Automation of Agriculture Diversions on the Bear River: Phase 2

Improved Control and Delivery of Streamflow and Storage Water

Community Agriculture Alliance
P.O. Box 771434
Steamboat Springs, CO 80477

Patrick Stanko
Ag Resource Coordinator
Community Agriculture Alliance
P.O. Box 771434
Steamboat Springs, CO 80477
patrick@communityagalliance.org
970-879-4370

COMMUNITY AGRICULTURE ALLIANCE

Contents

Executive Summary

Date: January 14, 2025

Community Agricultural Alliance (CAA),

Steamboat Springs, Routt County, Colorado

The Bear River, the crucial headwaters reach of the Yampa River in Northwest Colorado, stands out as one of the few highly administered rivers in the Yampa Basin. In addition, it's one of the sections of the Yampa River Basin where agriculture producers can purchase stored water for delivery during the irrigation season. This project proposes to add automated control to several critical diversions on the Bear River to improve water delivery and increase efficiency to the entire system where water resources are annually found to be insufficient to meet demand.

The project is a cooperative effort led by the Community Agriculture Alliance (CAA) and the Upper Yampa Water Conservancy District (UYWCD) in support of the agricultural producers along the Bear River.

CAA is a 501c3 nonprofit organization promoting and supporting local agriculture in Routt County, Colorado. Since 1999, CAA has been providing agricultural conservation, production, and advocacy resources as needed in Routt County to supportsmall family agricultural operations.

UYWCD was formed in March 1966 through the State of Colorado Water Conservancy Act to conserve, develop, and stabilize water supplies within its boundaries. The district's boundaries are Routt County and a small portion of Moffat County in Northwest Colorado. UYWCD has constructed and operates two reservoirs, Yamcolo (located at the headwaters of the Bear River in the Flat Tops mountains) and Stagecoach (located south of Steamboat Springs on the Yampa River). The district has storage contracts with municipalities and agricultural irrigators for storage in the Yamcolo reservoir that is used for summer water releases after the natural flow of the Bear River drops below the amount required to meet all water rights demands on the river. In addition, the UYWCD has to coordinate water operations through Yamcolo and down the Bear River for a private agriculture reservoir company (Bear River Reservoir Company which owns Stillwater Reservoir, located above Yamcolo) to deliver water to municipalities and agriculture irrigators. There is no irrigation district or ditch companies on the Bear River. For this reason, CAA and UYWCD are the entities facilitating this project.

In 2018, CAA and UYWCD were leading organizations in the development of the Yampa Integrated Water Management Plan (IWMP). The plan evaluated current conditions and developed recommendations to maintain and improve the water availability and health of the Yampa River. Of the twenty objectives identified by plan, the Automation of Agriculture Diversions on the Bear River, Phase 2 (the Project) would support a number of those listed objectives including, securing infrastructure funding, coordinating reservoir operations to meet irrigation and environmental shortages, performing multi-benefit diversion structure upgrades, meeting existing environmental flow targets and water rights, and building long-term capacity and support for agriculture water efforts and initiatives.

This Project aims to automate up to eighteen irrigation headgates on the Bear River (headwaters of the Yampa River in Northwest Colorado) in a multi-phased approach. Funding has been received

for Phase 1 which will provide automated control to five headgates in 2025. Funding is being requested for the second phase of the project (Phase 2) to add automation to another five headgates. Critical to automated control is having accurate measuring devices on each diversion including communicated telemetry data to provide control information to the automation equipment. The Division of Water Resources (DWR), the water administration authority for the State of Colorado, will have installed telemetry data on all headgates within the system by August 2025. Using this telemetry system and adding automation to headgates on the Bear River will improve the ability for UYWCD to deliver water and improve water use efficiency on the Bear River. For Phase 2 CAA and UYWCD plan to start upgrades to the headgates in September 2026, install automation by December 2026, and have the systems tested and operational by December 2027.

Project Location:

This project is located on the Bear River, a headwaters reach of the Yampa River, which starts in the Flat Top mountains of the Routt National Forest and runs to the Town of Yampa in South Routt County, Colorado.

There are five headgate structures proposed to be automated in Phase 2 of this project. They are as follows:

Headgate: Big Mesa
Latitude: 40.068451
Longitude: -107.001326
Adjudication Dates: 9/26/1902, 9/26/1904, 3/9/1953
Net Absolute: 32.3 CSF total, Adjudicated amounts: 5.8, 28.0, 8.5 CSF
593.5 acres of irrigated hay

Headgate: Coal Creek
Latitude: 40.055964
Longitude: -107.037170
Adjudication Dates: 9/14/1946
Net Absolute: 8.0 CFS

Headgate: Nickell Ditch
Latitude: 40.148948
Longitude: -106.904958
Adjudication Dates: 9/22/1892, 9/22/1892, 9/18/1905
Net Absolute: 9.3 CSF total, Adjudicated amounts: 1.7, 5.3, 2.3, CSF
385 acres of irrigated hay

Headgate: Nickell Bypass (Colorado Instream Flow Right)
Latitude: 40.148948
Longitude: -106.904958
Adjudication Dates: 9/23/1977
Instream Flow Right of 12 CFS for 11 miles of the Bear River.

