# **WaterSMART**

## WATER AND ENERGY EFFICIENCY GRANTS FOR FY 2024

## NO. R24AS00052 FUNDING GROUP II

# 2024 WATER CONTROL & METERING PROJECT UINTAH WATER CONSERVANCY DISTRICT

#### **COLLABORATING WITH:**

WHITEROCKS IRRIGATION COMPANY

MOSBY IRRIGATION COMPANY

J BAR J LATERAL OF ASHLEY CENTRAL IRRIGATION COMPANY

#### **UINTAH COUNTY, UTAH**

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**FEBRUARY 22, 2024** 

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#### 1. TECHNICAL PROPOSAL

#### 1.1. EXECUTIVE SUMMARY

*The executive summary should include:* 

Date: February 22, 2024

Applicant: Uintah Water Conservancy District on behalf of the Whiterocks Irrigation Company, Mosby

Irrigation Company, and J Bar J Lateral of the Ashley Central Irrigation Company

City, County, State: Lapoint & Vernal/Maeser, Uintah, Utah

Applicant Category: A

**Project Summary:** 

This project is a collaboration of three projects with canal companies or laterals that are grouping together for purposes of funding paperwork and assistance through the UWCD. The three components are as follows:

#### Whiterocks Diversion Structure Rehabilitation Project

The Whiterocks Diversion Structure Rehabilitation Project is located approximately 1.5 miles northeast of Whiterocks, Utah. This project will consist of reconstructing an existing diversion structure located on the Whiterocks River owned and operated by the Whiterocks Irrigation Company (WIC). This structure is an important piece of infrastructure for WIC and Tridell-Lapoint Water Improvement District. The primary purpose of the structure is to divert water for irrigation as well as water for the Tridell Water Treatment plant that is located 3.5 miles East of the diversion. The Whiterocks diversion delivers water year-round to the water treatment plant, it also delivers water to M&S reservoir and Lapoint Reservoir. These reservoirs are used to store water for the irrigation season. WIC delivers water to approximately 205 shareholders irrigating approximately, 6,700 acres, as well as 516 culinary water connections through the Tridell-Lapoint Water Improvement District (TLWID).

The project will completely replace and upgrade an existing diversion that is rapidly deteriorating and leaking, some sections of the headwalls are down to the rebar holding everything together. The river commissioner for the area has major concerns about the structure and anticipates that the structure could fail if there is a good runoff year. The structure has major leaks which makes it difficult to deliver a consistent amount of water as flows in the river increase. The current gates are outdated and unable to operate efficiently to respond to fluctuating river diurnal flow patterns. Pictures of the structure can be found in Appendix C.

#### Red Wash Feeder Canal Rehabilitation Project

The Mosby Irrigation Company owns and operates the Red Wash Reservoir which serves approximately 1130 acres of irrigation land. An open channel canal intercepts Deep Creek and takes water across a rocky hillside to the Red Wash Reservoir. Portions of the canal nearest the reservoir have been piped with HDPE pipe but there remains approximately 4,750 feet canal that is not piped. This segment has a high seepage rate and also leaks have been observed with high risk potential to wash out the downhill side of the canal banks. It is proposed that this segment is piped with 42-inch HDPE pipe and an upgraded screen structure and pipe intake structure be constructed at the diversion point. This project is anticipated to conserve up to 725 acre-feet of water annually, allowing Mosby to better manage the water they divert and have a measured amount going into their reservoir.

#### J Bar J Lateral Metering Project

The J Bar J Lateral metering project is a combination of residential and agricultural water meters being proposed on an existing pipeline coming from the Ashley Central Canal that has experienced water use abuse and shortages. Both larger users and small lawn and garden connections have the potential to over-water and without metering it is difficult to enforce or have accountability for the ditchrider to manage the flows and conserve water further into the irrigation season. This project is tied to the Steinaker Reservoir system that Reclamation and UWCD are managing. It is estimated that this project will save up to 963 acre-feet annually.

• Please indicate whether you are a Category A applicant or Category B applicant.

The applicant is a category A applicant.

• A one-paragraph project summary that provides the location of the project, a brief description of the work that will be carried out, any partners involved, expected benefits, and how those benefits relate to the water management issues you plan to address. Note: This information will be used to create a summary of your project for our website if the project is selected for funding.

This project is a trifecta of collaboration with three separate irrigation companies within the boundaries of the UWCD in Northeastern Utah, Uintah Basin. Each project has their own benefits and water saving potential and have worked together in the past to create efficiencies in funding and water use. The Whiterocks Diversion Structure project will upgrade and automate a river diversion that is critical for both agriculture and a rural community's culinary water treatment plant. The Mosby Red Wash Feeder Canal Rehabilitation will enclose nearly a mile of open channel canal on a rocky hillside with high seepage rates, serving their important storage reservoir and increasing the safety and reliability of their system. The J Bar J Lateral Metering project will create accountability and encourage water conservation for a group of water users on the Ashley Central Canal with an existing pipeline but no metering. This project will precede a future canal piping project for the main canal which will further conserve water and establish a better accounting system for this critical resource in the Ashley Valley. These projects together will save approximately 3,288 acre feet annually.

• State the length of time and estimated completion date for the proposed project (month/year).

December 31, 2025 (Approximately 2 years, if not completed sooner)

• Whether or not the proposed project is located on a Federal facility.

The project is not on a federal facility, although the J Bar J receives water directly from Steinaker Reservoir, a Reclamation facility managed by UWCD.

#### 1.2. PROJECT LOCATION

Provide specific information on the geographic location of the proposed planning area (e.g., watershed, basin, county) or location of the project being designed, including a map showing the geographic location. For example, [project name] is located in [county and state] approximately [distance] miles [direction, e.g., northeast] of [nearest town]. The project latitude is {##"#" and longitude is {###" "#" and longitude is {###" "#" and longitude is {##" "#" and longitude is {##" "#" and longitude is {###" "#" and longitude is {##" and longitude i

The Whiterocks Diversion Structure Rehabilitation project is in the Uintah Basin located 1.5 Miles northeast of Whiterocks, Utah in Uintah County. The project latitude and longitude is 40.490267°, - 109.912243°. A map of the project can be found in Appendix C.

The Red Wash Feeder Canal Rehabilitation project is in the Uintah Basin located north of Lapoint, Utah in Uintah County. The project latitude and longitude is 40.43273°, -109.77913°. A map of the project can be found in Appendix C.

The J Bar J Lateral Metering project is in the Ashley Valley located north of Vernal and East of Maeser, Utah in Uintah County. The project latitude and longitude is 40.47490°, -109.56704°. A map of the project can also be found in Appendix C.

#### 1.3. PROJECT DESCRIPTION

Provide a more comprehensive description of the technical aspects of your project, including the work to be accomplished and the approach to complete the work. This description should provide detailed information about the project including materials and equipment and the work to be conducted to complete the project. This section provides an opportunity for the applicant to provide a clear description of the technical nature of the project and to address any aspect of the project that reviewers may need additional information to understand.

Whiterocks Diversion Structure Rehabilitation Project

This Whiterocks Diversion project has been in the preliminary design stage for several years. Some major surveys have already been complete. A Ute Ladies Tresses (ULT) survey has already been completed and found that there was no ULT in the project boundaries. A wetland delineation has also been completed. Whiterocks Irrigation Company has also applied for partial funding through the UDAF's

Water optimization grant program, and a funding award has been obtained. UDAF will perform the necessary cultural survey for the project. It is also anticipated that this project will be a CATEX, due to the structure being replaced at the existing location. The last permit that will be required for the project is a stream alteration permit. After a final design is reached, a stream alteration permit will be applied for.

If funding for the project is procured, it is anticipated that a final design will commence shortly thereafter. A preliminary design has been developed and it is expected that the final design would be similar to the preliminary design. A preliminary design can be found in Appendix C of this document.

The proposed project will include the following elements:

- Preliminary design and hydraulic analysis of diversion structure
- Analysis and selection of most cost-effective site for construction (upstream structure)
- Environmental surveys for Ute-Ladies Tresses (Completed), Biological Assessment, Wetland Delineation (completed), cultural surveys, and other necessary NEPA work.
- Design of Structures, Flow Control, Flow Measurement, and Telemetry/ Automation
- Contractor selection and contracting
- Construction of project, dewatering, concrete construction, flow control gates installed, telemetry and automation of gates, power installation (solar), commissioning of all project elements.
- Erosion control and streambank stabilization, pole plantings and site restoration
- Access road restoration and improvements and existing structure demolition and stabilization included in project
- Monitoring of improvements and assessment of project goals and water conservation measures

The following list of objectives for the project include:

- Identify and tackle hurdles early on in the project (ROW, ULT, Funding)
- Install automated flow control gates in river and service channel
- Improve the river system's ability to pass flood stage flows, and consistent water delivery
- Stabilize channel and allow cobble to pass through structure without damages
- Increase efficiency in water deliveries to irrigators and storage
- Increase accuracy and timeliness of water deliveries through telemetry and existing flume
- Reduce required maintenance and operation costs for WIC and partners

#### Red Wash Feeder Canal Rehabilitation Project

The Mosby project will include expanding upon the preliminary design to solidify the pipe sizing requirements and establish the diversion and screen structure detailed design. Some major NEPA surveys have already been complete. A Ute Ladies Tresses (ULT) survey has already been completed and found that there was no ULT near the disturbance areas, but some habitat was found in the project boundaries. A wetland delineation has also been completed. MIC has also been awarded partial funding

through the UDAF's Water optimization grant program. UDAF will perform the necessary cultural survey for this project as well.

The proposed project will include the following elements:

- Preliminary design and hydraulic analysis of pipeline, flow measurement devices, and telemetry.
- Analysis and selection of most cost-effective and available materials and supplies.
- Environmental surveys for Ute-Ladies Tresses, Wetland Delineation, cultural surveys, and other necessary NEPA work. (2 of 3 completed already)
- Design of pipeline and diversion, flow control, flow measurement, and telemetry.
- Contractor selection and contracting.
- Access road restoration and improvements.
- Construction of projects: dewatering, pipeline construction, concrete forming construction, flow measurement meters, telemetry, power installation (likely solar), erosion control, stabilization, site restoration, commissioning of project elements.
- Monitoring of improvements and assessment of project goals and water conservation measures.

