

# WaterSMART

SMALL-SCALE WATER EFFICIENCY PROJECTS

FOR FISCAL YEAR 2019

NO. BOR-DO-19-F005

**UINTA PIPELINE METERING & SCADA PROJECT**  
**UINTAH AND OURAY INDIAN IRRIGATION PROJECT**  
**OPERATION AND MAINTENANCE COMPANY**

IN ASSOCIATION WITH:  
BUREAU OF INDIAN AFFAIRS – FT. DUCHESNE IRRIGATION DIVISION  
UINTAH WATER CONSERVANCY DISTRICT

**FORT DUCHESNE, UINTAH COUNTY, UTAH**

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## TABLE OF CONTENTS

<b>1.</b>	<b>Technical Proposal .....</b>	<b>1</b>
1.1.	Executive Summary .....	1
1.2.	Background Data .....	1
1.3.	Project Location .....	2
1.4.	Technical Project Description .....	2
1.5.	Evaluation Criteria .....	3
1.5.1.	Evaluation Criterion A: Project Benefits .....	3
1.5.2.	Evaluation Criterion B: Planning Efforts Supporting the Project .....	4
1.5.3.	Evaluation Criterion C: Project Implementation.....	5
1.5.4.	Evaluation Criterion D: Nexus to Reclamation .....	6
1.5.5.	Evaluation Criterion E: Department of the Interior Priorities .....	6
<b>2.</b>	<b>Project Budget .....</b>	<b>9</b>
2.1.	Funding Plan And Letters of Commitment .....	9
2.2.	Budget Proposal.....	10
2.3.	Budget Narrative .....	11
2.3.1.	Salaries and Wages .....	11
2.3.2.	Fringe Benefits .....	12
2.3.3.	Travel .....	12
2.3.4.	Equipment .....	12
2.3.5.	Material and Supplies .....	12
2.3.6.	Contractual .....	13
2.3.7.	Third-Party In-Kind Contributions.....	14
2.3.8.	Environmental and Regulatory Compliance Costs.....	14
2.3.9.	Other Expenses .....	16
2.3.10.	Indirect Costs .....	16
<b>3.</b>	<b>Required Permits or Approvals .....</b>	<b>17</b>
<b>4.</b>	<b>Letters of Support .....</b>	<b>17</b>
<b>5.</b>	<b>Official Resolutions .....</b>	<b>18</b>
	<b>Appendix A. Project Budget .....</b>	<b>20</b>
	<b>Appendix B. Letters of Support &amp; Letters of Commitment .....</b>	<b>21</b>
	<b>Appendix C. Project Location Map.....</b>	<b>22</b>

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## 1. TECHNICAL PROPOSAL

### 1.1. EXECUTIVE SUMMARY

Start Date: November 2019

Applicant: Uintah and Ouray Indian Irrigation Project Operation and Maintenance Project (UIIP)

Partners: Bureau of Indian Affairs (BIA); Uintah Water Conservancy District (UWCD)

Location: Un-incorporated Uintah County near Ft. Duchesne, Uintah, Utah

Project Title: Uinta Pipeline Metering & SCADA Project

**Project Summary:** The project consists of installation of flow meters along irrigation laterals on the Uinta Pipeline to allow ditchriders and operators to more accurately account for flows, especially during dry years. A SCADA system will allow the UIIP and UWCD to monitor flows and track data over the season. This will fill a gap that is currently in the system with other pipelines in the area being metered and having working SCADA. Pressure and flow will be tracked through the proposed SCADA to keep water users and operators apprised of the flow rates and pressure fluctuations, allowing them to be more responsible in their usage and water turns. UWCD expects a large amount of time and fuel to be saved by having meters and SCADA compared to the current un-metered and manual monitoring situation.

Length of Time: Project anticipated to be completed through Winter 2019/Spring 2019

Completion Date: April 15, 2020

Federal Facility Location: Ft. Duchesne

### 1.2. BACKGROUND DATA

*As applicable, describe the source of water supply, the water rights involved, current water uses (e.g., agricultural, municipal, domestic, or industrial), the number of water users served, and the current and projected water demand. Also, identify potential shortfalls in water supply. If water is primarily used for irrigation, describe major crops and total acres served. In addition, describe the applicant's water delivery system as appropriate. For agricultural systems, please include the miles of canals, miles of laterals, and existing irrigation improvements (e.g., type, miles, and acres). For municipal systems, please include the number of connections and/or number of water users served and any other relevant information describing the system. If the application includes hydropower or energy efficiency elements, describe existing energy sources and current energy uses. Identify any*

*past working relationships with Reclamation. This should include the date(s), description of prior relationships with Reclamation, and a description of the project(s).*

The project is located to the North and East from Fort Duchesne, and west of the town of Gusher in Uintah County, Utah. The water rights are tribally held, with the UIIP owning the pipeline and the UWCD operating and managing the deliveries. The source of water is the Uinta River and the primary use is agriculture, with the majority being used to irrigate alfalfa and grass fields for hay production and grazing. The Uinta Pipeline and lateral system being proposed to receive metering and SCADA cover an area approximately 4 miles by 2 miles, with approximately 2,000 acres being irrigated. See attached Project Location Map in Appendix C for location of project in relation to river system and storage reservoirs.

### 1.3. PROJECT LOCATION

*Provide detailed information on the proposed project location or project area including a map showing the specific geographic location. For example, {project name} is located in {state and county} approximately {distance} miles {direction, e.g. northeast} of {nearest town}. The project latitude is {##°##'N} and longitude is {###°##'W}.*

See the Site Map in Appendix C illustrating the existing pipeline alignments and other features along with proposed metering and SCADA locations. Shapefiles and a Google Earth KMZ file will be included in the electronic submittal if possible. Coordinate system is in decimal degrees WGS 84. The project latitude is 40°20'16.35"N and longitude is 109°49'51.93"W.