Headgate: Bird
Latitude: 40.146734
Longitude: -106.905342
Adjudication Dates: 9/22/1892, 9/15/1902, 9/14/1946
Net Absolute: 10.5 CSF total, Adjudicated amounts: 6.6, 3.33, 1.62, CSF
263 acres of irrigated hay

Technical Project Description

This Project looks to add automated control equipment to the irrigation headgates on the Bear River. The Bear River starts in the Flat Tops Wilderness of the White River and Routt National Forest just above the town of Yampa, Colorado, and is considered a headwaters tributary of the Yampa River. This river has two high-altitude reservoirs on it (Yamcolo and Stillwater Reservoirs) that

supply irrigation water to hay meadows and cattle agriculture ranches. UYWCD, which owns the Yamcolo Reservoir, uses the Bear River to fill the reservoir and to deliver contract water to agricultural producers. Twenty agricultural diversions exist between the UYWCD reservoir and the twelve miles of river to the Town of Yampa. UYWCD also has to coordinate movement of water through its reservoir from the upstream reservoir, Stillwater Reservoir, which also uses the Bear River as a water delivery system. Stillwater Reservoir is owned by the Bear River Reservoir Company, which is a consortium of agricultural producers. There are no ditch companies or irrigation districts that manage the twenty headgates along the Bear River.

Phase 2 of the Project involves installing automated diversion control systems on and additional set of headgates on the Bear River, bringing the total number of headgates with automated controls up to 10. The first five headgates received funding from the previous Bureau of Reclamation Small-Scale WaterSmart funding opportunity. This request would expand the reach and improve the realization of efficiency gains for system-wide automated control within this highly administered river reach.

The following steps have been or will be taken for each listed headgate in this request to determine scope of the project, to develop the budget, and execute the work:

Step 1 will be to assess the ditch headwall and headgate and design a trash rack for the diversion/headgate.

Step 2 includes site preparation which includes removal and replacement of the existing headwall and slide headgate and frame and the installation of a trash rack to keep the diversion slide gate free of debris such as logs and branches that may be traveling down the river. Installation will involve minimal disturbance to the surrounding area as materials can be brought in via existing disturbed areas along the irrigation ditch or other already formalized access points. If new headgates or headwalls are needed prior to placement of the automated control equipment, the footprint will be the same as that of the previous headwall or headgate location. Any equipment that cannot be mounted directly to the headwall will be post-mounted in close proximity to the headwall and can be placed in a location where previous construction disturbance activities occurred.

Step 3 includes installation of the automated control system to the headwall and headgate, which consists of mounting an electric motor and potentiometer along with the necessary controller and power supply comprising of a battery bank and appropriately sized solar panel. Remote communication with the automated system will be via spread spectrum radio that will link to the base tower. The base tower will be installed as part of the already funded Phase 1 project scope.

Step 4 will be testing and programming the system to automate each headgate independently using the telemetry flow data already installed on each ditch measuring device.

Memorandums of Understanding will be prepared and executed between CAA and each ditch owner to provide clarity and mutual understanding of the Project, roles, and long-term infrastructure maintenance requirements prior to proceeding with installation of equipment.

Evaluation Criterion

Project Benefits

Clearly explain the anticipated water management benefits to the Category A applicant's water supply delivery system and water customers. Consider:

- Will the project result in more efficient management of the water supply?
- Where any conserved water as a result of the project will go and how it will be used?

To meet the storage contracts out of Yamcolo Reservoir, the UYWCD uses the Bear River to deliver water to agricultural producers and municipalities. The UYWCD also must work with the Bear River Reservoir Company to pass water through Yamcolo into the Bear River to meet the company's delivery obligations. The water is then delivered to the twenty diversions in the twelve-mile stretch of the river. With present and future drying conditions, municipalities that own contracts with UYWCD will need their water shepherded past these agricultural diversions. The Bear River also has its own natural flow that must be administered by the Colorado Division of Water Resources (DWR), requiring UYWCD to coordinate with the water users, DWR and Bear River Reservoir Company. UYWCD will directly benefit from implementation of this project.