The list of objectives for the project include:

- Install pipeline along hillside, eliminating seepage loss and risk of losing canal.
- Increase efficiency in water deliveries to irrigators and storage in Red Wash.
- Increase accuracy and timeliness of water deliveries through telemetry and meters.
- Reduce required maintenance and operation costs for the irrigation companies.
- Reduce conflict from shareholders, ditch companies, Tribal users through accurate measurement and increased accountability.

#### J Bar J Lateral Metering Project

The J Bar J Lateral metering project has received some funding from the Secondary Metering program and a loan from the Board of Water Resources that will cover the smaller meters on their system. The project will include establishing turnout and proposed meter locations, specifying a meter for the usage and water flow rates, and a contractor will be secured to install the meter on existing piping. This project has specific goals to increase the accountability and accuracy of their water usage and the ability to track small and large users, some of which have either not been getting the water they are due or taken advantage of their position in the pipeline and pressure situations. The proposed meters will have real-time capability for reading and a future connection for the Ashley Central Irrigation Company's larger project will be planned for such that remote reading and tracking can be done for both the company, the lateral, and the individual user.

#### 1.4. EVALUATION CRITERIA

#### 1.4.1. EVALUATION CRITERION A – QUANTIFIABLE WATER SAVINGS (25 POINTS)

All applicants should be sure to:

1) Describe the amount of estimated water savings. For projects that conserve water, please state the estimated amount of water expected to be conserved (in acre-feet per year) as a direct result of this project. Please include a specific quantifiable water savings estimate; do not include a range of potential water savings.

Whiterocks: Operational losses have been determined through records and observations from the river commission and irrigation company staff. Losses due to high runoff (diurnal patters of flow in the river) being spilled down canals are estimated to be 1,600 acre-feet annually. Please refer to the attached water loss calculations in the Appendices.

Mosby: Losses are primarily due to seepage and leaks in the rocky porous hillside material that the canal is carved into. There have also been operational losses or breaks due to high flows coming down Deep Creek and overtopping the canal banks. These volumes are not measurable but have occurred during the life of the project and more recently.

J Bar J: Water savings in the metering project will come due to the new means for accountability that the users and the ditchrider will have. A study through the Weber Basin Water Conservancy District that savings of 20 to 29% can be realized between no meter to having a meter and knowing the usage. Water savings were calculated based on a conservative number and rate of flow for the users on the J Bar J pipeline.

- 2) Describe current losses. Please explain where the water that will be conserved is currently going and how it is being used. Consider the following:
  - Explain where current losses are going (e.g., back to the stream, spilled at the end of the ditch, seeping into the ground)?

Whiterocks: Losses are currently being stored by M&S and Lapoint Reservoir and a portion is additionally lost in seepage in the open channel canal in transit. Over a long period of time those reservoirs can only store some of that water eventually it is lost in the system. Water could remain in the Whiterocks River for other beneficial uses downstream.

Mosby: Current losses are lost into the ground and come back into the Deep Creek drainage, likely with higher concentrations of sediment and salinity, due to the surrounding soils.

J Bar J: Losses in this system are taken by water users either not knowing or purposefully watering more than they are allotted, and for longer in the season. Ditchrider suspects there are multiple users who are using a substantial amount of water above the allocation but without any metering to prove and correct the abuse.

• If known, please explain how current losses are being used. For example, are current losses returning to the system for use by others? Are current losses entering an impaired groundwater table becoming unsuitable for future use?

Whiterocks/Mosby: Losses are being realized at the structures, along the canal through seepage, and a remainder is temporarily stored by the reservoir, but eventually the water leaves the reservoir through the irrigation piping system and is lost in open channels and other reservoirs. These water losses can have positive impacts on aquatic and riparian habitats downstream, providing additional habitat for fish, plants and other wildlife.

J Bar J: Losses are being used by water users in excess of their allotment. Water is going into the ground and the Ashley Creek drainage, especially overwatered fields with flood irrigation.

• Are there any known benefits associated with where the current losses are going? For example, is seepage water providing additional habitat for fish or animal species?

These water losses can have positive impacts on aquatic and riparian habitats downstream, providing additional habitat for fish, plants and other wildlife. Whiterocks and Mosby have an agreement with the Salinity Program to maintain habitat with some of their regular water right flows, so this is being double covered and would not significantly impact the habitat outside normal operations. The Whiterocks, Deep Creek, and Uinta River systems have periods of very low flows and any additional water that can remain in the natural system is more beneficial to wildlife, the Ute Tribe, and downstream users. J Bar J may have higher crop yield as a benefit but at the cost of other water users as the reservoir eventually gets drained and those abusing the water use have taken advantage.

3) Describe the support/documentation of estimated water savings. Please provide sufficient detail supporting how the estimate was determined, including all supporting calculations.

Whiterocks: The supporting documentation for this project comes from the flow measurement flume on the downstream side of the diversion. Data was taken from the 2020 year since it was a typical irrigation season. Data for the Whiterocks Diversion was assessed during high water (from May 1<sup>st</sup> to June 20<sup>th</sup>) On average 97 acre-feet of water was diverted per day during that period with the peak daily diversion average being 200 cfs or 400 acre-feet per day. The average daily diversion was also assessed for non-high-water conditions which are from June 1<sup>st</sup> to October. This resulted in a average diversion of 65 acre-feet per day. Assuming that better control of the structure will reduce diversion during high water by 32 acre feet per day, over a 50 day period it was estimated that 1,600 acre-feet of water could be saved or 13% of the total amount of water diverted could be save.

Additionally, water savings were calculated for the off season by taking the average diversion during that period and taking the times where flows exceeded that average and calculating a total volume of "over delivery". An average of 5 years of data yielded that 300 acre-feet of water could be saved if the diversion could consistently divert the same amount of water that is needed for winter flows and for the culinary water use. The 300 acre-feet of water was not included in the total estimated water savings for the project, but is included here for informational purposes.

Mosby: Calculations based on seepage rates seen in the area with the previous Salinity projects in both Whiterocks and Mosby's lower canals and the surrounding soils. The Ditchrider has also explained the observed losses and leakage. These rates were taken into account and calculated across the irrigation and storage flow seasons.

J Bar J: Supporting documentation with another similar situation in Utah can be found here: <a href="https://www.standard.net/news/environment/2022/aug/15/weber-basin-study-secondary-water-meters-drive-down-consumption/">https://www.standard.net/news/environment/2022/aug/15/weber-basin-study-secondary-water-meters-drive-down-consumption/</a>

This is also a quantity that is supported by the Ditchrider and also the Board of Water Resources and their secondary water target program for water conservation. Personal experience of the project manager as well with his own irrigation system moving to meters and a reporting system such that all users could see what each user had consumed for some peer accountability and transparency in the water usage.

- 4) Please address the following questions according to the type of infrastructure improvement you are proposing for funding.
  - (1) **Canal Lining/Piping**: Canal lining/piping projects can provide water savings when irrigation delivery systems experience significant losses due to canal seepage. Applicants proposing lining/piping projects should address:
    - a) How has the estimated average annual water savings that will result from the project been determined? Please provide all relevant calculations, assumptions, and supporting data.
    - b) How have average annual canal seepage losses been determined? Have ponding and/or inflow/outflow tests been conducted to determine seepage rates under varying conditions? If so, please provide detailed descriptions of testing methods and all results. If not, please provide an explanation of the method(s) used to calculate seepage losses. All estimates should be supported with multiple sets of data/measurements from representative sections of canals.
    - c) What are the expected post-project seepage/leakage losses and how were these estimates determined (e.g., can data specific to the type of material being used in the project be provided)?
    - *d)* What are the anticipated annual transit loss reductions in terms of acre-feet per mile for the overall project and for each section of canal included in the project?
    - e) How will actual canal loss seepage reductions be verified?
    - f) Include a detailed description of the materials being used.

The Mosby project is a piping project and the average annual water savings was estimated first by ditch riders and irrigation company personnel. The flows in the canal are measured using an aging flume and also observed entering the existing pipeline that empties into the Red Wash Reservoir. Knowing the flows, the irrigation company personnel estimated the losses due to seepage and leaks based off a percentage of the flows. In order to verify these estimations, a soil seepage study was performed. Reference question 3 for a detailed explanation of the seepage study. The seepage study took the wetted perimeter of each canal, multiplied it by the length to find the seepage area, and then used the seepage rate of the soils to determine the seepage losses that were being experienced.

The seepage study that was performed assumes that there is a constant flow throughout the length of the canal. To account for this assumption, the seepage area is halved if there is no flow at the end of the canal. The average of the wetted perimeter at the start and end of the canal is used to calculate the seepage area when there is a given flow at the end of the canal. Running the calculations this way allows for a conservative approach. The final numbers for losses in the canals that were determined is a total of 725 acre-feet per year.

The Red Wash Feeder Canal will be fully enclosed, piped with HDPE. The seepage or leakage losses post-project are expected to be 0 acre-feet per year for this treatment. The actual canal seepage calculations will be verified using post-project measurements.

- (2) **Municipal Metering**: The residential or smaller ag users may be considered municipal, but since it is still secondary water, this won't apply to J Bar J, see flow measurement below.
- (3) Irrigation Flow Measurement: Irrigation flow measurement improvements can provide water savings when improved measurement accuracy results in reduced spills and overdeliveries to irrigators. Applicants proposing municipal metering projects should address:
  - a) How have average annual water savings estimates been determined? Please provide all relevant calculations, assumptions, and supporting data.