### 1.4. TECHNICAL PROJECT DESCRIPTION

*The technical project description should describe the work in detail, including specific activities that will be accomplished. This description shall have sufficient detail to permit a comprehensive evaluation of the proposal. Please note, if the work for which you are requesting funding is a phase of a larger project, please only describe the work that is reflected in the budget and exclude description of other activities or components of the overall project.*

- *Identify the problems and needs*
- *Describe how the project is intended to address the problems and needs*
- *Identify the expected outcomes*

The Uinta Pipeline Metering and SCADA project builds upon previous improvements with some of the pipeline being metered and telemetry installed. The purpose and need for these improvements stem from the gap and lack of metering and SCADA and difficulty and effort required to manually check pressures and flow rates by observation of pivots, wheel lines, and flood streams. Accounting for this water has been difficult and while a total flow could be determined and some points along the way, there are many laterals and water users that do not get individually metered, making it difficult to hold certain water users accountable for water usage and seasonal deliveries. Some flood irrigation turnouts can greatly affect pressure on nearby wheelines and conflicts are often

arising. This project will address the water flow rate, flow volume over time, and pressures in the system so that UWCD staff can oversee the deliveries and adjust as necessary without having to manually run to the sites and estimate with rudimentary methods. The expected outcomes will be better management of water, more stability in pressures as water users can be held more accountable, and a more transparent system for both UIIP and UWCD. Overall water usage can be monitored through existing meters on main line and water conservation due to metering and SCADA can be measured by comparison from past years with similar source availability. Management costs can also be compared from pre-project conditions to post-project tabulation.

## 1.5. EVALUATION CRITERIA

*(See Section E.1. Technical Proposal: Evaluation Criteria for additional details, including a detailed description of each criterion and Subcriterion and points associated with each.) The evaluation criteria portion of your application should thoroughly address each criterion and subcriterion in the order presented to assist in the complete and accurate evaluation of your proposal. It is suggested that applicants copy and paste the evaluation criteria and subcriteria in Section E.1. Technical Proposal: Evaluation Criteria into their applications to ensure that all necessary information is adequately addressed*

### 1.5.1. EVALUATION CRITERION A: PROJECT BENEFITS

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*Up to **35 points** may be awarded based upon evaluation of the benefits that are expected to result from implementing the proposed project. This criterion considers a variety of project benefits, including the significance of the anticipated water management benefits and the public benefits of the project. This criterion prioritizes projects that modernize existing infrastructure in order to address reliability concerns, including making water available for multiple beneficial uses and resolving water related conflict in the region*

- *Describe the expected benefits and outcomes of implementing the proposed project.*
  - *What are the benefits to the applicant's water supply delivery system?*
  - *If other benefits are expected explain those as well. Consider the following:*
    - *Extent to which the proposed project improves overall water supply reliability*
    - *The expected geographic scope benefits from the proposed project (e.g., local, sub-basin, basin)*
    - *Extent to which the proposed project will increase collaboration and information sharing among water managers in the region*
    - *Any anticipated positive impacts/benefits to local sectors and economies (e.g., agriculture, environment, recreation, tourism)*
    - *Extent to which the project will complement work done in coordination with NRCS in the area (e.g., with a direct connection to the district's water supply). Describe any on-farm efficiency work that is currently being completed or is*

*anticipated to be completed in the future using NRCS assistance through EQIP or other programs.*

The benefits for UIIP and the water supply delivery system will be seen through a more transparent and accountable system with meters and SCADA telling the real story and giving accurate quantities of usage, flow rate, and pressure fluctuation. Measuring the delivery of irrigation water will promote conservation and wise-stewardship on the water users end. This stability and conservation will translate to other water users along the Uinta River system and this combined pipeline.

The information tracked and gathered with the SCADA and meters proposed will be utilized by UIIP and UWCD to share information with the specific water users experiencing problems (or creating the problems) which will reduce conflict, improve communication, and promote cooperation so that everyone get's their portion of water and in the needed pressure and time. Agriculture is the primary economy in this area, and with better managed water, this will promote better management in the cropland that it serves.

There is an ongoing potential for NRCS on-farm improvements to be made along the Uinta Pipeline, as several users are still utilizing flood irrigation. With a more accurate measurement and reporting resource, these users may find that to increase efficiency with the water they may be limited to, it would be a wise decision to move towards sprinkler irrigation. This would also increase production and boost the economy.

#### 1.5.2. EVALUATION CRITERON B: PLANNING EFFORTS SUPPORTING THE PROJECT

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*Up to **35 points** may be awarded based on the extent to which the proposed on-the-ground project is supported by an applicant's existing water management plan, water conservation plan, System Optimization Review (SOR), or identified as part of another planning effort led by the applicant. This criterion prioritizes projects that are identified through local planning efforts and meet local needs.*

*Describe how your project is supported by an existing planning effort.*

- *Does the proposed project implement a goal or address a need or problem identified in the existing planning effort?*
- *Explain how the proposed project has been determined as a priority in the existing planning effort as opposed to other potential projects/measures.*

UWCD staff and specifically their Instrumentation and Controls specialist has made specific plans for the needs on the Uinta Pipeline System. It has also been included in the Bureau of Indian Affairs Irrigation Division's improvement planning, although no current funding plan is available through the BIA at this time. The Ute Tribe Water Commission has also identified improvements for tribal water on the Uinta and Whiterocks River systems and are promoting the accountability and measurement of the Tribe's water resources.

This project has been identified by the UIIP as a priority project in their water delivery systems. The UWCD has a water conservation plan and includes the Indian Irrigation laterals as part of the

systems they oversee and support. In terms of metering and SCADA, the Uinta Pipeline is the most desirable and feasible project at this time for both the UIIP and UWCD. Other potential metering projects exist, however the partners are not as committed, do not have enough funding, or are not yet ready to partner on a project whereas the UIIP, BIA, and UWCD are all supportive and available to partner on this project.

