savings using complete program data.

1.2

Report program effectiveness to help guide future legislative decisions regarding agricultural water use.



1.1.1 and 1.1.2 Metrics

1.1 Measure agricultural water use, quantify water savings, and share information in a useful way that leads to understanding of diversion and depletion savings using complete program data.

1.1.1

Indicator: Determined “saved water”

Baseline: Zero quantified “saved water” as defined by Utah Code Section 73-3-3

Target: To show an actual amount of saved water quantified in Acre Feet

Time Frame: FY 2025-FY2028

Responsible: Division of Water Rights through State Engineer decision on change applications

1.1.2

Indicator: Annual water use measurements after-project implementation

Baseline: Reporting has not previously been reliably used to guide agency understanding of diversion and depletion savings

Target: To produce measurable results annually on depletion and diversion savings that agencies can use to create policy and reporting

Time Frame: FY 2025-FY2028

Responsible: Division of Water Rights appointed data collector, Division of Water Resources annual report administration, UDAF field reporting



1.2.1 Metrics

1.2 Report program effectiveness to help guide future legislative decisions regarding agricultural water use.

1.2.1

Indicator: Standardized reporting

Baseline: Prior year’s reporting - Reporting has not been standardized

Target: To show a concise and easily understood summary of program success.

Time Frame: FY 2025-FY2028

Responsible: The Division of Water Resources in coordination with the Utah Department of Agriculture and Food and Water Rights shall annually compile and publish a report

1.1.1	As grantee annual reporting is collected once a year, data will be compiled to report on after-project irrigation water use in Ac/Ft	Program Manager & Asst. Managers	Staff Time	Annually - March 2025
1.1.1	At least 3-5 saved water applications are filed each application period.	Program Manager & Asst. Managers	Staff Time	Annually - July 2025
1.1.2	A summary of annual reporting is used to guide agency direction and policy.	Program Manager & Asst. Managers and DWRi and DWRe	Staff Time	Annually - March 2025
1.2.1	Report on water used (estimated diversion and depletion) and any changes to pre-project water use will be assembled by the committee, published by Division of Water Resources, presented to legislature, and published on our dashboard annually.	Asst. Manager, DWRe, Water Opts Committee	Staff Time	Annually - August 2025

GOALS & OBJECTIVES

Goal 2: Support agricultural water users.

Objectives

2.1

Fund agricultural water optimization projects that provide a benefit to agricultural operations and the environment.

2.2

Seek on-going funding for the agricultural water optimization program to ensure that secured funding positively impacts agricultural operations, does not increase water use, and maintains viable agricultural operations.

2.1.1 and 2.1.2 Metrics

2.1 Fund agricultural water optimization projects that provide a benefit to agricultural operations and the environment.

2.1.1

Indicator: Ongoing loss of agricultural land

Baseline: Upgraded irrigation systems are often not feasible to install due to high costs

Target: Fund 80-100 agricultural water optimization projects annually that sustain viable agricultural operations

Time Frame: Ongoing

Responsible: UDAF Water Optimization Staff

2.1.2

Indicator: Open space provides multiple benefits

Baseline: Ongoing loss of agricultural land contributes to negative environmental consequences.

Target: Acres impacted through funded projects

Time Frame: Ongoing

Responsible: UDAF Water Optimization Staff



2.2.1 Metrics

2.2 Seek on-going funding for the agricultural water optimization program to ensure that secured funding positively impacts agricultural operations, does not increase water use, and maintains viable agricultural operations.

2.2.1

Indicator: One-time, non-lapsing funding allocated through SB 277

Baseline: No on-going funding is secured

Target: Secure \$10-20 Million in on-going program funding to include permanent staff funding

Time Frame: On or before end-of-year 2027

Responsible: UDAF executive team with Water Optimization Program Manager

2.1.1	Identify funding projects through water optimization committee criteria selection that have the potential for diversion and/or depletion savings.	Field staff and Managers, DWRI	Staff Time	On-going
2.1.2	Identify, compile, and report acres impacted through program funding and how much land is lost annually to development.	DNR, Water Opt. Staff	Staff Time	Annually - March 2025
2.2.1	Annual legislative session presentations on program impact on agricultural communities, and quantified water savings.	UDAF Administration and Program Manager	Staff Time	By 2027

GOALS & OBJECTIVES

Goal 3: Effectively communicate program information.

Objectives

3.1

Create a coordinated online public dashboard so information such as water savings, program spending, and research findings are easily accessible.

3.2

Provide exceptional customer service by guiding agricultural producers step by step through the water optimization process including project planning, application submission, funding, project completion, and reporting.

3.1.1 Metrics

3.1 Create a coordinated online public dashboard so information such as water savings, program spending, and research findings are easily accessible.

3.1.1

Indicator: Consistent public inquiries generally looking for the same program data sets

Baseline: No easily accessible online public information

Target: Create a coordinated online public dashboard so information such as water savings, program spending, and research findings are easily accessible.

Time Frame: Year end 2026

Responsible: Asst. Water Optimization Program manager (Brian Christensen), in coordination with Division of Water Resources and Division of Water Rights.