Whiterocks: Data was taken from the 2020 year since it was a typical irrigation season. Data for the Whiterocks Diversion was assessed during high water (from May 1<sup>st</sup> to June 20<sup>th</sup>) On average 97 acrefeet of water was diverted per day during that period with the peak daily diversion average being 200 cfs or 400 acre-feet per day. The average daily diversion was also assessed for non-high-water conditions which are from June 1<sup>st</sup> to October. This resulted in a average diversion of 65 acre-feet per day. Assuming that better control of the structure will reduce diversion during high water by 32 acre feet per day, over a 50 day period it was estimated that 1,600 acre-feet of water could be saved or 13% of the total amount of water diverted could be saved.

J Bar J: Water savings in the metering project will come due to the new means for accountability that the users and the ditchrider will have. A study through the Weber Basin Water Conservancy District that savings of 20 to 29% can be realized between no meter to having a meter and knowing the usage. Water savings were calculated based on a conservative number and rate of flow for the users on the J Bar J pipeline.

b) Have current operational losses been determined? If water savings are based on a reduction of spills, please provide support for the amount of water currently being lost to spills.

Whiterocks: Operational losses have been determined through records and observations from the river commission and irrigation company staff. Losses due to high runoff (diurnal patters of flow in the river) being spilled down canals are estimated to be 1,600 acre-feet annually. Please refer to the attached water loss calculations in the Appendices.

c) Are flows currently measured at proposed sites and if so, what is the accuracy of existing devices? How has the existing measurement accuracy been established?

Whiterocks: Yes, flows are measured using a 10-foot flume, flumes like this typically have an accuracy of 2-5%. Accuracy has been established by using a custom flume discharge table that is specific to this structure. This project will also include the calibration of that flume.

Mosby: An existing flume at the head of the canal has been utilized, but it does not have great accuracy or telemetry.

J Bar J: Only a meter at the head of the lateral has been established by the Company and some newer smaller users have installed meters, but the majority only have their irrigation nozzle sizes to estimate flows, which means accuracy could be worst than 10-20%.

*d)* Provide detailed descriptions of all proposed flow measurement devices, including accuracy and the basis for the accuracy.

For both Whiterocks and Mosby the flow measurement device inside of a new stilling well will probably be upgraded to a vega water level these level sensors have an accuracy of 1 mm. Measurements of the existing flume would be taken, and those measurements could be taken into WinFlume and a new discharge table could be created and implemented if there is a significant difference between the existing discharge table and the new one. Alternatively, Jones & DeMille Engineering has the ability to take flow measurements of rivers and streams, and can verify the accuracy of the measurement devices.

e) Will annual farm delivery volumes be reduced by more efficient and timely deliveries? If so, how has this reduction been estimated?

Water diverted for the WIC system from the Whiterocks River will be more consistent with the proposed structures such that the net benefit will be realized in the entire river system. For J Bar J, the farm delivery volumes will be metered and tracked such that efficiency in irrigation practices is rewarded and wheelines are moved in a timely manner or flood streams paid attention to in more detail.

*f)* How will actual water savings be verified upon completion of the project?

Using existing structure and gates to estimate flow rates and deliveries, records will be compared to new data gathered by the proposed structure, meters, or pipeline and SCADA systems to document water deliveries and pass-through flows. Reports will be generated for a comparison and shared with those interested as well as posted online for Mosby & Whiterocks in a manner similar to and in conjunction with the Duchesne River system website: <a href="http://www.duchesneriver.org/">http://www.duchesneriver.org/</a>

For J Bar J, a system is being investigated for the office of the Ashley Central Irrigation Company to be able to tie future mainline piping projects into a company-wide system and not just a SCADA system for one lateral (the J Bar J for example) but meters will be capable to hook into a compatible system.

(4) *Turf Removal*: Not applicable to this project.

- (5) Smart Irrigation Controllers, Controllers with Rain Sensor Shutoff, Drip Irrigation, and High-Efficiency Nozzles: Not applicable to this project.
- (6) High-Efficiency Indoor Appliances and Fixtures: Not applicable to this project
- (7) *Commercial Cooling Systems*: Not applicable to this project.

#### 1.4.2. EVALUATION CRITERION B - RENEWABLE ENERGY (20 POINTS)

# 1.4.2.1. SUBCRITERION B.1 – IMPLEMENTING RENEWABLE ENERGY PROJECTS RELATED TO WATER MANAGEMENT AND DELIVERY

**Describe the amount of energy capacity**. For projects that implement renewable energy systems, state the estimated amount of capacity (in kilowatts) of the system. Please provide sufficient detail supporting the stated estimate, including all calculations in support of the estimate.

The renewable energy systems included in this project include solar panels for level sensors and data loggers and the gate actuators. A typical panel that WIC and MIC would utilize should have an average capacity of 200-300 watts. J Bar J may opt for internal long-life batteries on smaller meters and a small-scale solar panel for larger meters, but this will be finalized during design.

**Describe the amount of energy generated.** For projects that implement renewable energy systems, state the estimated amount of energy that the system will generate (in kilowatt hours per year). Please provide sufficient detail supporting the stated estimate, including all calculations in support of the estimate. Please explain how the power generated as a result of this project will be used, including any existing or planned agreements and infrastructure.

The power used in this project will be minor, with enough energy to operate a level sensor and connect existing SCADA to other points of the system. It will supplement the data already being sent with a level of the stilling well so that a ditchrider can see the status of the flow. This project and the telemetry that will be tied into will reduce the required amount of travel and time to the diversion for maintenance and adjustments.

#### Describe the status of a mothballed hydropower plant.

Not Applicable to this project.

**Describe any other benefits of the renewable energy project**. Please describe and provide sufficient detail on any additional benefits expected to result from the renewable energy project, including:

• How the system will combat/offset the impacts of climate change, including an expected reduction in greenhouse gas emissions

Less physical travel for adjustments to the headgates/turnouts or for maintenance will reduce vehicle usage and therefore reduce greenhouse gas emissions. The River Commissioner has to visit the Whiterocks site at least twice a day during high runoff to adjust the gates to avoid over deliveries or shortages. Mosby is also a river commissioner's nightmare and several closed and locked gates have to

be travelled through to access. J Bar J is also going to see benefits with remote reading capable meters so that physically opening meter boxes is not required.

• Expected environmental benefits of the renewable energy system. 39 Notice of Funding Opportunity No. R24AS00052

Not applicable to this project.

• Any expected reduction in the use of energy currently supplied through a Reclamation project.

Not applicable to this project

• Anticipated benefits to other sectors/entities.

The Whiterocks project will benefit Tridell-Lapoint Water Improvement District as well as other irrigation users on the Whiterocks River as well as the Uinta River. The Mosby project will also benefit similar downstream users, while the J Bar J project will benefit Ashley Creek and Steinaker Reservoir users by conservation of water due to metering.

Expected water needs, if any, of the system.

No additional water is needed for the project, it will conserve water in the systems as a whole.

#### AND/OR

#### 1.4.2.2. SUBCRITERION B.2 – INCREASING ENERGY EFFICIENCY IN WATER MANAGEMENT

Describe any energy efficiencies that are expected to result from implementation of the water conservation or water efficiency project (e.g., reduced pumping).

• If quantifiable energy savings is expected to result from the project, please provide sufficient details and supporting calculations. If quantifying energy savings, please state the estimated amount in kilowatt hours per year.

The WIC and MIC water delivery system on the upper end is designed so that water is delivered through open channel systems, which requires almost no energy to operate. Lapoint, Red Wash, and M&S reservoirs all utilize pressurized irrigation systems to deliver water. The system will benefit from more efficient diversion structure and reducing losses at the headgate due to leaks. The J Bar J is already piped so it doesn't have the same pumping or seepage reduction efficiencies.

• How will the energy efficiency improvement combat/offset the impacts of climate change, including an expected reduction in greenhouse gas emissions.

This project group and the telemetry that will be tied into it will reduce the required amount of travel and time spent to adjust diversions, check meters, and maintain open channel canals, and most importantly, adjusting and troubleshooting on-farm and canal fluctuations as a result of the current system setup;

• If the project will result in reduced pumping, please describe the current pumping requirements and the types of pumps (e.g., size) currently being used. How would the proposed project impact the current pumping requirements and energy usage?

This project won't reduce or increase pumping costs. It is anticipated that they will remain the same.

• Please indicate whether your energy savings estimate originates from the point of diversion, or whether the estimate is based upon an alternate site of origin.

Energy savings due to the reduction in driving originates at the point of diversion (Whiterocks River, Deep Creek, or the Ashley Central Canal).

• Does the calculation include any energy required to treat the water, if applicable?

Energy savings do not include energy required to treat the water. Although Tridell-Lapoint Water Improvement District will see benefits of the Whiterocks structure due to a more consistent and predictable supply to the treatment plant. Stable flow conditions facilitate more efficient treatment processes and reduce the risk of sudden influxes of sediment or contaminants that can overwhelm the systems. The new structure will also reduce debris and other contaminants entering the treatment plant which increases the overall quality of the water and increases water treatment efficiency.

• Will the project result in reduced vehicle miles driven, in turn reducing greenhouse gas emissions? Please provide supporting details and calculations.

A reduction in vehicle miles driven is anticipated but has not been calculated at this time. As described above, the river commissioners and ditchriders have the greatest potential for a reduction in fuel and emissions due to time and equipment that is taken keeping the flows regulated with a fluctuating source. This may be an item that is easier to calculate or realize after the project is complete.

• Describe any renewable energy components that will result in minimal energy savings/production (e.g., installing small-scale solar as part of a SCADA system).

The proposed Whiterocks structure improvements will utilize small-scale solar for a level sensor to tie into the SCADA system for the Uinta River Commissioner and <a href="https://www.duchesneriver.org">www.duchesneriver.org</a>. The new structure and automated gates will utilize solar panels, batteries, the solar panels typically used in the area are 200 to 300 watts depending on equipment energy consumption. Mosby and J Bar J are likely to only have one or two instances were solar panels can be installed, unless each user on J Bar J is needing more power than the batter powered meters need.

#### 1.4.3. EVALUATION CRITERION C - OTHER PROJECT BENEFITS (15 POINTS)

**Resilience and Sustainability Benefits.** Will the project address a specific water and/or energy sustainability concern? Please address the following:

• Explain and provide detail of the specific issue(s) in the area that is impacting water resilience and sustainability. Consider the following:

• Describe recent, existing, or potential drought or water scarcity conditions in the project area.