Benefits to adding automation to the Bear River for UYWCD consist of the following:

- Aid in more efficient water management for the UYWCD as water moving through the system can be monitored and diversions from the river channel can be precisely adjusted.
- Allow the agricultural producers who lease stored water from the UYWCD to receive the full amount purchased, as it can be more easily and precisely shepherded to the desired headgate.
- Allows for better collaboration between water managers and agricultural producers to the system, as information will be more transparent to all parties. This should lead to less conflict and/or reduce distrust among water users and government officials
- Currently system losses occur since diversion structures cannot modulate to adjust to real-time streamflow variability. The addition of automated control will allow diversions to adjust in real-time to reduce system losses and improve overall delivery efficiencies.
- System efficiencies will lead to preservation of reservoir levels by avoiding systems losses due to past flow volume or timing challenges resulting from a lack of real time diversion monitoring and adjustment
- Allow water delivery to the Yampa River for downstream municipalities that have contracts with UYWCD.

Broader Benefits of Automation on the Bear River:

As stated earlier, the Bear River is used by UYWCD and Bear River Reservoir Company to deliver water, and the Bear River has its natural flow. With a drying environment, reliance on storage water will increase not only for the agricultural users but also for municipalities and river health. The Bear River is over appropriated (there is not enough water to meet all of the water rights) and is placed on call yearly by DWR, requiring the drying up of the Bear River at the call point. This requires a significant amount of time by all the water users, UYWCD, and DWR to manage the river.

Adding automation to the Bear River will also add these broader benefits:

- Aid in more efficient water management for the water users and DWR.
- Reduce the burden of DWR staff time on the Bear River.
- Allow junior water rights to get water when it is available that usually would pass their headgates without system automation. Agricultural water rights holders will therefore be able to utilize this water in their respective operations whereas it would otherwise be lost in the system.
- Allow water delivery to the Yampa River to meet municipal augmentation plans.
- Enable leased water for instream flow rights to be shepherded down the Bear River, preserving and enhancing the aquatic habitat.

Planning Efforts Supporting the Project

Plan Description and Objectives: *Is your project supported by a specific planning document or effort? If so, describe the existing plan. When was the plan developed? What is the purpose and objective of the plan?*

Plan Development: *Who developed the planning effort? What is the geographic scope of the plan? If the planning effort was not developed by the Category A applicant, describe the Category A applicant's involvement in developing the planning effort.*

Support for the Project: *Describe to what extend the proposed project is supported by the identified plan. Consider:*

- *Is the project identified specifically by name and location in the planning effort?*
- *Is this type of project identified in the planning effort?*
- *Explain whether the proposed project implement a goal, objective, or address a need or problem identified in the existing planning effort?*
- *Explain how the proposed project has been determined as a priority in the existing planning effort as opposed to other potential projects/measures*

The Yampa Integrated Water Management Plan (IWMP), completed in 2022, was developed by the Yampa-White-Green Basin Roundtable, one of nine basin roundtables supported by the Colorado Water Conservation Board. These roundtables bring together the different water users in the basin and work collaboratively to solve water supply gaps. The UYWCD is a founding member of the Yampa-White-Green Basin Roundtable and has been a member since 2012. The UYWCD was a primary stakeholder in the plan as the district has a water storage and delivery obligation in Routt County. UYWCD board and staff attended and led planning efforts and attended all meetings in the formation of the plan. Three of their staff members and one board member are directly credited in the document as part of the "Yampa IWMP Committee, Consultants & Work Group Members". UYWCD is also recognized in the document for having provided funding for the plan development. Community Agriculture Alliance (CAA) led the outreach to the agricultural community for stakeholders' input on the plan and its recommendations and it's staff is also recognized for serving as a committee and work group member.

The final IWMP developed twenty recommendations for continued areas of management efforts including basin-wide education, outreach and collaboration activities, river corridor protection, support for beneficial uses of the river corridor and flows, and river flows protection. The IWMP

specifically identified for the segment of river corresponding to the project area "a widespread desire for infrastructure upgrades ranging from ditch repair, diversion repair, headgate and measuring device repair, and irrigation equipment."