### 1.5.3. EVALUATION CRITERION C: PROJECT IMPLEMENTATION

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*Up to **10 points** may be awarded based upon the extent to which the applicant is capable of proceeding with the proposed project upon entering into a financial assistance agreement. Applicants that describe a detailed plan (e.g., estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates) will receive the most points under this criterion. **Please also see section C.3.3. Length of Projects.***

- *Describe the implementation plan for the proposed project. Please include an estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates.*
- *Describe any permits that will be required, along with the process for obtaining such permits.*
- *Identify and describe any engineering or design work performed specifically in support of the proposed project.*
- *Describe any new policies or administrative actions required to implement the project.*
- *Describe how the environmental compliance estimate was developed. Have the compliance costs been discussed with the local Reclamation office?*

Implementation of the project will build upon previous work by UWCD staff to identify the priority areas and gaps in the current system for meters and SCADA. Upon an award or notification of being selected, further detailed project tasks will be completed in cooperation with UWCD and UIIP, as well as BIA Irrigation staff. The material list and metering/SCADA components will be updated and new cost quotes obtained. The environmental work is anticipated to be handled through the BIA, and a categorical exclusion is anticipated since pipeline is already in place and disturbance will be limited to existing pipeline disturbance. The NEPA process will be completed as required for the specified meter installation and SCADA elements. Environmental compliance has been generally discussed with Reclamation along with prior WaterSMART grant applications. BIA staff have also been consulted on these types of projects and have a process to complete the NEPA for the actions being proposed.

Engineering design will mesh with UWCD standards and a bid package will be created for soliciting contractors for installation of the meters and SCADA. Preliminary engineering and specifications have been completed by UWCD and recently updated by applicant's consultants. The current UIIP and UWCD relationships and policies will remain in effect, with this project adding to the communication and record keeping that both parties desire.

See the proposed schedule under the cost estimate in Appendix A.

#### 1.5.4. EVALUATION CRITERON D: NEXUS TO RECLAMATION

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*Up to **10 points** may be awarded based on the extent that the proposal demonstrates a nexus between the proposed project and a Reclamation project or activity. Describe the nexus between the proposed project and a Reclamation project or activity, including:*

- *Is the proposed project connected to a Reclamation project or activity? If so, how? Please consider the following:*
  - *Does the applicant receive Reclamation project water?*
  - *Is the project on Reclamation project lands or involving Reclamation facilities?*
  - *Is the project in the same basin as a Reclamation project or activity?*
  - *Will the proposed work contribute water to a basin where a Reclamation project is located?*
- *Will the project benefit any tribe(s)?*

This project is connected to the Combined Pipeline project that was done as part of the West Side Combined Canal Salinity Project, a Reclamation Salinity Control Project. The combined canal project created a single diversion structure on the Uinta River and flow is diverted from an open channel canal to a settling pond where it enters the Uinta Pipeline. Facilities are owned in part by UWCD and the pipeline is owned by UIIP, with funding support through Reclamation. Reclamation has been very active in the Uintah Basin.

This project directly benefits the Ute Indian Tribe and UIIP consists in part of 4 board members who are appointed by the Ute Tribe Business Committee to oversee the O&M of the Indian Irrigation project infrastructure and use of tribal water. Non-Indian users who own tribal water shares make up a portion of the UIIP and this particular project, although water is delivered under the Indian water rights and assessments go to the UIIP and ultimately the Ute Tribe. Better quantification, data tracking, and system efficiencies will benefit the tribe's water resource goals and objectives.

#### 1.5.5. EVALUATION CRITERON E: DEPARTMENT OF THE INTERIOR PRIORITIES

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*Up to **10 points** may be awarded based on the extent that the proposal demonstrates that the project supports the Department of the Interior priorities. Please address those priorities that are applicable to your project. It is not necessary to address priorities that are not applicable to your project. A project will not necessarily receive more points simply because multiple priorities are addressed. Points will be allocated based on the degree to which the project supports one or more of the priorities listed, and whether the connection to the priorities is well supported in the proposal.*

1. *Creating a conservation stewardship legacy second only to Teddy Roosevelt.*
  - a. *Utilize science to identify best practices to manage land and water resources and adapt to changes in the environment;*

SCADA and metering elements in the proposed project include pressure transducer sensors, data loggers, solar panels, SCADA, and links to automated valves previously installed; these improvements are a perfect example of utilization of modern science for managing our water resources.

- b. Examine land use planning processes and land use designations that govern public use and access;*

Project lies primarily in private property and Ute Tribal Lands.

- c. Revise and streamline the environmental and regulatory review process while maintaining environmental standards;*

These projects will utilize a streamlined and simplified approach for NEPA and if possible, utilize categorical exclusions and design methods to avoid impacts to wetlands, cultural features, or jurisdictional waters. Proper process and permits will be obtained.

- d. Review DOI water storage, transportation, and distribution systems to identify opportunities to resolve conflicts and expand capacity;*

Reclamation assisted facilities such as the Combined Canal Diversion, West Side Combined Pipeline project (Salinity Funded), and other irrigation infrastructure in the Uintah Basin contribute to UWCD and UIIP's ability to deliver, store, and manage water. Increasing efficiency helps resolve conflicts as well as expand capacity of the systems being improved.

- e. Foster relationships with conservation organizations advocating for balanced stewardship and use of public lands;*

The combined canal sends water to the Bullock and Cottonwood reservoirs, which have public access for a fishery. Utah Division of Wildlife Resources. Efficiencies in the system will allow a measured and more consistent amount of water to be passed down both the Uinta River and also the canal that feeds these recreational and irrigation storage reservoirs.

- f. Identify and implement initiatives to expand access to DOI lands for hunting and fishing;*

While there are not specific DOI properties, the above-mentioned fisheries and reservoirs are local hot-spots for fishing. The project would benefit an existing community fishery designed for family recreation.