Water scarcity issues for the area are coming from shortages due to drought and any other change or reason for less precipitation, less snowpack during winter months, and increased pressure on agriculture for economically viable products despite growing costs of fuel, materials, and chemicals as well as increased demand upon certain products and services.

• Is the project in an area that is experiencing, or recently experienced, drought or water scarcity?

Yes, the impacts of climate change in the Uintah Basin and Ashley Valley are primarily evident in water supply and drought. This directly correlates with the amount of water available for agriculture, which is also a crisis waiting to happen. Conservation of the precious water resource that WIC and TLWID has is of top priority and making operational changes and improvements along with infrastructure upgrades is an important part of their mission. Installation of the new diversion structure, pipeline, and metering to better manage and operate their systems and reduce over deliveries and fluctuations is of great importance. Better stewardship of water and reliable deliveries will allow crop yields to increase and may offset the drought with diligent metering, measurements, and awareness.

 Describe any projected increases to the severity or duration of drought or water scarcity in the project area. Provide support for your response (e.g., reference a recent climate informed analysis, if available).

Utah has experienced abnormally dry conditions for the past two decades. Which has had impacts on hay productions as well as economic impacts. The Uintah Basin is known for a large agricultural community, and drought conditions have a big impact on crop yields. Crop yields affect the price for feed for cattle which can negatively impact farmers profits. All of the irrigation companies have recognized the drought conditions will probably never go away and have been working diligently to increase water delivery efficiencies. Utah State University has done specific studies on the Uintah Basin and one can be found here - https://extension.usu.edu/drought/research/economic-impacts-of-drought-in-utah-uintah-and-ouray-reservation

• Explain and provide detail of the specific issue(s) in the area that is impacting energy sustainability, such as reliance on fossil fuels, pollution, or interruptions in service.

The Uintah Basin is a valuable source of fossil fuels and has impacts due to fossil fuel extraction, which has a strain on water resources in both population boom & bust cycles as well as production water for extraction activities. Irrigation water is sometimes targeted for lease by these companies and therefore unavailable for agriculture and other ecological resources. Energy production is very prevalent in the area and oil production well can be found as close as 1 to 3 miles away.

Please describe how the project will directly address the concern(s) stated above.

The new Whiterocks diversion will integrate a renewable energy source (solar panels) to operate the gates as well as the telemetry which will reduce reliance on fossil fuels an decrease the carbon footprint

of the water management practices. Mosby will also use a similar setup to measure flows going into pipeline. J Bar J will decide to do solar or internal long-term batteries for their meters, or potentially even propellor meters which use hydraulic energy to measure flows and track total flows.

Incorporating automated features such as automated gates and precision measuring instruments will enhance and optimize water distribution. This will optimize water delivery by being able to quickly adjust flows when it is needed.

• Will the project directly result in more efficient management of the water supply? For example, will the project provide greater flexibility to water managers, resulting in a more efficient use of water supplies?

Yes the project will result in more efficient management of the water supply in all three cases. Efficiently managing water distribution through the new structure and pipeline, water can be allocated more fairly and equally among irrigators on the WIC system, Whiterocks River, Deep Creek, and Mosby. This helps prevent over diverting water from the Whiterocks River or Deep Creek, reduces any issues that may occur over water rights. This promotes sustainable water management practices that benefit both agricultural producers and domestic water users on Tridell-Lapoint Water Improvements District's culinary water system, as well as residential secondary users in J Bar J Lateral service area.

- Please address where any conserved water as a result of the project will go and how it will be used, including whether the conserved water will be used to offset groundwater pumping, used to reduce diversions, used to address shortages that impact diversions or reduce deliveries, made available for transfer, left in the river system, or used to meet another intended use.
  - o *Indicate the quantity of conserved water that will be used for the intended purpose(s).*

Whiterocks: 1,600 acre-feet of water will be conserved and will be utilized by WIC. WIC has a water right and will continue to divert up to that right when demands are high, however the water that is diverted will have a better chance of being used efficiently and therefore may present a lesser amount needing to be diverted from the river. The conserved water will be used on agricultural fields so that water users aren't burdened with a loss or 'shrink' factor to their water right and can use their full right and duty.

Mosby: 725 acre-feet of water will be conserved and delivered to the Red Wash Reservoir both during irrigation season and also during storage season, but once reservoir is filled, the flows will be sent down Deep Creek sooner than previously with the seeping canal. This will provide a net increase in water staying in the natural system.

J Bar J: 963 acre-feet of water will be conserved by the metering project due to the measurement of approximately 53 users in the lateral. This water will remain in the Steinaker Reservoir and will also allow less water diverted from Ashley Creek and/or a longer irrigation season pending the total volume doesn't exceed 3 acre-feet per acre irrigated.

• Provide a description of the mechanism that will be used, if necessary, to put the conserved water to the intended use. 41 Notice of Funding Opportunity No. R24AS00052

• Will the project assist States and water users in complying with interstate compacts?

This project increases efficiency and improves water stewardship in the Whiterocks River, Deep Creek, and Ashley Creek, which area all tributary streams of the Green and Colorado River systems, which is currently one of the most critical interstate river systems for the Lower Colorado states. Increased water savings on this system allows more flows into an already critically low and stressed river system.

• Will the project help to prevent a water-related crisis or conflict? Is there frequently tension or litigation over water in the basin?

This project will help reduce conflicts or disputes between different irrigation companies and individual agricultural users due to overuse or untracked use of water rights. This typically isn't a problem, but during high flows over diverting water could inadvertently happen since peak flows during the runoff season occur in the middle of the night. With the new Whiterocks structure over diversion could be adjusted automatically by the new telemetry and automation system. The J Bar J situation will relieve tensions between larger ag-users and smaller residential users, with both pointing their fingers at each group saying they use more water than they should.

Ecological Benefits. In addition to the separate WaterSMART Environmental Water Resources Projects NOFO, this NOFO places a priority on projects that that result in ecological benefits, through this section and other sections above, consistent with the SECURE Water Act. Please provide information regarding how the project will provide ecosystem benefits, including the following:

• Will the project benefit species (e.g., federally threatened or endangered, a federally recognized candidate species, a state listed species, or a species of particular recreational, or economic importance)? Please describe the relationship of the species to the water supply, and whether the species is adversely affected by a Reclamation project or is subject to a recovery plan or conservation plan under the Endangered Species Act (ESA).

WIC and MIC utilize open channel canals and pipe systems that diverts water from the Whiterocks River or Deep Creek, both a tributary of the Green River with 4 endangered fish species (bonytail, Colorado pikeminnow, humpback chub and razorback sucker) and 3 threatened species (bluehead sucker, flannelmouth sucker, and roundtail chub). Efficiency in the irrigation systems along the Whiterocks River will directly benefit these species, which have been adversely affected by a Reclamation project such as the Flaming Gorge Dam.

• Will water remain in the system for longer periods of time? If so, provide details on current/future durations and any expected resulting benefits (e.g., maintaining water temperatures or water levels, recreational benefits, etc.).

Yes the implementation of this project will allow for more water to be stored in M&S Reservoir, Red Wash, and Lapoint reservoir. This water is used to supplement natural flows downstream of the reservoirs during low flows or droughts.

• Will the proposed project reduce the likelihood of a species listing or otherwise improve the species status?

This project will reduce the likelihood of a species listing and will improve the species status. The Whiterocks Irrigation Company receives water from the Whiterocks River, which is a tributary of the Green River with four endangered fish species (bonytail, Colorado pikeminnow, humpback chub, and razorback sucker) and 3 threatened species (bluehead sucker, flannelmouth sucker, and roundtail chub). Efficiency in the irrigation systems along these rivers will directly benefit these species because less fluctuation of diverted water will allow for consistent flows in the Whiterocks River. The same can be said for Deep Creek and also Ashley Creek in the case of Mosby and J Bar J.

• Please describe any other ecosystem benefits as a direct result of the project.

More consistent diversion rates will allow more water to remain in the Whiterocks River which will support the growth of vegetation along the banks. The plants and vegetation will stabilize the soil along the banks which will reduce the amount of sediment going into the Whiterocks and Uinta Rivers. Reduced sediments in the river also improves the water quality which benefits fish species and other irrigators downstream. The Mosby situation will maintain an average flow into the Red Wash Reservoir, keeping a higher average of flow that can pass down Deep Creek, with resulting ecosystem benefits. Similar savings and benefits are realized in the Ashley Valley with Steinaker and the canal systems.

Climate Change: E.O. 14008 emphasizes the need to prioritize and take robust actions to reduce climate pollution; increase resilience to the impacts of climate change; protect public health; and conserve our lands, waters, oceans, and biodiversity.

• Describe how the project addresses climate change and increases resiliency. For example, does the project help communities adapt to bolster drought resilience?

By having updated automation and telemetry the diversion can be adjusted quicker. The Mosby screen/inlet structure will require less maintenance and resulting in more resilience to conditions and drought. This will ensure a more reliable water delivery and prevent water shortages while maintaining agricultural productivity. This will provide more consistent crop yields which are used to feed cattle which is a large part of the economy found in the Uintah Basin.

• Does the project seek to improve ecological resiliency to climate change?

This project improves ecological resilience by utilizing water from the Whiterocks, Deep Creek, and Ashley Creek to water crops in a region that would otherwise be a desert. With climate change necessitating better stewardship of water resources, this project is a high priority for UWCD and the three companies they are representing in order to continue their wise use of the water they are responsible for and the agricultural producers whom they serve.

• Does the proposed project seek to reduce or mitigate climate pollutions such as air or water pollution? 42 Section E. Application Review Information

Fewer trips to the heading will result in lower fuel consumption by ditch riders by reducing the amount of trips they have to take. The reduces the demands for fossil fuels which is a large part of the economy in the Uintah Basin. Decreasing fuel consumption decreases the need for oil extraction, the oil extraction

process produces air and water pollutants. These changes may be small but every bit helps to reduce climate change.