UYWCD supports the IWMP recommendations and UYWCD participated in developing the following recommendations:

- Identify repairs for existing reservoirs and secure infrastructure funding to complete them
- Secure funds to implement multi-benefit diversion structure upgrades per CAA/Ag workgroup's 2021 Flowchart and Prioritized List: Develop sustainable funding to continue helping irrigators modernize their infrastructure with basic engineering, assistance with identifying funds and grant writing.
- Coordinate reservoir operations to meet irrigation and environmental shortages: Identify opportunities that increase the utilization of existing stored water to help alleviate existing and future irrigation water and environmental flow shortages.
- Refine return flow study: Continue progress towards understanding surface water return flow patterns in the basin through additional science and monitoring.
- Protect water quality in the upper Yampa River watershed & Stagecoach Reservoir: Inventory, model and sample the sub-basin above and including Stagecoach Reservoir to identify possible causes of prolific algae blooms. Develop and implement land and water management practices to mitigate possible sources.
- Form Yampa River dashboard and information database: Develop a "Yampa River Dashboard" for use by stakeholders as a one stop location for information related to water management such as: status of snowpack, current climate conditions, soil moisture
- Build long-term capacity and support for representation of agriculture in water efforts and initiatives: Establish a paid position to represent basin irrigators' interests in local and statewide water conversations.
- Educate on water rights and improve diversion data reported to the State of CO: Identify the barriers to accurate water reporting and seek funding to implement solutions.
- Educate on ditch governance to support water right owners who may want to form an entity, update existing governance documents, or prepare user agreements: Conduct education and outreach on opportunities and options for ditch governance.
- Execute StateMod model refinements: Review and update information housed in the State of Colorado's water rights model including irrigated acreage, water source and points of return flow.

This Project proposed as part of this funding request will support these recommendations by improving water delivery in the Bear River (headwaters of the Yampa River), protect agricultural water supply, provide environmental flows and improve management collaboration.

Beyond the IWMP the UYWCD has developed its own strategic-plan with the following goals that support this project:

- Ensure the district's infrastructure is safe, maintained and improved
- Protect all in-basin beneficial vested water uses in the district, consistent with other UYWCD policies.
- Provide adequate water supplies within the district in light of changing climate conditions, population shifts and other changes
- Promote healthy reservoirs, streams, and watershed within the District

The CAA used stakeholder input and the agriculture diversion assessment data from the IWMP to focus its efforts on the Bear River agricultural infrastructure. These efforts include diversion infrastructure repair projects such as the Nickell Ditch Diversion Repair Project, scheduled for construction in 2025. Stakeholder engagement performed by CAA over the past few years has highlighted the need for diversion automation on the Bear River. This Bear River automation project will directly support two beneficial uses of the river corridor and its flows by securing funding to implement multi-benefit irrigation diversion structure upgrades and coordinate reservoir operations to meet irrigation and environmental flow shortages. This project will also support the IWMP recommendation to showcase demonstration projects in the basin with multiple benefits. The proposed headgate automation is one step in working towards meeting existing environmental flow targets of the existing State of Colorado Instream Flow Right on the Bear River.

Implementation and Results

- *Describe the implementation plan for the proposed project. Please include an estimated project schedule showing the proposed work's stages and duration, including major tasks, milestones, and dates.*
- *Proposals with a budget and budget narrative that provide a reasonable explanation of project costs will be prioritized under this criterion.*
- *Describe any permits and agency approvals that will be required, along with the process and timeframe for obtaining such permits or approvals.*
- *Identify and describe any engineering or design work performed specifically in support of the proposed project. What level of engineering design is the project currently? If additional design is required, describe the planned process and timeline for completing the design.*

To date, the project management team comprised of CAA, UYWCD, and its consultants have performed project strategic planning, diversion needs assessment, met with ditch owners and stakeholders such as DWR and the United States Forest Service, performed radio communication range testing, and consulted with irrigation automated control installers and suppliers. These efforts have been conducted to validate project feasibility, develop cost scoping related to equipment and existing diversion structure needs, prioritize improvement timing within overall schedule, and identify project challenges such as access constraints or environmental/cultural clearance hurdles.

Phase 2 of the Project is planned to start Q1 of 2026 and be completed by Q4 of 2026, with testing continuing into 2027, and will consist of:

1. Funding and contracting (Q1 of 2025 to Q1 of 2026)
2. Permitting, cultural and environmental compliance (Q1 to Q3 of 2026)
3. Site evaluation and contractor agreement execution (Q1 to Q3 of 2026)
4. Site prep which will consist of installing headgate and headwall upgrades as needed (Q3 to Q4 of 2026)
5. Installing the trash racks (Q3 to Q4 of 2026)
6. Installing the automation system to each of the listed headgates. (Q4 of 2026)
7. Testing and automation enhancements (Q2 to Q3 of 2027)