3.2.1 Metrics

3.2 Provide exceptional customer service by guiding agricultural producers step by step through the water optimization process including project planning, application submission, funding, project completion, and reporting.

3.2.1

Indicator: Statewide program awareness

Baseline: Lower application numbers in central and southern Utah counties

Target: Host five outreach events focused on target counties to generate program applications

Time Frame: End of year 2025

Responsible: Central and Southern Utah water optimization field staff (support from water opt leadership)

<p>3.1.1</p>	<p>Work with IT department and UDAF Electronic Communications Program Manager to implement a public dashboard that interfaces with our Submittable and GIS information - where program data is compiled and easily queried by interested parties.</p>	<p>Asst. Managers</p>	<p>Staff Time and IT Department, UDAF GIS Contracting Specialists</p>	<p>EOY 2026</p>
<p>3.2.1</p>	<p>Host at least five events annually that will help underserved areas within the state by providing program information, Division of Water Rights on change applications, introducing their local UDAF office staff, and where to find program updates and applications.</p>	<p>Southern Utah Field Staff</p>	<p>Staff Time</p>	<p>EOY 2025</p>

GOALS & OBJECTIVES

Goal 4: Bolster resilience of agricultural operations.

Objectives

4.1

Ensure agricultural community needs and concerns are addressed through meaningful outreach events coordinated in partnership with local conservation districts that share program information and provide opportunities to discuss challenges and suggest new ideas.

4.2

Establish and improve relationships with strategic partners such as Division of Water Rights, Division of Water Resources, Utah State University, Colorado River Authority of Utah, Great Salt Lake Commissioner, local conservation districts, and Natural Resources Conservation Service (NRCS) to help them understand the needs of agricultural operations and influence program decisions into the future.

4.1.1 Metrics

4.1 Ensure agricultural community needs and concerns are addressed through meaningful outreach events coordinated in partnership with local conservation districts that share program information and provide opportunities to discuss challenges and suggest new ideas.

4.1.1

Indicator: Agricultural community requests and comments for more program involvement opportunities.

Baseline: No clear path for public agricultural community input of potential water optimization projects and funding needs.

Target: Host 3-5 community outreach events throughout the state

Time Frame: On-going annually

Responsible: All Water Optimization program staff



4.2.1 Metrics

4.2 Establish and improve relationships with strategic partners such as Division of Water Rights, Division of Water Resources, Utah State University, Colorado River Authority of Utah, Great Salt Lake Commissioner, local conservation districts, and Natural Resources Conservation Service (NRCS) to help them understand the needs of agricultural operations and influence program decisions into the future.

4.2.1

Indicator: Multiple agricultural water stakeholders with vested interest in program success

Baseline: Transitioning from Utah Agricultural Water Optimization Task Force to the Agricultural Water Optimization Committee

Target: Hold monthly Water Optimization Committee meetings to ensure program goals are aligned with strategic partners (data sharing)

Time Frame: On-going

Responsible: Water Optimization Manager (Hannah Freeze)

4.1.1	Host at least five outreach events with existing or pending applicants to gather agricultural community input on new technologies, program needs and wants, and gather community concerns.	Field staff and Program Managers	Staff Time	On-going
4.2.1	Biannually scheduled meetings with existing partner entities.	Water Opt. Field Staff	Staff Time	December 2024, On-going
4.2.1	Host monthly Water Optimization Committee meeting and invite funding partners and partner agencies to provide and seek program input.	UDAF Administration and Water Opt. Committee	Staff Time	On-going

GOALS & OBJECTIVES

Goal 5: Explore emerging technologies.

Objectives

5.1

Identify innovative water savings technologies that are effective, practical, and economical for agricultural water users through pilot projects, program ranking priorities, field days, and supporting research.



5.1.1 Metrics

5.1 Identify innovative water savings technologies that are practical and economical for on farm implementation through pilot projects, program ranking priorities, field days, and supporting research.

5.1.1

Indicator: Many potential new water savings irrigation technologies available for producers

Baseline: Lack of up-to-date information on the value of emerging water savings technologies

Target: Fund 1-3 pilot projects per application period that will provide information on possible economics, practicality, and quantifiable water savings utilizing new technologies and practices.

Time Frame: On-going

Responsible: Agricultural Water Optimization Committee



5.1.2 Metrics

5.1.2

Indicator: Water savings technology research is updated constantly

Baseline: No clear path to identify new research that may impact Utah water users as it becomes available

Target: Receive annual reporting from research partners like Utah State University, etc. on relevant research

Time Frame: On-going – pre-application period

Responsible: Agricultural Water Optimization Committee

5.1.1	Identify possible new technologies on the market. Can be done through partner recommendations, company outreach, or applicant interest.	Field staff and Program Managers	Staff Time	On-going
5.1.1	Create a pilot project fund with funding criteria, a new pilot contract, and guidelines.	Program Manager & Asst. Managers	Staff Time	June 2025
5.1.1	Select 1-3 potential products for a pilot project for the committee to fund and quantify the generated data from the project in an effective and concise way.	UDAF Administration and Water Optimization Committee	Staff Time	December 2025, On-going
5.2.1	Request presentations from funding partners and research partners on new field related research.	Water Optimization Committee	Funding and Research Partners	Biannually



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