- g. Shift the balance towards providing greater public access to public lands over restrictions to access.*

The success of the above-mentioned reservoirs increases public access and the quality of the experience due to conserved and more consistent water deliveries. Also tribal water and fishing values are improved.

2. *Utilizing our natural resources*

- a. *Ensure American Energy is available to meet our security and economic needs;*
- b. *Ensure access to mineral resources, especially the critical and rare earth minerals needed for scientific, technological, or military applications;*
- c. *Refocus timber programs to embrace the entire 'healthy forests' lifecycle;*
- d. *Manage competition for grazing resources.*

Solar powered telemetry and SCADA is one way that renewable energy is being utilized for this project. The Uintah Basin provides an important economic resource with the oil and gas fields herein. The efficiency of the Uinta Pipeline irrigated lands will allow farmers to put up more hay, establish and maintain quality forage for cattle and other livestock, which in turn reduces competition and shortfalls for grazing in the area.

3. *Restoring trust with local communities*

- a. *Be a better neighbor with those closest to our resources by improving dialogue and relationships with persons and entities bordering our lands;*
- b. *Expand the lines of communication with Governors, state natural resource offices, Fish and Wildlife offices, water authorities, county commissioners, Tribes, and local communities.*

The Uinta Pipeline Metering & SCADA project is closely tied to the Ute Tribe and tribal irrigation rights. All of the water delivered is Ute tribal water, with tribal duties taking priority during times of shortfalls and measuring of this water will allow an accurate disbursement for Indian and non-Indian water users to benefit from. Uintah County Water Conservancy District is very supportive of the project and it follows their goals for efficiency in irrigation deliveries. The Ute Tribe Water Commission and tribal members on the UIIP board are also fully supportive of this project.

4. *Striking a regulatory balance*

- a. *Reduce the administrative and regulatory burden imposed on U.S. industry and the public;*
- b. *Ensure that Endangered Species Act decisions are based on strong science and thorough analysis.*

These projects will have a simplified level of NEPA involved, with some possibility of T&E species in portions of the Uinta Pipeline, which has been permitted previously. Finding balance in the projects and their permitting will be a goal of UIIP, BIA, and UWCD, along with their consultants.

5. *Modernizing our infrastructure*

- a. *Support the White House Public/Private Partnership Initiative to modernize U.S. infrastructure;*
- b. *Remove impediments to infrastructure development and facilitate private sector efforts to construct infrastructure projects serving American needs/*
- c. *Prioritize DOI infrastructure needs to highlight:*
  - i. *Construction of infrastructure;*
  - ii. *Cyclical maintenance;*
  - iii. *Deferred maintenance.*

UIIP is an irrigation company tasked by the Ute Tribe that has partnered with a county entity (UWCD) and Federal entity (BIA) to modernize the Uinta Pipeline irrigation infrastructure. Maintaining and improving the irrigation systems in the UWCD and UIIP service areas is a priority for both public and private groups in the Uintah Basin.

## 2. PROJECT BUDGET

### 2.1. FUNDING PLAN AND LETTERS OF COMMITMENT

*Describe how the non-Federal share of project costs will be obtained. Reclamation will use this information in making a determination of financial capability.*

*Project funding provided by a source other than the applicant shall be supported with letters of commitment from these additional sources. This is a **mandatory requirement**. Letters of commitment shall 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*

*Commitment letters from third party funding sources should be submitted with your project application. If commitment letters are not available at the time of the application submission, please provide a timeline for submission of all commitment letters. 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.*

The UIIP will send a copy of their Letter of Commitment after a board meeting on May 6<sup>th</sup>, along with their official resolution. The UWCD has provided a Letter of Support for the project and this is included in Appendix B of this application. They will provide in-kind assistance for the completion of the project and ongoing support, although this value is not calculated or included at this time.

Reclamation will not make funds available for an award under this FOA until the recipient has secured non-Federal cost share. Reclamation will execute a financial assistance agreement once non-Federal funding has been secured or Reclamation determines that there is sufficient evidence and likelihood that non-Federal funds will be available to the applicant subsequent to executing the agreement.

Please identify the sources of the non-Federal cost share contribution for the project, including:

- Any monetary contributions by the applicant towards the cost-share requirement and source of funds (e.g., reserve account, tax revenue, and/or assessments)
- Any costs that will be contributed by the applicant
- Any third party in-kind costs (i.e., goods and services provided by a third party)
- Any cash requested or received from other non-Federal entities.
- Any pending funding requests (i.e. grants or loans) that have not yet been approved and explain how the project will be affected if such funding is denied.

In addition, please identify whether the budget proposal includes any project costs that have been or may be incurred prior to award. For each cost, describe:

- The project expenditure and amount
- The date of cost incurrence
- How the expenditure benefits the Project

The total estimated project cost is \$197,000. The UIIP has funds available to provide the non-Federal cost share. As stated previously, there are potential in-kind contributions from both UWCD and BIA but those have not been quantified or included in this application at this time. The project will likely stay on hold if this WaterSMART grant is not awarded. Minor project costs and in-kind labor has been incurred prior to this application, and are not being considered or asked for reimbursement at this time. These have greatly benefited the project for scoping and estimating purposes.

## 2.2. BUDGET PROPOSAL

The total project cost (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, that are necessary to complete the project.