The overall project timeline is shown below

Project Task	Q3 24	Q4 24	Q1 25	Q2 25	Q3 25	Q4 25	Q1 26	Q2 26	Q3 26	Q4 26	Q1 27	Q2 27	Q3 27	Q4 27
DWR Installation of Automated Flow Measurement														
Automation Headgate Design														
Base station installation														
Phase 1 Site Prep (install new headgates, headwalls, trashracks)														
Phase 1 installation of automation system on headgates														
Phase 2 Grant Request														
Phase 2 Grant award and contract														
Phase 2 Cultural and environmental compliance														
Phase 2 headgate assessment														
Phase 2 Supplies ordered and accumulated														
Phase 2 Site Prep (install new headgates, headwalls, trashracks)														
Phase 2 installation of automation system on headgates														
Phase 3 Grant Request														
Phase 3 Grant award and contract														
Phase 3 Cultural and environmental compliance														
Phase 3 headgate assessment														
Phase 3 Supplies ordered and accumulated														
Phase 3 Site Prep (install new headgates, headwalls, trashracks)														
Phase 3 installation of automation system on headgates														
	Q3 24	Q4 24	Q1 25	Q2 25	Q3 25	Q4 25	Q1 26	Q2 26	Q3 26	Q4 26	Q1 27	Q2 27	Q3 27	Q4 27

In support of Phase 2 of the Project, a communications base station will be installed as part of phase 1. All design and contracting will be in place for Phase 2 work and is planned for completion by the end of September 2026. CAA and the ditch owners of the five headgates outlined in this application will contract with an automation equipment contractor for installation in fall 2026 with planned operational functionality by the 2027 irrigation season. This will require that all site preparation be completed by October 2026 and automated controls installed by early spring of 2027. The above chart shows the proposed project schedule.

CAA has consulted with a number of equipment suppliers for automated controls during scoping of this project. As a result of those efforts it is estimated that automating a single headgate would cost about $23,000. Since the installation of the automation system is anticipated to occur in the fall of 2026, CAA is estimating an increase in cost of 10%.

CAA, in partnership with the UYWCD, had a communications specialist evaluate the automation system communications needs and design for the project. One communication base station (cellular to spread spectrum radio) will be sufficient for a communication link to all system headgates. For Phase 2 work, a repeater and solar panel mounted to the control house at Yamcolo would be sufficient for radio communication link to the base station. The material and installation cost for that device is expected to be $10,640, which includes 34 hours of consultant support. There will be no ground disturbing activity associated with that installation as it can be mounted to the existing structure.

The proposed Phase 2 automation effort includes establishment of automation on five existing irrigation headgates (see attached photos for visual representation of project scope and ditches proposed for improvement). At all five locations, a communication receiver, solar power battery pack, remote operation electrical motor and associated gear will be installed on the headgate wall to operate the gate screw. Debris racks will be installed in front of each headwall intake in order to prevent damage to the gate and motor that could occur in the event that something interferes with operation of the gate.

