

DWR Component 4

Sustainability through Improvements in Irrigation Efficiency and Irrigation Water Management

March 16, 2026



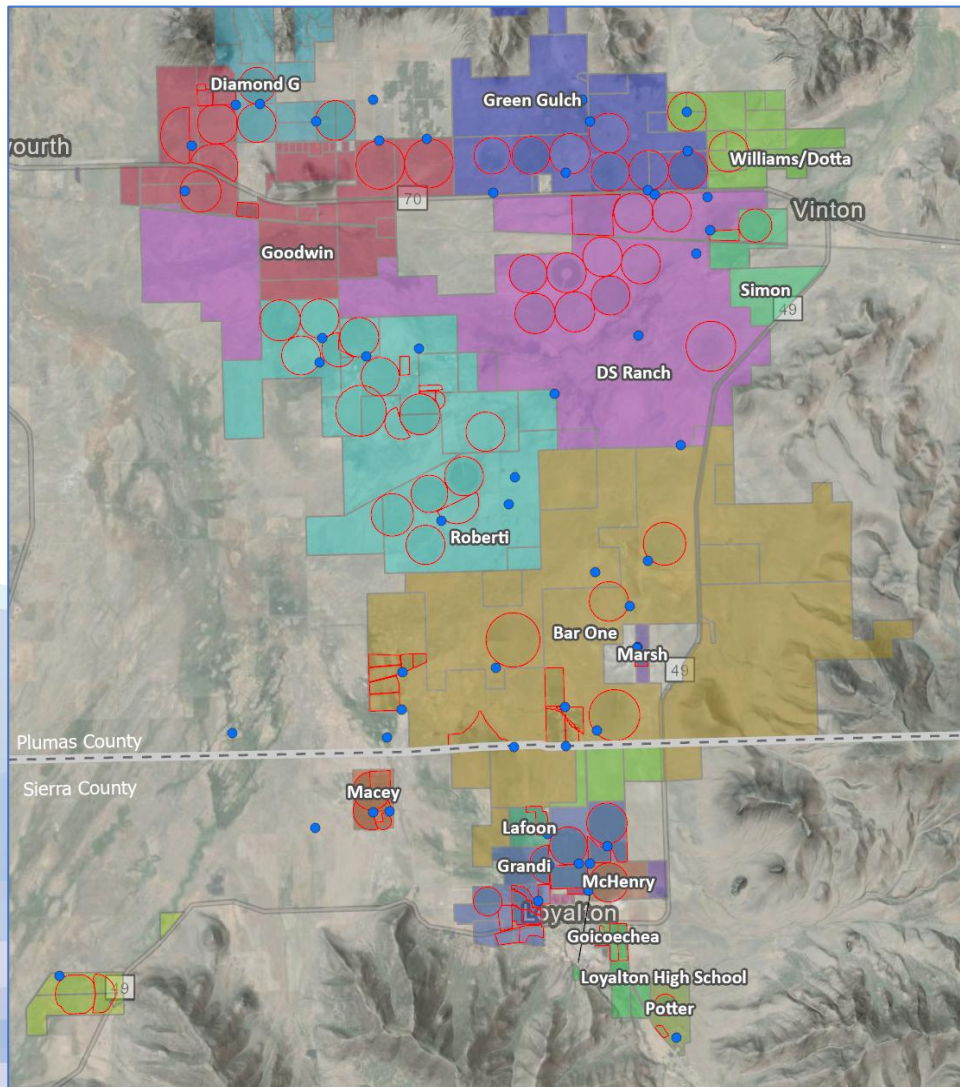
Equipment Purchased and Installed

>\$1 Million of Expenditures – All of 4(c) and 4(d)