Table 1. – Total Project Cost Table

<b>SOURCE</b>	<b>AMOUNT</b>
Costs to be reimbursed with the requested Federal Funding	\$75,000
Costs to be paid by the applicant	\$122,000
Value of third party contributions (not tabulated at this time)	\$0
<b>Total Project Costs</b>	<b>\$197,000</b>

*The budget proposal should include detailed information on the categories listed below and must clearly identify **all** items of cost, including those that will be contributed as non-Federal cost share by the applicant (required and voluntary), third-party in-kind contributions, and those that will be covered using the funding requested from Reclamation, and any requested pre-award costs. Unit costs must be provided for all budget items including the cost of services or other work to be provided by consultants and contractors. Applicants are strongly encouraged to review the procurement standards for Federal awards found at 2 CFR §200.317 through §200.326 before developing their budget proposal.*

*It is also strongly advised that applicants use the budget proposal format shown below in Table 2 or a similar format that provides this information. If selected for award, successful applicants must submit detailed supporting documentation for all budgeted costs. Additional information regarding the types of documentation that will be necessary to support budgeted costs can be found in Attachment 1 to this FOA.*

**Note: The costs of preparing bids, proposals, or applications on potential Federal and non-Federal awards or projects, including the development of data necessary to support the non-Federal entity's application are not eligible project costs and should not be included in the budget proposal ( 2 CFR §200.460).**

## 2.3. BUDGET NARRATIVE

*Submission of a budget narrative is mandatory. An award will not be made to any applicant who fails to fully disclose this information. The budget narrative provides a discussion of, or explanation for, items included in the budget proposal. The types of information to describe in the narrative include, but are not limited to, those listed in the following subsection. Costs, including the valuation of third-party in-kind contributions, must comply with all applicable cost principles contained in 2 CFR §200.*

### 2.3.1. SALARIES AND WAGES

*Indicate the Project Manager and other key personnel by name and title. The Project Manager must be an employee or board member of the applicant. Other personnel should be indicated by title alone. For all positions, indicate salaries and wages, estimated hours or percent of time, and rate of compensation. The labor rates must identify the direct labor rate separate from the fringe rate or fringe cost for each category. All Labor estimates must be allocated to specific tasks as outlined in the applicant's technical project description. Labor rates and proposed hours shall be displayed for each task.*

*The budget proposal and narrative should include estimated hours for compliance with reporting requirements, including final project and evaluation. Please see Section F.3. Program Performance. Generally, salaries of administrative and/or clerical personnel will be included as a portion of the stated indirect costs. If these salaries can be adequately documented as direct costs, they should be included in this section; however, a justification should be included in the budget narrative.*

See Contractual rates. The salaries and/or reimbursements of UIIP, BIA or UWCD staff are not included in this budget nor are they anticipated to be a part of it.

### 2.3.2. FRINGE BENEFITS

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*Indicate rates/amounts, what costs are included in this category, and the basis of the rate computations. Federally approved rate agreements are acceptable for compliance with this item.*

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

### 2.3.3. TRAVEL

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*Include the purpose of each anticipated trip, destination, number of persons traveling, length of stay, and all travel costs including airfare (basis for rate used), per diem, lodging, and miscellaneous travel expenses. For local travel, include mileage and rate of compensation.*

Travel costs will be part of the contracted portion of the project.

### 2.3.4. EQUIPMENT

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*If equipment will be purchased, itemize all equipment valued at or greater than \$5,000. For each item, identify why it is needed for the completion of the Project and how the equipment was priced. Note: if the value is less than \$5,000, the item should be included under materials and supplies. If equipment is being rented, specify the number of hours and the hourly rate. Local rental rates are only accepted for equipment actually being rented or leased. If the applicant intends to use their own equipment for the purposes of the project, the proposed usage rates should fall within the equipment usage rates outlined by the United States Army Corps of Engineers (USACE) within their Construction Equipment Ownership and Operating Expense Schedule (EQ 1110-1-8) at [www.publications.usace.army.mil/USACE-Publications/Engineer-Pamphlets/u43545q/313131302D312D38](http://www.publications.usace.army.mil/USACE-Publications/Engineer-Pamphlets/u43545q/313131302D312D38).*

*Note: If the equipment will be furnished and installed under a construction contract, the equipment should be included in the construction contract cost estimate.*

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

### 2.3.5. MATERIAL AND SUPPLIES

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*Itemize supplies by major category, unit price, quantity, and purpose, such as whether the items are needed for office use, research, or construction. Identify how these costs were estimated (i.e., quotes, engineering estimates, or other methodology). Note: If the materials/supplies will be furnished and installed under a contract, the equipment should be included in the construction contract cost estimate.*

Materials and supplies will be part of the contracted portion of project and will be documented as required.

### 2.3.6. CONTRACTUAL

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*Identify all work that will be accomplished by consultants or contractors, including a breakdown of all tasks to be completed, and a detailed budget estimate of time, rates, supplies, and materials that will be required for each task. For each proposed contract, identify the procurement method that will be used to select the consultant or contractor and the basis for selection. Please note that all procurements with an anticipated aggregate value that exceeds the Micro-purchase Threshold (currently \$10,000) must use a competitive procurement method (see 2CFR §200.320 – Methods of procurement to be followed). Only contracts for architectural/engineering services can be awarded using a qualifications-based procurement method. If a qualifications-based procurement method is used, profit must be negotiated as a separate element of the contract price. See 2 CFR §200.317 through §200.326 for additional information regarding procurements, including required contract content.*

Jones & DeMille Engineering will be contracted to perform the design and possibly some construction observation for this project. They have prepared the funding application and will prepare bid packages for the project. They may monitor progress during construction to provide quality assurance with plans and specifications, otherwise UWCD and UIIP staff will be present during these installations. The table below includes the design engineering laborer classifications, billing rates and estimated number of hours.

Table 1. Design Engineering Hours & Rates for Uinta Pipeline Metering & SCADA Project

Role/Position	Rate	Hours	Total
Project Manager II	\$150.00	10	\$1,500.00
Project Engineer	\$110.00	15	\$1,650.00
Graduate Engineer	\$90.00	30	\$2,700.00
CAD Technician	\$65.00	20	\$1,300.00
Construction Engineering Technician	\$100.00	78	\$7,800.00
Survey	\$125.00	4	\$500.00
Administrative Assistant	\$55.00	10	\$550.00
<b>Total</b>		<b>167</b>	<b>\$16,000.00</b>

A contractor will be procured to perform the construction tasks on the project. However it is possible that the UIIP and UWCD will perform some of the construction tasks to minimize the amount of savings UIIP contributes to the project.