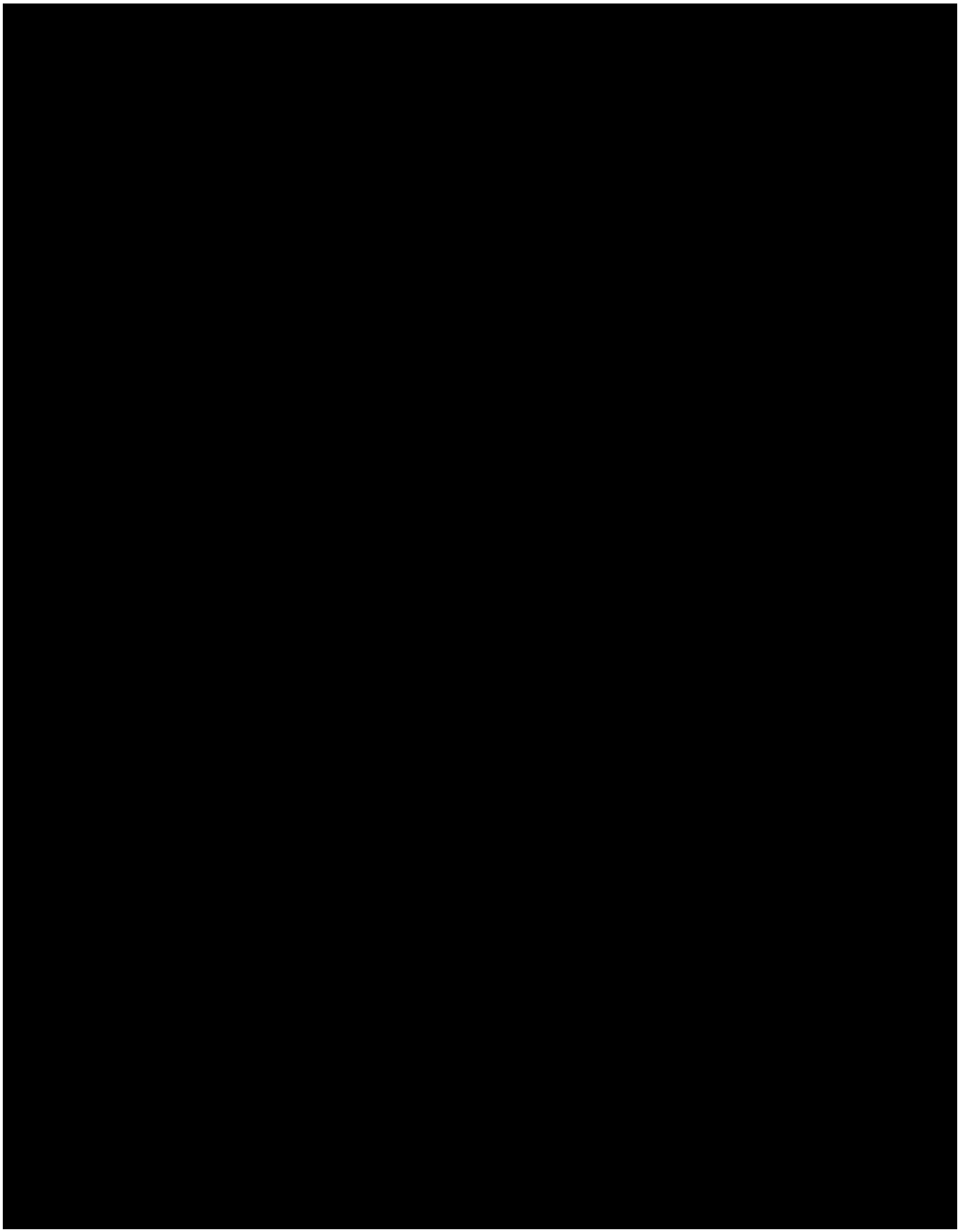
Three of the five headgate wall and pipe structures included in Phase 2 require no modification (Nickell Ditch, Nickel Bypass, and Bird Ditch). At the other two diversions, Coal Creek and Big Mesa, the wall and gate will be replaced prior to installation of the motor in order to achieve proper mount of the operating equipment. In the case of Big Mesa, there are two side-by-side headgates at the point diversion. The project does not propose to modify the in-stream diversion structures. At each location, lowering the headgate pipe elevation will be evaluated. With automated operation and a lower pipe elevation, ditch receiving capacity will be improved. This should alleviate or eliminate the need for more significant, intrusive construction efforts or annual push-up dam construction within the river channel. This approach also considers reducing environmental clearance challenges. Trash racks, other construction materials, and site preparation contracting costs for the automation installation on the five headgates are budgeted at $54,450. These costs are typical costs CAA sees in other agriculture diversion projects. CAA staff support for this project is estimated to cost $6,187, covering staff time, fringe benefits, and travel. CAA will be contracting with an engineering consultant to support this project at an estimated cost of $13,520, covering all project steps, including cultural/environmental assessment. An additional $6000 is budgeted for the cultural/environmental assessment. This brings the total direct cost of the project to $217,297.

Nexus to Reclamation

*Up to **5 points** may be awarded based on the extent that the proposal demonstrates a nexus between the proposed project and a Reclamation project or activity. Describe the nexus between the proposed project and a Reclamation project or activity, including: Is the proposed project connected to a Reclamation project or activity? If so, how? Please consider the following:*

- *Does the applicant have a water service, repayment, or operations and maintenance(O&M) contract with Reclamation?*
- *If the applicant is not a Reclamation contractor, does the applicant receive Reclamationwater through a Reclamation contractor or by any other contractual means?*
- *Will the proposed work benefit a Reclamation Project area or activity?*

This project seeks to improve Colorado Basin water efficiency through the use of technology and irrigation practices.



Budget Narrative

Since this is the project's second phase, which plans to automate the next five priority headgates on the Bear River, much of the cost for this proposal is site prep and installation of the automation on the headgates. Site-prep expenses are estimated at $28,925, which covers materials to update the headgates, $12,925, and labor/contractual expenses at $16,000. Installing automated control equipment is estimated at $25,300 (a 10% increase from the 2023 $23,000 quote) on five headgates for $126,500. The final contract expense for this project will be the installation of trash racks on the headgates to protect the automation system at an estimated cost of $ 25,525. Community Agriculture Alliance will contract with a local engineering consultant to support this project at an estimated $ 13,520 (104 hours at $130 an hour). This engineering contract also includes support for all steps of this project including Cultural/Environmental Assessment. A $6000 Cultural/Environmental Assessment contractor is also included in the overall project budget. The budget also included $10,640 for 34 hours for the communication engineer and supplies to add the repeater and solar panel at Yamcolo Reservoir. Community Agriculture Alliance has estimated staff expenses of $6,187 for salary, fringe benefits, and travel expenses. The total direct cost of this project is estimated to be $ 217,297. With De minimis of $32596 the total project cost is $249,893.