• Does the proposed project include green or sustainable infrastructure to improve community climate resilience?

This project will implement solar panels and batteries which will provide self-sufficient power for the instrumentation used to monitor flows at the heading, inlet, or metered turnout. Solar Panels are also resilient and don't require any external power sources, which are more likely to withstand a natural disaster. This instrumentation is critical for water to be delivered to irrigators during normal operations as well as a disaster. Continuing to irrigate during climate change and disaster is critical for the economy and the community.

 Does the proposed project contribute to climate change resiliency in other ways not described above?

The impacts of climate change in the Uintah Basin are primarily evident in the water supply. Prolonged drought conditions cause the snowpack to be reduced which correlates directly to the amount of water available to irrigate with. Conserving water and maximizing the available water is a top priority of UWCD. The systems that they currently operate are very efficient and they strive to pass that along to others working in the area. These projects have been identified by water users as a deficiency of the existing systems. Reconstructing the heading and piping the Feeder Canal will allow for more consistent water delivery. Better stewardship with measurement and metering while making more reliable deliveries will help increase crops yields and may offset the drought with better accountability and awareness.

1.4.4. EVALUATION CRITERION D – DISADVANTAGED COMMUNITIES, INSULAR AREAS, AND TRIBAL BENEFITS

#### 1.4.4.1. SUBCRITERION D.1. DISADVANTAGED COMMUNITIES

E.O. 14008 affirms the advancement of environmental justice for all through the development and funding of programs to invest in disadvantaged communities. This criterion, which is used to identify projects that advance the Justice 40 Initiative, includes all Federally recognized Tribes and Tribal entities, and any disadvantaged communities in insular areas (American Samoa, Guam, the Northern Mariana Islands, or the Virgin Islands) identified pursuant to the following criteria.

• Please use the White House Council on Environmental Quality's interactive Climate and Economic Justice Screening Tool (CEJST), available online at Explore the map - Climate & Economic Justice Screening Tool (screeningtool.geoplatform.gov/en/#17.59/36.63278/-105.181329) to identify any disadvantaged communities that will benefit from your project. The CEJST developed by the White House Council on Environmental Quality is a geospatial mapping tool that utilizes publicly available, nationally consistent data sets related to climate change, the environment, health, and economic opportunity to identify disadvantaged communities. In addition to identifying specific census tracts that are disadvantaged, the

CEJST includes the lands of Federally 43 Notice of Funding Opportunity No. R24AS00052 recognized Tribes as disadvantaged communities. In addition, regardless of whether a Federally recognized Tribe has land, all Federally recognized Tribal entities are considered disadvantaged communities for the purposes of the Justice40 Initiative.

The land that will benefit from this project is located within the following tracts:

#### 49047940201

This tract is located within Uintah County, Utah and is identified as a disadvantaged community.

"The lands of Federally Recognized Tribes that cover 100% of this tract are also considered disadvantaged."

"This tract is considered disadvantaged because it meets more than 1 burden threshold **AND** the associated socioeconomic threshold."

• If applicable, describe how the proposed project will serve or benefit a disadvantaged community, identified using the tool. For example, will the project improve public health and safety by addressing water quality, add new water supplies, provide economic growth opportunities, or provide other benefits in a disadvantaged community?

Farmers and ranchers located within the disadvantaged community will benefit from the increased reliability of water that is delivered to the user for agricultural purposes. At this point, many of the landowners, farmers, and ranchers have felt a downturn in the economy due to economic challenges; however, if water is more reliably delivered due to this project, this could increase production, providing benefits to them.

#### 1.4.4.2. SUNCRITERION D.2. TRIBAL BENEFITS

The Department is committed to strengthening tribal sovereignty and the fulfillment of Federal Tribal trust responsibilities. The President's memorandum, Tribal Consultation and Strengthening Nation-to-Nation Relationships, asserts the importance of honoring the Federal Government's commitments to Tribal nations. Address the following, if applicable:

• Does the proposed project directly serve and/or benefit a Tribe? Will the project increase water supply sustainability for an Indian Tribe? Will the project provide renewable energy for an Indian Tribe?

The Whiterocks Irrigation Company delivers water to members of the Ute Tribe. The diversion is located on the Uintah and Ouray Reservation, which is home to members of the Ute Indian Tribe. The irrigation company serves non-tribal farms and ranches as well as tribal members who utilize water for agricultural purposes. Tridell-Lapoint Water District primarily serves non-tribal residents in the area but there are some members of the Ute Tribe who receive water from TLWID

Mosby isn't as directly tied to the Tribe but Deep Creek does take some water and has tribal water rights tied to it as well. J Bar J is further from tribal benefits at is sits in Ashley Valley and is outside of the historic reservation boundaries.

• Does the proposed project support Tribal led conservation and restoration priorities, and/or incorporate or benefit indigenous traditional knowledge and practices?

Like mentioned in the prior section, this project is located on or near Tribal grounds, excepting J Bar J. The construction on Whiterocks will require an access permit and coordination with the tribe. The Whiterocks Diversion structure can serve as a valuable tool for supporting tribal-led conservation and restoration practices by providing a reliable water supply and facilitation collaborative efforts to enhance ecosystem health, protect cultural resources, and promote sustainable land stewardship on tribal lands.

• Does the proposed project directly support tribal resilience to climate change and drought impacts or provide other Tribal benefits such as improved public health and safety through water quality improvements, new water supplies, increased renewable energy, or economic growth opportunities?

Whiterocks: This project supports tribal resilience to climate change and drought impacts by increasing efficiency in water deliveries to the Whiterocks Irrigation Company, which translates upstream to the U.S. Whiterocks Canal which is owned and operated Uintah Indian Irrigation Project O&M Company (UIIP). UIIP is ultimately owned by the Ute Tribe. This canal, carries a portion of irrigation specifically for tribal members and fee users. WIC, the BIA, and Uintah Indian Irrigation Project O&M Company work together to improve the irrigation efficiency and reliability in this system.

• Does the proposed project support Reclamation's Tribal trust responsibilities or a Reclamation activity with a Tribe?

The primary responsibility of the BOR Tribal trust is to manage water resources and infrastructure development for Tribes. This project does directly benefit the Ute Tribe or tribal members, as mentioned this project will increase efficiencies in the river system and the canal system by having more consistent water deliveries. These efforts do support the Reclamations responsibilities.

# 1.4.5. EVALUATION CRITERION E – COMPLEMENTING ON-FARM IRRIGATION IMPROVEMENTS (8 POINTS)

If the proposed project will complement an on-farm improvement eligible for NRCS assistance, please address the following:

- Describe any planned or ongoing projects by farmers/ranchers that receive water from the applicant to improve on-farm efficiencies.
  - Provide a detailed description of the on-farm efficiency improvements.

Farmers and Ranchers in the area regularly receive help from the NRCS to improve on farm infrastructure. These include but aren't limited to, pivot installations, improving soil health and evaporation ponds.

• Have the farmers requested technical or financial assistance from NRCS for the onfarm efficiency projects, or do they plan to in the future?

Many farmers in the area have requested financial assistance from the NRCS. The NRCS has funded several pivot projects through Salinity funding and the Utah Department of Ag & Food (UDAF) has also funded pivots through the Water optimization program. Funds from UDAF have been obtained through the water optimization program for both the Mosby and Whiterocks projects specifically and J Bar J will be applying this next upcoming opportunity.

o If available, provide documentation that the on-farm projects are eligible for NRCS assistance, that such assistance has or will be requested, and the number or percentage of farms that plan to participate in available NRCS programs.

No documentation is available at this time

• Applicants should provide letters of intent from farmers/ranchers in the affected project areas.

No specific letters of intent available at this time. There are meeting attendance sheets attached in Appendix B that had

- Describe how the proposed WaterSMART project would complement any ongoing or planned on-farm improvement.
  - Will the proposed WaterSMART project directly facilitate the on-farm improvement? If so, how? For example, installing a pressurized pipe through WaterSMART can help support efficient on-farm irrigation practices, such as drip-irrigation.

OR

• Will the proposed WaterSMART project complement the on-farm project by maximizing efficiency in the area? If so, how?

This project will help manage the flows of water from the Whiterocks River to the farm fields. By optimizing water delivery and minimizing losses to do high runoff, leaking headgates and over delivery, this project supports efficient water use, which aligns with NRCS goals of water conservation and sustainable resource practices.

- Describe the on-farm water conservation or water use efficiency benefits that are expected to result from any on-farm work.
  - Estimate the potential on-farm water savings that could result in acre-feet per year. Include support or backup documentation for any calculations or assumptions.

J Bar J: The meters could be considered an on-farm improvement and will become the responsibility of the individual users after installation. Approximately 963 acre-feet of the total project is due to these on-farm improvements with metering and the savings will be initiated by the on-farm conservation practices.

Whiterocks/Mosby: Upgrading this irrigation heading structure and feeder canal often leads to the modernization of other components on the irrigation system including on farm upgrades, such as the implementation of pivots, wheel lines, or pipelines. It is difficult to estimate on-farm water savings at this time but it is anticipated that there would be some savings.

• Please provide a map of your water service area boundaries. If your project is selected for funding under this NOFO, this information will help NRCS identify the irrigated lands that may be approved for NRCS funding and technical assistance to complement funded WaterSMART projects.

See maps in Appendix C.

#### 1.4.6. EVALUATION CRITERION F - READINESS TO PROCEED (8 POINTS)

- Identify and provide a summary description of the major tasks necessary to complete the project. Note: Do not repeat the more detailed technical project description provided in Section D.2.2.2 Application Content. This section should focus on a summary of the major tasks to be accomplished as part of the project.
- Describe any permits that will be required, along with the process for obtaining such permits.

Whiterocks: Permits will include a stream alteration permit, cultural resources, wetland delineation, ULT Survey, Ute Tribe Access Permit. At this time a ULT survey has already been conducted and no ULT were found. A wetland delineation has also been done. Jones & DeMille Engineering has worked extensively with the Ute Tribe and has a current access permit and it is anticipated that an access permit for the future contractor will be issued without any problems.