#### 2.3.7. THIRD-PARTY IN-KIND CONTRIBUTIONS

*Identify all work that will be accomplished by third-party contributors, including a breakdown of all tasks to be completed, and a detailed budget estimate of time, rates, supplies, and materials that will be required for each task. Third-party in-kind contributions, including contracts, must comply with all applicable administrative and cost principles criteria, established in 2 CFR Part 200, available at [www.ecfr.gov](http://www.ecfr.gov), and all other requirements of this FOA.*

Environmental costs are included in the project. The NEPA work is proposed to be done through BIA Irrigation and efficiencies have already been realized in this method. Metering will not require additional disturbance from the pipeline already in place. Approximately 3% was assumed and has been budgeted, see Appendix A.

#### 2.3.8. ENVIRONMENTAL AND REGULATORY COMPLIANCE COSTS

*Prior to awarding financial assistance, Reclamation must first ensure compliance with Federal environmental and cultural resources laws and other regulations (“environmental compliance”). Every project funded under this program will have environmental compliance costs associated with activities undertaken by Reclamation and the recipient.*

*To Estimate environmental compliance costs, please contact compliance staff at your local Reclamation Office for additional details regarding type and costs of compliance that may be required for your project. Note, support for you compliance costs estimate will be considered during review of your application. Contact the Program Coordinator (see Section G. Agency Contacts) for Reclamation contact information regarding compliance costs and requirements.*

*Environmental compliance costs are considered project costs and must be included as a line item in the project budget and will be cost shared accordingly.*

*The amount of the line item should be based on the actual expected environmental compliance costs for the project, including Reclamation's cost to review environmental compliance documentation. Environmental compliance costs will vary based on project type, location, and potential impacts to the environment and cultural resources.*

*How environmental compliance activities will be performed (e.g., by Reclamation, the applicant, or a consultant) and how the environmental compliance funds will be spend, will be determined pursuant to subsequent agreement between Reclamation and the applicant. The amount of funding required for Reclamation to conduct any environmental compliance activities, including Reclamation's cost to review environmental compliance documentation, will be withheld from the Federal award amount and placed in an environmental compliance account to cover such costs. If any portion of the funds budgeted for environmental compliance is not required for compliance activities, such funds may be reallocated to the project, if appropriate.*

*Costs associated with environmental and regulatory compliance must be included in the budget. Compliance costs include costs associated with any required documentation of environmental compliance, analyses, permits, or approvals. Applicable Federal environmental laws could include NEPA, ESA, NHPA, CWA, and other regulations depending on the project. Such costs may include, but are not limited to:*

- The cost incurred by Reclamation to determine the level of environmental compliance required for the project*
- The cost incurred by Reclamation, the recipient, or a consultant to prepare any necessary environmental compliance documents or reports*
- The cost incurred by Reclamation to review any environmental compliance documents prepared by a consultant*
- The cost incurred by the recipient in acquiring any required approvals or permits, or in implementing any required mitigation measures*

Environmental costs are included in the project. The NEPA work is proposed to be done through BIA Irrigation and efficiencies have already been realized in this method. Metering will not require additional disturbance from the pipeline already in place. Approximately 3% was assumed and has been budgeted, see Appendix A. The proposed project is designed to minimize environmental impacts.

Impacts to wildlife habitat will be minimized by installing meters on the pipeline within existing disturbed areas, and timing restrictions may be applied to prevent disturbance during sensitive time periods.

The USFWS IPaC system was searched and the following species were identified as potentially occurring within the area:

- Mexican spotted owl
- Yellow-billed cuckoo
- Bonytail Chub
- Colorado pikeminnow
- Humpback Chub
- Razorback sucker
- Ute Ladies'-tresses
- Black-footed Ferret (Experimental Population, Non-Essential)
- Canada Lynx

During the project, construction will be confined to existing pipeline corridors and a few adjacent staging areas as well as agricultural land and roadway right-of-ways, no impacts to these plant or animal species is expected. Once design and construction plans are complete, a more thorough analysis will be performed.

A wetland delineation may be required if deemed necessary during design and BIA site visits. Once this is completed, any impacts will be evaluated and all necessary permits will be acquired.

It is assumed that a cultural resource survey was conducted during original pipeline and meter/SCADA installation, with SHPO consultation being part of that effort.

There are no known archeological sites in area of the project.

The project will not adversely affect low income or minority populations, but will benefit the local agricultural community by increasing irrigation water delivery efficiency.

The project will not affect access to tribal lands or sites.

Best management practices will be applied to prevent the spread or establishment of noxious weeds or invasive species.

#### 2.3.9. OTHER EXPENSES

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*Any other expenses not included in the above categories shall be listed in this category, along with a description of the item and why it is necessary. No profit or fee will be allowed.*

Not Included.

#### 2.3.10. INDIRECT COSTS

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*Indirect costs are costs incurred by the applicant for a common or joint purpose that benefit more than one activity of the organization and are not readily assignable to the activities specifically benefitted without undue effort. Costs that are normally treated as indirect costs include, but are not limited to, administrative salaries and fringe benefits associated with overall financial and organizational administration; operation and maintenance costs for facilities and equipment; and,*

*payroll and procurement services. If indirect costs will be incurred, identify the proposed rate, cost base, and proposed amount for allowable indirect costs based on the applicable cost principles for the applicant's organization. It is not acceptable to simply incorporate indirect rates within other direct cost line items.*

*If the applicant has never received a Federal negotiated indirect cost rate, the budget may include a de minimis rate of up to 10 percent of modified total direct costs. For further information on modified total direct costs, refer to 2 CFR §200.68 available at [www.ecfr.gov](http://www.ecfr.gov).*