CAA is seeking $116,297 from the Small Scale WaterSMART grant ($100,000 will be used to automate four headgates) and will cover $133,595 in matching funds through the State of Colorado water grants.

Environmental and Cultural Resources Compliance

The Project will automate existing agricultural headgates on the Bear River. The UYWCD uses the Bear River to deliver contracted water to agricultural producers. The UYWCD reservoir is in Routt National Forest, with all but two of the headgates located on private land. Phase 2 will automate five headgates, including the “Big Mesa” and “Coal Creek” located on public land. The“Big Mesa” and “Coal Creek” headgate is situated on Routt National Forest Service Land, and automation will require support from the Yampa Ranger District.

The region has been producing agricultural water for over 140 years, with the earliest appropriate date on agricultural water use being 1883. All headgates have been updated in the past 40 years, and we expect minimal work on the headgates and headwalls. The biggest impact will be transporting the system to each headgate. All staging will be conducted on agricultural producers' property/homesteads. We understand that wetland permitting will be exempt since this is an upgrade to an agricultural structure. That said, CAA and its engineering consultant will coordinate with ACOE regulators in order to provide notice and address any standard conditions deemed necessary. Considering that improvements will be contained within the existing disturbance and structure footprints, and that installation requirements are nominal, impacts to the natural environment will be minimal. These sites are not listed on the National Historic Register, nor would they affect any tribal lands, but SHPO will be consulted through the BOR standard notification process for Small Scale WaterSMART grant projects.

Overlap or Duplication of Effort Statement

This is the project's second phase, which will automate the next five priority headgates as determined by water user stakeholder engagement by CAA and consultation with DWR and UYWCD. The long-term goal is to phase in additional headgates until at least sixteen of the twenty headgates are automated. Since CAA is a 503C non-profit organization, CAA will look for additional funding through the State of Colorado Water Conservation Board, The Colorado River District, and other local funding sources. The funding cycles of these organizations will allow for secured funding by July 2025.

Matching grants CAA will procure for this project:

> Colorado Water Conservation Board (Water Plan Grant), July 2025, with an award in Janurary 2026.
>
> If needed CAA will look for additional funding sources from local funding sources and ditch owners.

Conflict of Interest Disclosure Statement

Community Agriculture Alliance, as a 503C non-profit, will follow all conflicts of interest regulations and, as the fiscal agent for this project, does not see or anticipate any conflicts of interest.

Category A Letter of Support

UPPER YAMPA WATER
—CONSERVANCY DISTRICT—

January 14, 2025

Attn: Nickie McCann
Bureau of Reclamation
Water Resources and Planning Office
Mail Code: 86-63000
P. O. Box 25007
Denver, CO 80225-0007

RE: Category A Applicant Partner with Community Agricultural Alliance WaterSMART Small Scale Water Efficiency Project Grant Application

Dear Nickie McCann:

The Upper Yampa Water Conservancy District (UYWCD) is supporting the Community Agricultural Alliance (CAA) WaterSMART Small Scale Water Efficiency Project Grant Application as the Category A Partner for the Automation of Agriculture Diversion on the Bear River project. As the project Category A Partner, the UYWCD will act in partnership with the CAA by providing guidance and feedback for the project in the form of In-Kind UYWCD staff time contributions. The UYWCD agrees to the application submittal and the content of the application.

The UYWCD is a conservancy district that was formed in March 1966 through the State of Colorado Water Conservancy Act. The UYWCD owns and operates Yamcolo Reservoir, near the headwaters of the Bear River, and makes water storage deliveries from this reservoir throughout the irrigation season to its contract holders, primarily for agricultural irrigation. Automating agricultural infrastructure in this river corridor will reduce delivery losses throughout the whole system, improve collaboration between water users, and will help with water delivery efficiency and effectiveness. All water users will benefit from automating agricultural infrastructure on the Bear River, including UYWCD.

The installation of the water use efficiency infrastructure on the Bear River, in Northwest Colorado, proposed in this project aligns with the UYWCD mission to enhance the water resources sustainability of the Yampa River Basin. The UYWCD looks forward to working with the CAA on this important initiative to advance agricultural water management practices on the Bear River reach of the Yampa River system.