Mosby: Stream alteration permit and cultural resource surveys, the ULT and Wetland surveys have been completed to expedite the project once funding is in order.

J Bar J: Meters will be installed on pre-existing pipes and disturbances and a Categorical Exclusion is anticipated to cover the work there.

• Identify and describe any engineering or design work performed specifically in support of the proposed project.

Whiterocks: The structure has a preliminary design, and the radial gate for the structure is already designed. If awarded funding from the BOR and UDAF the final design would quickly commence and other the permits mentioned above would be obtained. See Appendix C.

Mosby: Pipeline hydraulic sizing and design has been completed, concept details for an inlet screen has begun, and permitting has started. This segment of new pipe will connect to an existing pipe so the design will be quickly obtained upon approval.

J Bar J: Preliminary work with ditchrider and water users has established a concept map and a number of meters, further design and investigation will be required to finalize meter sizing and locations. This will be accomplished by an ArcGIS application and using a QR code and other means of communication to gather data efficiently and provide good public relations.

• Describe any new policies or administrative actions required to implement the project.

Whiterocks & Mosby: No new policies or administrative actions will be required, besides some collaboration between WIC and TLWID for potential funding assistance.

J Bar J: For the funding obtained for the secondary meters, several minor rules will need to be implemented with policy towards water conservation and not allowing watering for residential lawns during the heat of the day. Also implementing data gathering for the meters.

• Describe the current design status of the project. If additional design work is required prior to construction, describe the planned process and timeline for completing the design work.

Whiterocks: The project is currently in the funding stages, but a conceptual design has been developed and some work has been completed such as a wetland delineation. Once funding is procured the first step would be to survey the existing structures and develop a site plan. Shortly after a structural and civil design would be developed and approval would be obtained from the shareholders. Simultaneously the required permits and surveys would be completed. See Appendix A for schedule.

Mosby: Similar to statement above, the design is mostly completed for what this project requires, there will be some specific grades and earthwork calculations but the bulk of the project cost is already sized in the pipeline. The diversion/inlet screen structure will need further refinement and design, which will happen fairly quickly once funding is obtained and Mosby can give the go-ahead. See Appendix A for schedule.

J Bar J: Preliminary details have been started for meter boxes, and further design and investigation will be required to finalize meter sizing and locations. This will be accomplished by an ArcGIS application and using a QR code and other means of communication to gather data efficiently and provide good public relations. This will take longer than design tasks as it involves individuals and their schedules, but the ditchrider will be utilized to help facilitate details.

• Please also include an estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates. Milestones may include, but are not limited to, the following: complete environmental and cultural compliance; mobilization; begin construction/installation; construction/installation (50% complete); and construction/installation (100% complete). Was the expected timeline for environmental and cultural compliance discussed with the local Reclamation regional or area office?

A project schedule can be found in Appendix A. The expected timeline has been discussed with the local Reclamation office and is also currently under review through the UDAF funding. Based on other projects that have been completed in the area the timeline is achievable.

#### 1.4.7. EVALUATION CRITERION G - COLLABORATION (5 POINTS)

Please describe how the project promotes and encourages collaboration. Consider the following:

• Is there widespread support for the project? Please provide specific details regarding any support and/or partners involved in the project. What is the extent of their involvement in the process?

The WIC, MIC, and J Bar J board has voted and held company-wide shareholder meetings about these projects and the River Commissioner is pushing hard to get this Whiterocks structure replaced and upgrades made. The TLWID has a portion of the responsibility and has been coordinated with as well. UDAF funded the project with high rankings in their application process and the local planners have been involved in those applications and funding. UWCD board was willing to support by applying for the WaterSMART grant and help fund the effort. All three entities get along fairly well and participate in local projects and water conservation efforts.

• What is the significance of the collaboration/support?

This project is following suite with several other improvements on the Whiterocks and Uinta River systems such as the Bifurcation Structure, which has provided some great templates and methods for cost-savings and streamlining design and construction. This collaboration is very helpful to provide a happier atmosphere in river commission meetings, knowing that many companies are making improvements so that they are more responsible and accurate in their flow diversions. The J Bar J project was first thought to be a difficult pill to swallow, but at the latest meeting, there was unanimous support of getting meters.

• Will this project increase the possibility/likelihood of future water conservation improvements by other water users?

As mentioned before, it is very likely that other irrigation companies in the area will follow this pattern of improvement and implementation. The metering project will encourage responsible use of the water and will force some to conserve or run out early, with a locked valve!

• Will the project benefit multiple sectors and/or users (e.g., agriculture, municipal and industrial, environmental, recreation, or others)?

This project is unique that it benefits both the usual agricultural and environmental measures but also municipal water supply for the TLWID and the communities it serves. The metering project also delves into the municipal water savings as secondary water is being used to water outdoors, lessening the strain on the treatment plants that are in the are to provide culinary water.

• Please attach any relevant supporting documents (e.g., letters of support or memorandum of understanding). .

See Appendix B.

#### 1.4.8. EVALUATION CRITERION H - NEXUS TO RECLAMATION (4 POINTS)

Describe the nexus between the proposed project and a Reclamation project or Reclamation activity. Please consider:

• Does the applicant have a water service, repayment, or operations and maintenance (O&M) contract with Reclamation?

Whiterocks and Mosby placed the majority of their delivery systems in pipelines using Reclamations Basin States Salinity funding for connections for both M&S Reservoir, Lapoint Reservoir, and also the Mosby Irrigation Company's Redwash Reservoir. They have completed their obligations and are paying a loan off through the Board of Water Resources. J Bar J is part of the Steinaker Reservoir user group through UWCD and has a direct source from Reclamation.

• If the applicant is not a Reclamation contractor, does the applicant receive Reclamation water through a Reclamation contractor or by any other contractual means?

WIC does not directly receive water through a Reclamation contractor, but is part of a larger system with a lot of Reclamation involvement (Duchesne, Green River, Colorado River).

J Bar J is part of the Steinaker Reservoir user group through UWCD and has a direct source from Reclamation through the Ashley Central Irrigation Company.

• Will the proposed work benefit a Reclamation project area or activity?

Efficiencies to the WIC and MIC systems will benefit the Reclamation projects related to the Colorado and Green Rivers. J Bar J efficiencies will benefit the Steinaker & Red Fleet reservoir storage systems in Ashley Valley as well as the aforementioned river systems.

• *Is the applicant a Tribe?* 

The primary applicant is not a tribe, although some of it is on tribal land and has tribal benefits explained above.

#### 1.5. PERFORMANCE MEASURES

Provide a brief summary describing the performance measure that will be used to quantify actual benefits upon completion of the project (e.g., water saved or better managed, energy generated or saved). For more information calculating performance measure, see Appendix A: Benefit Quantification and Performance Measure Guidance.

The performance measure used to quantify actual benefits of reconstruction of the Whiterocks Diversion and Mosby Feeder Canal piping will focus on improvements in water efficiency and conservation. This measure will assess factors such as reduced water loss, optimized water distribution and delivery, and increased agricultural productivity resulting from the replacement of the old structure and more efficient design. The J Bar J performance measures will be made with their master meter and the individual meters adding up for a total savings and also a trend as users get used to metered deliveries.

By comparing pre-construction and post-construction data on water usage, crop yields, and environmental impacts, the WIC board can evaluate the outcome and effectiveness of the replacement of the structure.

The most noticeable benefit will be water savings, the anticipated water savings have already been calculated. The same procedure used to evaluate savings can be used after the implementation of the project.

#### 1.6. BUDGET NARRATIVE

In the budget detail and narrative section, applicants should describe and justify requested budget items and costs. Applicants should provide details to support the SF-424A, "Object Class" categories or the SF-424C, "Cost Classification" categories. The budget narrative must clearly identify all items of cost (total estimated project cost), including those contributed as non-Federal cost share by the applicant (required and voluntary), third-party in-kind contributions, and those covered using the funding requested from Reclamation, and any requested pre-award costs.

The total project cost is the sum of all allowable items of costs, including all required cost sharing and voluntary committed cost sharing, including third-party contributions necessary to complete the project. Applicants must include detailed descriptions of all cost justifications (see Reclamation's suggested format in Attachment B for more detail). Costs, including the valuation of third-party in-kind contributions, must comply with the applicable cost principles contained in 2 CFR, §200.

The success of the entire project hinges significantly on securing funding from the Bureau of Reclamation's WaterSMART program and funding from the UDAF Water Optimization programs, which two of the three have already obtained. As a crucial partner in water resource management and infrastructure development, the BOR plays a pivotal role in providing financial support for projects aimed at enhancing water delivery systems, improving irrigation efficiency, and ensuring sustainable agricultural practices in the Uintah Basin. This funding is essential for developing these companies infrastructure to ensure a consistent water supply for agricultural needs. The project will provide consistent and accurate flow which will promote economic success and improve environmental stewardship. Without this funding, the project's ability to address water management challenges and meet the evolving needs of farmers and shareholders within each company would not be able to be resolved.

The table below shows the breakdown of funding sources for the project. See the attached cost estimate for further breakdown of each item and budget in Appendix A.

FUNDING SOURCES	AMOUNT			
Non-Federal Entities				
UDAF Water Optimization (WIC & MIC)	\$664,200			
UDAF Water Optimization (J Bar J Applied)	\$200,000			
WIC Shareholder Financing	\$91,800			
MIC Shareholder Financing	\$116,000			
J Bar J Shareholder Financing	\$ 39,330			
Non-Federal Subtotal	\$1,111,330			
REQUESTED RECLAMATION FUNDING	\$1,053,900			

#### 1.6.1. PERSONNEL

See Contractual rates and title page for key personnel. The salaries and/or reimbursements of WIC or other support staff are not included in this budget nor are they anticipated to be part of it.

#### 1.6.2. FRINGE BENEFITS

All fringe benefits are fixed rates for billing through engineering and construction contracts.

