### Water Optimization Program

Brian Christensen Agricultural Water Optimization Utah Department of Agriculture and Food 2/22/2024



### Water Optimization Program Purpose

- Maintain viable agriculture while reducing water depletion
- Enhance water availability and improve water quality
- Improve water quantification by showing accurate, real-time measurement of diverted water to demonstrate actual water savings in CFS and acre foot
  - Improve and protect surface and ground water quality by reducing over watering of crops
  - Provide increased operational flexibility to agricultural water users



# **General Information**

- \$500,000 max award
- 50/50 match
- 10% grantee contribution
- No end guns or big guns
- New materials
- Reimbursement
- 20% withheld until project completion
- No more cap at \$7,000/acre
- Must have a consultation with Division of Water Rights

Watch website for announcements of future application periods (this Fall) <a href="https://ag.utah.gov/farmers/conservation-division/water-optimization-program/">https://ag.utah.gov/farmers/conservation-division/water-optimization-program/</a>



# Examples

- Pipe and Riser
- Drip Irrigation
- Subsurface Drip Irrigation
- Automated Surge Valves
- Laser Leveling
- Pivots
- Wheelines
- K-linds (Pods)

### Requirements

#### • Flow Meters

- Required on all funded Water Optimization projects
- Must be in real-time with the capability to record and store data
- Water metering reports must be submitted electronically
- Real-time water metering should occur each time water is diverted
- Evaluation of Nutrient Load Reduction
- Annual Reports (3 years)
  - Irrigation season
  - Water diverted for the irrigation season
  - Acres irrigated
  - o Crops irrigated
  - Crop yields



# **Looking Forward**

- Have an idea of costs and design
- Work with a UDAF planner
- Other funding sources
  - Environmental Quality Incentive Program (EQIP NRCS)
  - o UDAF Loan Program (ARDL)

| Loan Amount          | Interest Rate | Loan Terms          |
|----------------------|---------------|---------------------|
| Less than \$52,000   | 3.25%         | 7 years or 15 Years |
| \$52,001 - \$103,999 | 3%            | 15 Years            |
| \$104,000 or More    | 2.75%         | 15 Years            |



### **UDAF** Planners

Hannah Freeze – Program Manager (435)764-6258 Brian Christensen – Assistant Program Manager (435)494-9760 Liz Hamilton – Assistant Program Manager (385)522-6246 Nick Coffey – Cache, Rich, Tooele, SLC, Utah Wasatch Counties (385)228-7163 Ben Law – Box Elder, Weber, Davis, Morgan, Summit Counties (385)622-3461 Hayes Mills – Millard, Sanpete, Juab, Sevier, Piute, Wayne, Beaver, Iron, Garfield, Washington, Kane Counties (385)228-8258 Tanner Mills – Daggett, Duchesne, Uintah, Carbon, Emery, Grand, San Juan Counties (385)228-

2710



# **Utah's Water Budget**

| Frater  | Asia East  |
|---|------------|
| 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<br>79.2% of amount diverted | 3,761,000  |
| Landscape irrigation ~0.96% or 12.4% of<br>amount diverted              | 589,000    |
| Industry/Community – 0.64% or 8.33%<br>excluding landscape irrigation   | 395,540    |

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

# Questions

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