Sincerely,

Andy Rossi
General Manager
Upper Yampa Water Conservancy District
P.O. Box 775529
Steamboat Springs, CO 80477
arossi@upperyampawater.com
970-871-1035

Mailing Address
P.O. Box 775529
Steamboat Springs, CO 80477-5529

Location
2220 Curve Plaza, Suite 201
Steamboat Springs, CO 80487

Telephone
(970) 871-1035
Fax (888) 519-3464

Appendix:

Project Map:

Phase 2 Example photos of automation gear installation on irrigation headgates

Gate Control

Manual Control Panel `

Control Module

Phase 2 headgates

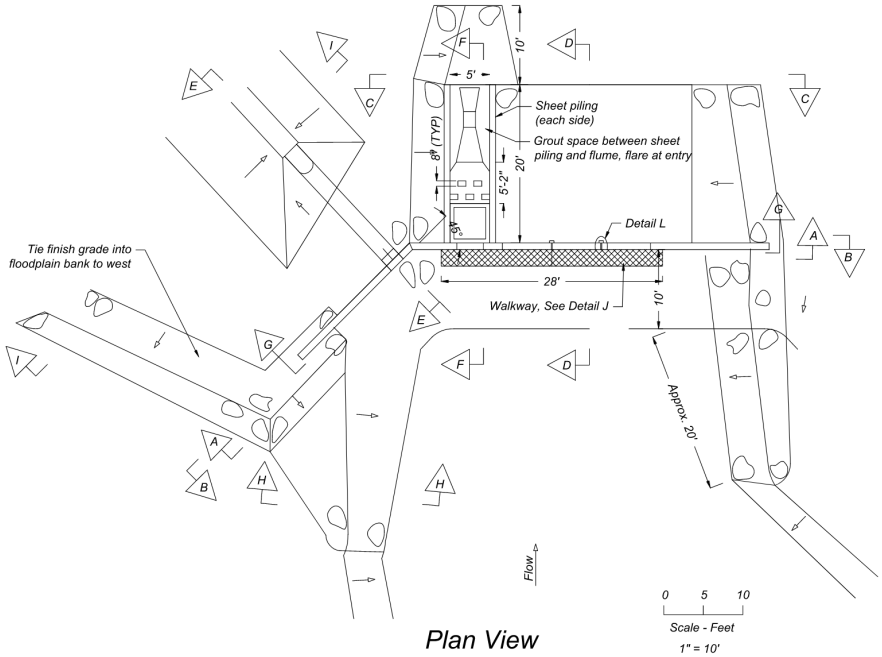
Big Mesa Ditch

Coal Creek Ditch

Bird Ditch

Nickell Ditch (diversion structure to be complete in 2025)

* Includes two headgates (one serves the ditch, second serves the instream flow bypass), project funded by Colorado Water Conservation Board, Colorado River District, Upper Yampa Water Conservancy District)



Plan View

UPPER YAMPA WATER
CONSERVANCY DISTRICT

January 14, 2025

Attn: Nickie McCann
Bureau of Reclamation
Water Resources and Planning Office
Mail Code: 86-63000
P. O. Box 25007
Denver, CO 80225-0007

RE: Category A Applicant Partner with Community Agricultural Alliance WaterSMART Small Scale Water Efficiency Project Grant Application

Dear Nickie McCann:

The Upper Yampa Water Conservancy District (UYWCD) is supporting the Community Agricultural Alliance (CAA) WaterSMART Small Scale Water Efficiency Project Grant Application as the Category A Partner for the Automation of Agriculture Diversion on the Bear River project. As the project Category A Partner, the UYWCD will act in partnership with the CAA by providing guidance and feedback for the project in the form of In-Kind UYWCD staff time contributions. The UYWCD agrees to the application submittal and the content of the application.

The UYWCD is a conservancy district that was formed in March 1966 through the State of Colorado Water Conservancy Act. The UYWCD owns and operates Yamcolo Reservoir, near the headwaters of the Bear River, and makes water storage deliveries from this reservoir throughout the irrigation season to its contract holders, primarily for agricultural irrigation. Automating agricultural infrastructure in this river corridor will reduce delivery losses throughout the whole system, improve collaboration between water users, and will help with water delivery efficiency and effectiveness. All water users will benefit from automating agricultural infrastructure on the Bear River, including UYWCD.

The installation of the water use efficiency infrastructure on the Bear River, in Northwest Colorado, proposed in this project aligns with the UYWCD mission to enhance the water resources sustainability of the Yampa River Basin. The UYWCD looks forward to working with the CAA on this important initiative to advance agricultural water management practices on the Bear River reach of the Yampa River system.

Sincerely,

Andy Rossi
General Manager
Upper Yampa Water Conservancy District
P.O. Box 775529
Steamboat Springs, CO 80477
arossi@upperyampawater.com
970-871-1035