#### 1.6.3. TRAVEL

Travel costs will be part of the contracted portion of the project. It is likely that the scope of this project will utilize local consultants and contractors so that travel costs are minimal.

#### 1.6.4. EQUIPMENT

Equipment will be part of the contracted portion of the project.

#### 1.6.5. SUPPLIES

Supplies will be part of the contracted portion of the project.

#### 1.6.6. CONTRACTUAL

An engineering consultant will be contracted through the UWCD or company procurement process to perform the design, funding procurement, and construction engineering of these project. JDE has assisted in the preparation of this application and a budgetary estimate of time and rates anticipated for the civil and construction engineering scope of the project. The environmental consultant will provide the appropriate permitting and surveys for the project, along with coordination with USFWS for ULT flowers but that will likely not be required. The table below includes the design and environmental laborer classifications, billing rates, and estimated number of hours.

Role/Position	Rate	Hours	Total
Senior Project Manager	\$219	80	\$17,520
Project Engineer	\$160	222	\$35,520
Graduate Engineer	\$140	259	\$36,260
CAD Technician	\$101	160	\$16,160
Professional Land Surveyor	\$175	36	\$6,300
Survey Technician	\$135	60	\$8,100
Administrative Assistant	\$84	79	\$6,636
Environmental Scientist	\$142	250	\$35,500
		TOTAL	\$162,000

#### 1.6.7. CONSTRUCTION

A general contractor will be contracted through UWCD or company procurement process to perform the construction of the project. See Appendix A for a breakdown of construction items and tasks, which will be utilized for bidding purposes for construction contractors, with a price-based selection for qualified contractors to perform the work.

Additionally, an engineering consultant will be contracted through the UWCD or company procurement process to perform construction staking, material testing, and construction observation during construction of the project. The table below includes the construction engineering laborer classifications, billing rates, and estimated number of hours.

Role/Position	Rate	Hours	Total
Senior Project Manager	\$219	60	\$13,140
Project Engineer	\$160	115	\$18,400
Construction Project Manager	\$140	120	\$16,800
Construction Engineering Technician	\$118	350	\$41,300
Professional Land Surveyor	\$175	20	\$3,500
Survey Technician	\$135	36	\$4,860
		TOTAL	\$98,000

#### 1.6.8. OTHER

No other expenses are anticipated.

#### 1.6.9. INDIRECT COSTS

Not included. Note that "Indirect" costs on the attached cost estimate could also be defined as non-construction costs to help clarify. All costs proposed in the budget are based on quotes, estimates, and contractual itemized costs from similar projects in the area.

#### 1.7. ENVIRONMENTAL AND CULTURAL RESOURCES COMPLIANCE

To allow Reclamation to assess the probable environmental and cultural resources impacts and costs associated with each application, all applicants should consider the following list of questions focusing on the NEPA, ESA, and NHPA requirements. Please answer the following questions to the best of your knowledge. If any question is not applicable to the project, please explain why. The application should include the answers to:

• Will the proposed project impact the surrounding environment (e.g., soil [dust], air, water [quality and quantity], animal habitat)? Please briefly describe all earth-disturbing work and any work that will affect the air, water, or animal habitat in the project area. Please also explain the impacts of such work on the surrounding environment and any steps that could be taken to minimize the impacts.

There will be effects on the surrounding environment because of the project. These effects include excavation of material, and the demolition of the old structures, and the backfilling of the pipeline. To minimize these impacts, construction will be confined to a designated construction area, it is not anticipated the construction will remain to a confined area. The completed project would improve the quantity of water staying within the river systems, improving habitat for animals and fish species as well.

No other impacts are anticipated. The metering project will have minimal excavation and backfill on a previously disturbed area with the pipeline already in place.

• Are you aware of any species listed or proposed to be listed as a Federal threatened or endangered species, or designated critical habitat in the project area? If so, would they be affected by any activities associated with the proposed project?

There are four federally listed fish species (Colorado pikeminnow, razorback sucker, bonytail, and humpback chub) and 3 threatened species (bluehead sucker, flannelmouth sucker, and roundtail chub) within the river systems where these projects would be constructed. These projects will not directly impact these fish species; however, the saved water will remain within the river system to benefit the fish. During the wetland delineation that was already completed no ULT or suitable ULT habitat was found. In order to eliminate or minimize disturbance, the project sites will be evaluated prior to the start of construction.

• Are there wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdiction as "Waters of the United States"? If so, please describe and estimate any impacts the proposed project may have.

An aquatic resource delineation has also been completed. Any impacts to wetlands would be permitted with the Army Corps of Engineers and the Utah Division of Water Rights. The final impacts will be quantified during design completion, so impacts would be minimized and kept under 0.1 acres.

• When was the water delivery system constructed?

The water delivery system was constructed in the early 1900's. M&S and Redwash Reservoirs were built were built in 2006 and 2013.

• Will the proposed project result in any modification of or effects to, individual features of an irrigation system (e.g., headgates, canals, or flumes)? If so, state when those features were constructed and describe the nature and timing of any extensive alterations or modifications to those features completed previously.

This project will affect the existing heading structure. The existing heading structure was built in the early 1900's the oldest water right for WIC dates back to 1905.

• Are any buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places? A cultural resources specialist at your local Reclamation office or the State Historic Preservation Office can assist in answering this question.

Unknown, but likely the diversion structure or inlet structure itself is potentially a site. None in the metering project.

• *Are there any known archeological sites in the proposed project area?* 

No, there are no known archeological sites in the proposed project area.

• Will the proposed project have a disproportionate and adverse effect on any communities with environmental justice concerns?

No, the project will not have a disproportionate or adverse effect on any communities with environmental justice concerns.

• Will the proposed project limit access to, and ceremonial use of, Indian sacred sites or result in other impacts on Tribal lands?

No, the proposed project will not limit access to ceremonial use of Indian sacred sites or result an any negative impacts to Tribal lands; however, increase in efficiency in Tribal water systems will be a result of this project.

• Will the proposed project contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area?

No, the proposed project will not contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area. The Contractor will be required to have a specific cleaning and preventative plan by specification to avoid spread of unwanted weeds and species.

#### 1.8. REQUIRED PERMITS OR APPROVALS

You should state in the application whether any permits or approvals are necessary and explain the plan for obtaining such permits or approvals.

The two diversions on the project will require a stream alteration permit. Once funding is approved and final design completed, the permits approvals can be obtained during the irrigation season, so that construction can commence in the off-season.

#### 1.9. OVERLAP OR DUPLICATION OF EFFORT STATEMENT

Applicants should provide a statement that addresses if there is any overlap between the proposed project and any other active or anticipated proposals or projects in terms of activities, costs, or commitment of key personnel. If any overlap exists, applicants must provide a description of the overlap in their application for review.

Applicants should also state if the proposal submitted for consideration under this program does or does not in any way duplicate any proposal or project that has been or will be submitted for funding consideration to any other potential funding source—whether it be Federal or non-Federal. If such a circumstance exists, applicants must detail when the other duplicative proposal(s) were submitted, to whom (Agency name and Financial Assistance Program), and when funding decisions are expected to be announced. If at any time a proposal is awarded

funds that would be duplicative of the funding requested from Reclamation, applicants must notify the NOFO point of contact or the Program Coordinator immediately.

#### 1.10. CONFLICT OF INTEREST DISCLOSURE STATEMENT

Per 2 CFR §1402.112, "Financial Assistance Interior Regulation" applicants should state in the application if any actual or potential conflict of interest exists at the time of submission. Submission of a conflict-of-interest disclosure or certification statement is mandatory prior to issue of an award.

#### 1.11. UNIFORM AUDIT REPORTING STATEMENT

All U.S. states, local governments, federally recognized Indian Tribal governments, and non-profit organizations expending \$750,000 USD or more in Federal award funds in the applicant's fiscal year must submit a Single Audit report for that year through the Federal Audit Clearinghouse's Internet Data Entry System. U.S. state, local government, federally recognized Indian Tribal governments, and non-profit applicants must state if your organization was or was not required to submit a Single Audit report for the most recently closed fiscal year. If your organization was required to submit a Single Audit report for the most recently closed fiscal year, provide the Employer Identification Number (EIN) associated with that report and state if it is available through the Federal Audit Clearinghouse website.

#### 1.12. CERTIFICATION REGARDING LOBBYING

Applicants requesting more than \$100,000 in Federal funding must certify to the statements in 43 CFR §18, Appendix A. If this application requests more than \$100,000 in Federal funds, the authorized official's signature on the appropriate SF-424 form also represents the applicant's certification of the statements in 43 CFR § 18, Appendix A.

#### 1.13. SF-LLL: DISCLOSURE OF LOBBYING ACTIVITIES (IF APPLICABLE)

If applicable, a fully completed and signed SF-LLL: Disclosure of Lobbying Activities form is required if the applicant has made or agreed to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. This form cannot be submitted by a contractor or other entity on behalf of an applicant.

#### 1.14. LETTERS OF SUPPORT

You should include any letters from interested stakeholders supporting the proposed project. To ensure your proposal is accurately reviewed, please attach all letters of support as an appendix. Letters of support received after the application deadline for this NOFO will not be considered in evaluating your proposed project. These letters do not count within the 125 page maximum.

See Appendix B.

#### 1.15. LETTER OF PARTNERSHIPS (CATEGORY B APPLICANTS)

Category B applicants should submit a Letter of Partnership from the Category A partner, stating that they are acting in partnership with the applicant and agree to the submittal and content of the application (see Section C.1 Eligible Applicants). However, if the project is selected, a Letter of Partnership must be received prior to award.

Not applicable.

#### 1.16. OFFICIAL RESOLUTION

If selected, the applicant must provide prior to award an official resolution adopted by your organization's board of directors or governing body, or, for state government entities, an official authorized to commit the applicant to the financial and legal obligations associated with receipt of a financial assistance award under this NOFO, verifying:

- The identity of the official with legal authority to enter into an agreement
- The board of directors, governing body, or appropriate official who has reviewed and supports the application submitted
- That your organization will work with Reclamation to meet established deadlines for entering into a grant or cooperative agreement

An official resolution meeting the requirements set forth above is mandatory before an award of funding will be made.