*If the applicant does not have a federally approved indirect cost rate agreement and is proposing a rate greater than the de minimis 10 percent rate, include the computational basis for the indirect expense pool and corresponding allocation base for each rate. Information on "Preparing and Submitting Indirect Cost Proposals" is available from Interior, the National Business Center, and Indirect Cost Services at [www.doi.gov/ibc/services/finance/indirect-cost-services](http://www.doi.gov/ibc/services/finance/indirect-cost-services). If the proposed project is selected for award, the recipient will be required to submit an indirect cost rate proposal with their cognizant agency within 3 months of award.*

**Not Included.**

### **3. REQUIRED PERMITS OR APPROVALS**

*Applicants must state in the application whether any permits or approvals are required and explain the plan for obtaining such permits or approvals.*

*Note that the improvements to Federal facilities that implemented through any project awarded funding through this FOA must comply with additional requirements. The Federal government will continue to hold title to the federal facility and any improvement that is integral to the existing operations of that facility. Please see P.L. 111-11, Section 9504(a)(3)(B). Reclamation may also require additional reviews and approvals prior to award to ensure that any necessary easements, land use authorizations, or special permits can be approved consistent with the requirements of 43 CFR Section 429, and that the development will not impact or impair project operations or efficiency.*

Most of the work will be done on private property or in the existing pipeline easements. All environmental compliance permits will be obtained in accordance to NEPA requirements. Final approval for the metering and SCADA project will follow NEPA work and appropriate funding requirements. BIA will be anticipated as the lead agency during NEPA process.

### **4. LETTERS OF SUPPORT**

*Please include letters from interested stakeholders supporting the proposed project. To ensure your proposal is accurately reviewed, please attach all letters of support/partnership letters as an appendix. Letters of support received after the application deadline for this FOA will not be considered in the evaluation of the proposed project.*

A letter of support from the UWCD is included in Appendix B.

## 5. OFFICIAL RESOLUTIONS

*Include an official resolution adopted by the applicant'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 FOA, 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*
- *The capability of the applicant to provide the amount of funding and/or in-kind contributions specified in the funding plan*
- *That the applicant 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. If the applicant is unable to submit the official resolution by the application deadline because of the timing of board meetings or other justifiable reasons, the official resolution may be submitted up to 30 days after the application deadline.***

The UIIP board will meet on May 6<sup>th</sup> to sign official resolution and send to Reclamation within 30 days of application submittal.

**OFFICIAL RESOLUTION  
OF THE  
UINTAH AND OURAY INDIAN IRRIGATION PROJECT OPERATION  
AND MAINTENANCE COMPANY**

**RESOLUTION # 1**

**WHEREAS**, the United States Department of the Interior, Bureau of Reclamation has announced the *WaterSMART Water and Energy Efficiency Grants* in order to prevent water supply crises and ease conflict in the western United States, and has requested proposals from eligible entities to be included in the WaterSMART Program, and

**WHEREAS**, the Uintah and Ouray Indian Irrigation Project Operation and Maintenance Company (UIIP) has need for funding to complete an irrigation project that will install metering and SCADA so that water can be conserved, measured, and efficiently delivered to the water users on the Uinta Pipeline.

**NOW, THEREFORE, BE IT RESOLVED** that the UIIP Board of Directors agrees and verifies that:

1. The application has been reviewed and supports the application submitted;
2. The UIIP is capable of providing the amount of funding as specified in the funding plan;
3. If selected for a WaterSMART Grant, the applicant will work with Reclamation to meet established deadlines for entering into a cooperative agreement; and
4. The Company Official signing this document has the legal authority to enter into this agreement.

DATED: \_\_\_\_\_

SIGNED: \_\_\_\_\_

NAME: Dan Larsen  
TITLE: Chairman, UIIP

ATTEST: \_\_\_\_\_

APPENDIX A. PROJECT BUDGET

**Owner:** Uintah and Ouray Indian Irrigation Project Operation and Maintenance Company  
**Project:** Uinta Pipeline Metering & SCADA Project  
**Today's Date:** 4/23/2019



<b>CONCEPT COST UINTA PIPELINE METERING &amp; SCADA PROJECT</b>					
<b>Item No.</b>	<b>Item Description</b>	<b>Unit</b>	<b>Estimated Quantity</b>	<b>Unit Price</b>	<b>Price</b>
1-1	MOBILIZATION	LUMP	1	\$ 10,000	\$ 10,000
1-2	METERS/MATERIALS	LUMP	1	\$ 80,000	\$ 80,000
1-3	INSTALLATION	EACH	13	\$ 5,000	\$ 65,000
1-4	SURVEY, DESIGN/CONSTRUCTION ENGINEERING, LEGAL	LUMP	1	\$ 16,000	\$ 16,000
1-5	ENVIRONMENTAL COMPLIANCE	%	3%	\$ 6,000	\$ 6,000
1-6	CONTINGENCY & ITEMS NOT ESTIMATED	%	10%	\$ 20,000	\$ 20,000
<b>TOTAL CONCEPT PROJECT COST</b>					<b>\$ 197,000</b>

Project Funding Award Notification:	Jul-19
Project Pre-Design Scoping	May-19
Preliminary Engineering and Environmental Tasks:	July - August 2019
o Plan Development	
o Cultural, T&E, wetland surveys	
Finalize Design & Permitting:	August - October 2019
o Waters permitting, finalize Categorical Exclusion	
o Connection details, telemetry specs	
o Final drawings and specification review	
Construction of Uinta Pipeline Improvements:	November 2019 - March 2020
o Clearing and excavation	
o Install flow meters	
o Install telemetry/SCADA elements	
Final Project Closeout & Begin Performance Measures:	Apr-20

APPENDIX B. LETTERS OF SUPPORT & LETTERS OF COMMITMENT

# Uintah Water Conservancy District

"Steinaker Dam"

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

"Red Fleet Dam"

April 24, 2019

Bureau of Reclamation  
Denver, CO  
FOA BOR-DO-19-F005

## **RE: UIIP Uinta Pipeline Metering & SCADA Project – Letter of Support from Uintah Water Conservancy District**

Grant Application Review Committee:

The Uintah Water Conservancy District is submitting a letter of support for the Uinta Pipeline Metering & SCADA Project being proposed by the Uintah & Ouray Indian Irrigation Project O&M Company (UIIP). The UWCD staff manage and operate the Uinta Pipeline along with several other irrigation systems across the Uintah Basin. Our staff are often spread out with many different responsibilities and demands. This project will greatly help the UWCD field staff, UIIP, and individual water users to track their usage, have real time data for flows, and the benefits that come from metering and SCADA systems that work. SCADA is already being utilized in other portions of the systems we manage and operate; and the benefits are clearly worth the effort and funding.