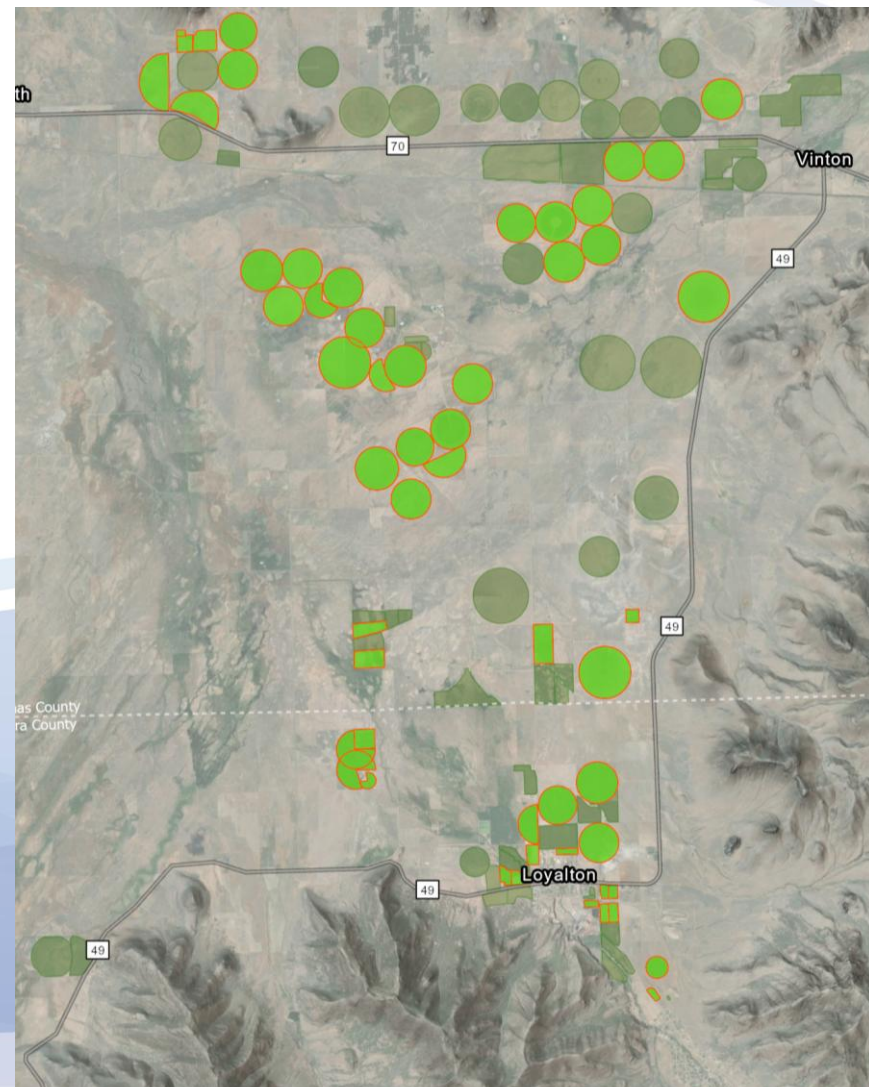
Facility	Number of Facilities Recommended in Farm Assessment Reports	Facilities Installed Through Grant
High Efficiency Sprinkler Package	49	37
Sand Separator	6	3
Ditch Pump Intake Screens	7	6
Variable Frequency Drive Controls	2	2
Wheel Line Improvements	41	17
Pipeline Replacement/Construction	14	6
Weather Stations (Basinwide)	4	3
Soil Moisture Stations	38	11

Targeted Large Irrigators for Assessments

Red Outlines indicate Groundwater Irrigated Fields targeted for Project Implementation



Highlighted Fields Indicate Locations of Irrigation Efficiency Project Improvements



Groundwater Savings Summary

Summary of Groundwater Savings

- **From Equipment installed through Component 4 of Grant (2024-2026)**
 - Approximately 470 AFY during an Average Hydrologic Year (i.e., 2022)
- **Basin-Wide Savings from Complete Conversion to High-Efficiency Sprinklers**
 - Results in approximately 90 AFY to 710 AFY during wet to dry hydrologic conditions, respectively, based on conversion of 12 remaining pivots
- **Improved Un-Quantified Groundwater Savings from Improved Irrigation Management**
 - Improved Distribution Uniformity from Sand Separators, VFDs, Ditch Pumps
 - Reduced groundwater use through use of Soil Moisture sensors (i.e., beginning of year, end of year, after each cutting)
 - Utilization of Forecasts and Observed Conditions to inform irrigation decisions
 - On the ground Soil Moisture Sensors and Climate Data
 - Forecasting Tools – weather and forecasted ET

Recommendations

Opportunities for Continued Efficiency Improvements

- **Other Irrigation System Recommendations**
 - Field irrigation system conversions (Wheel line to Center Pivots/Lateral Move Systems)
 - Remaining pivot sprinkler conversions
 - Laser level field – improve surface distribution uniformity
 - Conveyance improvements – Ditch conversions/Rehab, pipelines
- **Irrigation Management Techniques** – Utilization of Forecasts and Observed Conditions to inform irrigation decisions
 - On the ground Soil Moisture Sensors and Climate Data
 - Forecasting Tools – weather and forecasted ET
 - Soil Reservoir Monitoring and Management
- **Lake Davis Transfer**
 - LCCWD consulted with and agreed to no impacts to senior rights through 2 cfs transfer
 - Assess economic impact of 375 AFY at \$143 per AF
 - Costs to be negotiated with Plumas County

Component 4 Deliverables

Completed Deliverables under Component 4

- **Draft and Final Component Completion and Demonstration Project Report**
- **Technical Memorandum regarding Participating Irrigators, lessons learned, and incorporated strategies**
- **Inventory of equipment and material purchased**
- **Summary of activities and photo documentation of equipment installed**
- **Inspection Reports (incorporated in bullet above)**
- **Efficiency Reports for participating ranches (Farm Assessments)**
- **Technical Memorandum summarizing identification criteria**
- **Report summarizing feasibility and impact of Lake Davis water rights transfer**