#### 1.17. LETTERS OF FUNDING COMMITMENT

If a project is selected for award under this funding opportunity and cost share funding is anticipated to be provided by a source other than the applicant, the third-party cost share must be supported with letters of commitment prior to award. Letters of commitment should identify the following elements:

- The amount of funding commitment
- The date the funds will be available to the applicant
- Any time constraints on the availability of funds
- Any other contingencies associated with the funding commitment

Cost-share funding from sources outside the applicant's organization (e.g., loans or State grants) should be secured and available to the applicant prior to award. Reclamation will not execute a financial assistance agreement until non-Federal funding has been secured or Reclamation determines that there is enough evidence and likelihood that non-Federal funds will be available to the applicant after executing the agreement.

Letters of commitment are included in Appendix B

### APPENDIX B. LETTERS OF SUPPORT AND FUNDING COMMITMENT

# Vintah Water Conservancy District

"Steinaker Dam"

78 West 3325 North Vernal, Utah 84078 Phone: (435) 789-1651 Fax: (435) 789-1670

"Red Fleet Dam"

February 13, 2024

RE: Letter of Support for 2024 Water Control & Measurement Projects

Grant Application Review Committee:

The Uintah Water Conservancy District (District) is submitting this letter in support of three projects being considered for funding assistance. These projects include the Whiterocks Irrigation Company (WIC) – Whiterocks Diversion Structure Rehabilitation, the Mosby Irrigation Company (MIC) – Red Wash Feeder Canal Enclosure, and the Ashley Central Irrigation Company – J Bar J Lateral Measurement projects. Both the WIC and MIC have received supplemental funds through the Utah Department of Agriculture and Food (UDAF) Agricultural Water Optimization Program, and the J Bar J Lateral Measurement project successfully lobbied the Utah Board of Water Resources for assistance metering residential secondary water connections but is still seeking funding to measure agricultural water uses. We find that these projects will not only benefit individual water users, but they will support our regional goals for improved water control, measurement, and conservation.

In preparation, WIC and MIC have already started the environmental permitting process by completing surveys for potential Ute ladies'-tresses orchids' populations and habitat. These surveys have returned favorable findings that both projects have no direct impacts. Each company has an existing right-of-way for project construction. UDAF is scheduled to clear the projects for cultural resources as part of their contribution. The J Bar J Lateral also held a shareholder meeting to establish support for metering their system. Their project will likely be a Categorical Exclusion as the pipelines are already in place. The main hurdle for all three projects is available funding and ultimate project affordability for agriculture water users.

We support these projects, and we are submitting a larger Funding Group II application in support of the combined effort. Each individual entity will also be submitting a separate Funding Group I application giving Reclamation flexibility in their funding decisions. We appreciate the opportunity to partner with each stakeholder, UDAF, and Reclamation. We formally request your consideration and funding support for these WaterSMART program applications. Please contact us with any questions or requests for further information. We look forward to hearing from you.

Sincerely,

**UINTAH WATER CONSERVANCY DISTRICT** 

William Merkley General Manager

#### RESOLUTION

Resolution No: 20240213

#### **UINTAH WATER CONSERVANCY DISTRICT**

APPROVING THE APPLICATION FOR BUREAU OF RECLAMATION WATER AND ENERGY EFFICIENCY GRANT FUNDS FOA No. R24AS00052

FOR

#### 2024 WATER CONTROL & MEASUREMENT PROJECTS

WHEREAS, the Bureau of Reclamation's Upper Colorado Region is requesting proposals for Water and Energy Efficiency Grants (WEEG) funding to assist Eligible Applicants with their water conservation activities; and

WHEREAS, the Uintah Water Conservancy District (District) is an Eligible Applicant by virtue of being the sponsoring entity for the Vernal and Jensen Units of the Central Utah Project constructed by the Bureau of Reclamation; and

WHEREAS, the District desires to submit a proposal for funding assistance

NOW, THEREFORE, BE IT RESOLVED that the District Board of Trustees:

- 1. Has reviewed and approves the filing of the grant proposal herein submitted; and
- 2. Certifies that the District has sufficient funds and resources as specified in the Funding Plan portion of the proposal to implement the project; and
- Certifies that if selected for a WEEG grant, the District will work with Reclamation to execute the proper agreements and meet the objectives and deadlines described in the proposal.

DATED:

Quentin R. Johnson, Chairman

ATTEST:

William Merkley, Secretary/Treasurer

February 22, 2024

William Merkley, General Manager Uintah Water Conservancy District 78 West 3325 North Vernal, UT 84078

Letter of Commitment for Mosby Irrigation Company - Red Wash Feeder Canal Piping Project

Mr. Merkley & UWCD Board:

The Mosby Irrigation Company (MIC) is submitting this letter to show support for the proposed 2024 Water. Control & Metering Project being submitted for funding assistance through the UWCD. This project is an important project for water efficiency on the Mosby system, as it is the critical feeder canal that sends water into Red Wash Reservoir for the lower system's pipeline. The canal is at risk for failure as it is along a rocky hillside and has had washouts in the past. It is also loosing water through high seepage. Portions have been piped and this project will complete the piping to the diversion point. We have already initiated environmental surveys with Waters of the US Delineation and also a Ute Ladies Tresses T&E Species survey last August.

The total cost estimate for the project is \$1,160,000. MIC has already secured a grant for a portion of the project from the UDAF Water Optimization program and is applying for funding through the Bureau of Reclamation's WaterSMART Grant opportunity. The following commitment is proposed for our company with the associated grant funds:

- Cost share of up to \$116,000 (MIC portion of the project)
- Funds to be available by time of construction and anticipated by Spring 2025 if grants are obtained and according to project schedules.
- There are no contingencies or constraints on the availability of funding or the commitment of these funds.
- We request further information and coordination as the project commences and the funding scenario is finalized.

We appreciate the opportunity to partner with the Uintah Water Conservancy District and Utah Department of Ag & Food as well as the possible funding assistance from the WaterSMART program. Thank you for this opportunity to collaborate, we are excited to hear what comes of the grant application.

Sincerely,

Chris Walker President

Mosby Irrigation Company

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February 22, 2024

William Merkley, General Manager Uintah Water Conservancy District 78 West 3325 North Vernal, UT 84078

RE: Whiterocks Diversion Structure - Letter of Commitment & Support

Mr. Merkley & UWCD Board:

The Whiterocks Irrigation Company (WIC) is submitting this letter to show support for the proposed 2024 Water Control & Metering Project being submitted for funding assistance through the UWCD. This project is an important project for water control and efficiency on the Whiterocks system as well as the culinary water users on Tridell-Lapoint Water Improvement District, as this diversion provides water to their treatment plant to serve the Lapoint & Tridell communities. The current structure is outdated and falling apart, new improvements will include automation on gates and the ability to monitor remotely and operate efficiently without manual and onsite visits by the River Commissioner and WIC staff. The total cost estimate for the project is \$512,000. WIC has already secured a grant for a portion of the project from the UDAF Water Optimization program and is applying for funding through the Bureau of Reclamation's WaterSMART Grant opportunity. The following commitment is proposed for our company with the associated grant funds:

- Cost share of up to \$51,200 (WIC portion of the project)
- Funds to be available by time of construction and anticipated by Spring 2025 if grants are obtained and according to project schedules.
- There are no contingencies or constraints on the availability of funding or the commitment of these funds.
- We request further information and coordination as the project commences and the funding scenario is finalized.

We appreciate the opportunity to partner with the Uintah Water Conservancy District and Utah Department of Ag & Food, and Tridell-Lapoint Water Improvement District as well as the possible funding assistance from the WaterSMART program. We look forward to hearing about the results of the grant applications.

Sincerely,

Tyson Murray President

Whiterocks Irrigation Company

February 22, 2024

William Merkley, General Manager Uintah Water Conservancy District 78 West 3325 North Vernal, UT 84078

#### Letter of Commitment for J Bar J Irrigation

Mr. Merkley & UWCD Board:

The J Bar J Lateral on the Ashley Central Irrigation Company is submitting this letter to show support for the proposed 2024 Water Control & Metering Project being submitted for funding assistance through the UWCD. This project is an important project for water accountability and efficiency on the J Bar J Lateral. Water efficiency and metering is becoming ever more essential, especially given the recent drought conditions we face here in the west. Federal and local government agencies are starting to mandate metering for any new projects and are implementing laws and regulations that will require existing systems to be retrofitted with meters. J Bar J lateral desires to acqire meters for their system in order to meet these existing and future requirements. Metering on each turnout will also assist the ditch rider and clerk to more accurately report, monitor, and bill water usage. Having this data will also allow water users to stay informed about their water usage and how it relates to their water rights. It is anticipated that this project will result in as much as a 23% water savings due to having live metering data available to users and the ditch rider. For this system, this would equate to approximately 900 acre-feet per year.

The total cost estimate for the project is \$2,257,000. J Bar J has already secured a grant for a portion of the project from the Utah Secondary Metering Grant program in the amount of \$91,770, and a Utah Board of Water Resources loan in the amount of \$33, 430. We are also applying for UDAF Water Optimization program funds later this fall, and are currently applying through the Bureau of Reclamation's WaterSMART Grant opportunity. The following commitment is proposed for our lateral/company with the associated grant funds:

- Cost share of up to \$39,330 (J Bar J portion of the project)
- Funds to be available by time of construction and anticipated by Spring 2025 if grants are obtained and according to project schedules.
- There are no contingencies or constraints on the availability of funding or the commitment of these funds.
- We request further information and coordination as the project commences and the funding scenario is finalized.

We appreciate the opportunity to partner with the Uintah Water Conservancy District and Utah Department of Ag & Food as well as the possible funding assistance from the WaterSMART program. Thank you for this opportunity to collaborate, we are excited to hear what comes of the grant application.

Sincerely,

Quentin Johnson

President J Bar J Lateral