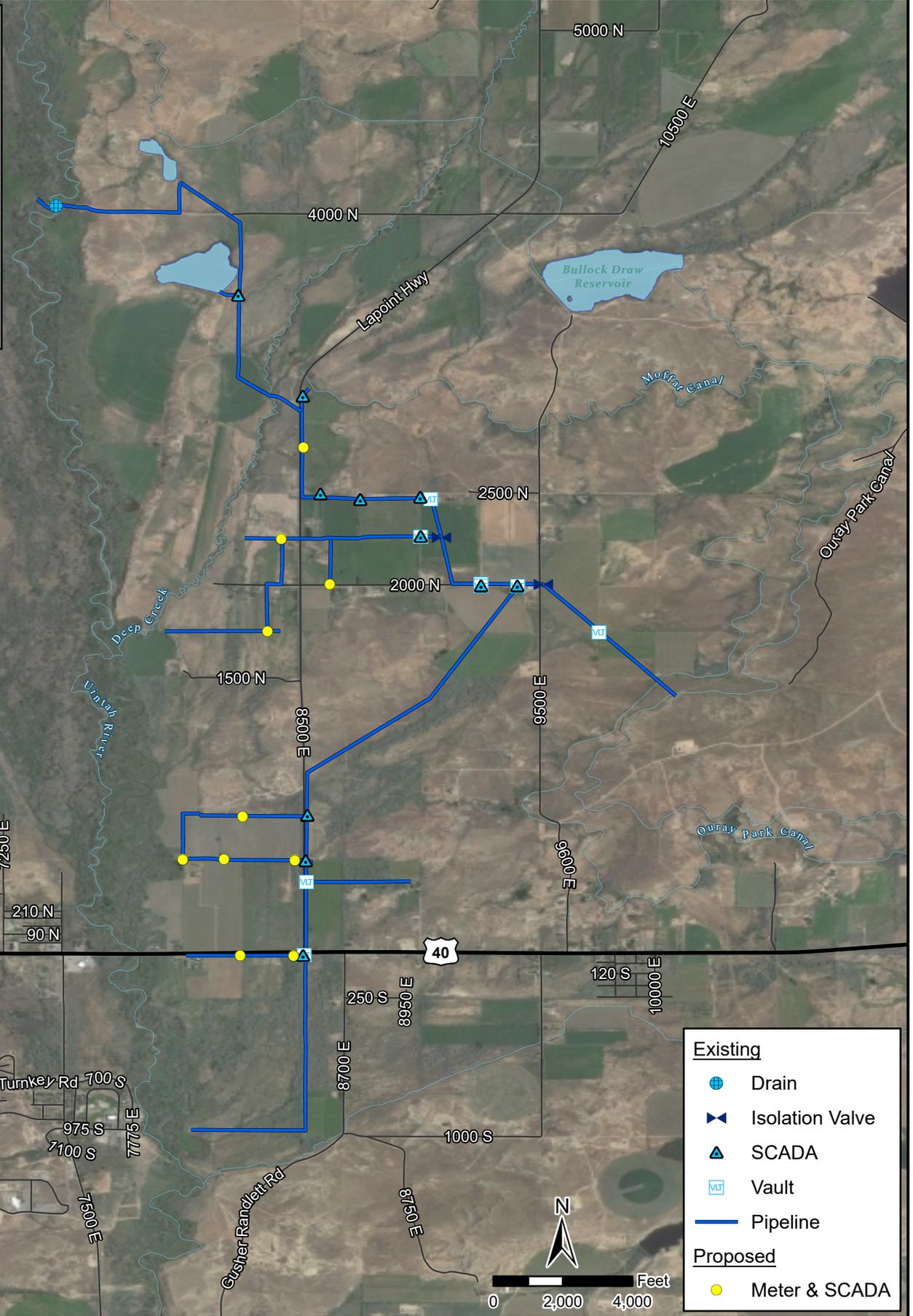
We recommend this project to the Bureau of Reclamation as a viable use of grant funds and pledge our support for UIIP for this endeavor. Our field staff have helped develop the price estimates, material lists, locations, and SCADA needs that support this application and are excited to have these improvements being considered. Please contact us with further questions and any other required information.

Sincerely,



William Merkley  
General Manager  
Uintah Water Conservancy District

APPENDIX C. PROJECT LOCATION MAP



Existing	
	Drain
	Isolation Valve
	SCADA
	Vault
	Pipeline
Proposed	
	Meter & SCADA



**Jones & DeMille Engineering**

- Shaping the Quality of Life -  
800.748.5275 www.jonesanddemille.com

**Uintah and Ouray Indian Irrigation Project Operation and Maintenance Company (UIIP)**

**Uinta Pipeline Metering & SCADA Project**  
**Proposed Upgrade Overview - WaterSMART Application**

Map Name: C:\Users\ShareFile\Shared With Me\2019\UIIP\Uinta Pipeline\GIS\Projects\Design\DEV\_UIIP\_2019.aprx - Exh\_UIIP\_Meters\_SCADA\_8.5x11  
Project Number: DEV-2019      Drawn by: JEM 04-19      Last Edit: 04/23/2019

Uintah County

Scale: 1" = 4,000'

**1**