Bureau of Reclamation WaterSMART
Small-Scale Water Efficiency Projects

Department of Interior, Bureau of Reclamation,
Water Resources and Planning Office
Funding Opportunity No: R24AS00059
Application Period 3

Applicant - City of Moscow – Public Works Department
Advanced Metering Infrastructure Project – Beta Initial Deployment (Phase 2)

City of Moscow
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APPENDIX

TABLES AND FIGURES

LIST OF ACRONYMS

AMI	Advanced Metering Infrastructure
AMR	Automated Meter Reading
City	City of Moscow
CEJST	Climate and Economic Justice Screening Tool
DCU	Data Collection Unit
GIS	Geographic Information System
GPS	Global Positioning System
GWMP	Groundwater Management Plan
IDWR	Idaho Department of Water Resources
IPaC	Information and Planning Consultation
MDMS	Mobile Data Management System
NOFO	Notice of Funding Opportunity
NEPA	National Environment Policy Act
NRCS	Natural Resources Conservation Service
PBAC	Palouse Basin Aquifer Committee
RFP	Request for Proposals
UI	University of Idaho
WDOE	Washington Department of Ecology

SECTION 1: TECHNICAL PROPOSAL AND EVALUATION CRITERIA

1.1 Executive Summary

Date:	January 10, 2025	**County:**	Latah County
Applicant Name:	City of Moscow	**State:**	Idaho
City:	Moscow	**Applicant Category:**	Category A

The City of Moscow (City), in Latah County, Idaho, is planning the "Beta Initial Deployment" (Beta) which is the second phase of a multi-phase project that will ultimately result in the complete transition to an Advanced Metering Infrastructure (AMI) system. The Beta phase includes purchasing 500 new AMI meters of various sizes to be installed throughout Moscow by City Water Department staff. These meters will be tested for connectivity with the system's interfaces, representing basic meter data management system (MDMS) functionality and integration with a customer portal. New AMI meters will enhance the City's ability to control and minimize water loss in residential and commercial areas, quickly identify and respond to leaks, usage spikes, and provide customers with real-time water usage data through an online portal. This project will conserve and better manage our declining water supply while offering greater transparency in water services to the community. In particular, this water conservation project is critical to addressing the declining Palouse Basin Aquifer, which is the sole drinking water source for over 80,000 local residents. The Palouse Basin Aquifer Committee (PBAC) is a consortium of public entities working together to ensure a sustainable long-term quality water supply for the Palouse Basin region. AMI is a high priority in PBAC's Alternative Water Supply Analysis Report, targeting the need for an additional 15% conservation rate to the existing goal in order to extend the aquifer's lifespan. Currently, the region's water demand exceeds the aquifer's recharge rate, making AMI technology essential to reducing Moscow's impact and ensuring the region's water security and resilience. The project is scheduled to start in October 2025 and will take 12 to 14 months to complete with a closeout date of January 2027. The City has not partnered with any other agency on this project, and it is not located on a federal facility.

1.2 Project Location

The project is located in the City of Moscow, in the north-central region of Idaho, also known as the Idaho panhandle. Moscow is the county seat for Latah County and the City limits borders Whitman County, Washington. Geographically, Moscow is situated 32 miles north of Lewiston, Idaho, 7 miles east of Pullman, Washington, approximately 85 miles south of Spokane, Washington, and 125 miles east of Walla Walla, Washington. Moscow's coordinates are 46° 43' 54.1380" N latitude and 116° 59' 59.7804" W longitude. See **Figure 1.**

Latah and Whitman counties are referred to as the "Palouse," renowned for its highly productive farmland on beautiful rolling hills. The area produces a large share of wheat, lentils, peas, oats and barley for the United States. Moscow and Pullman are situated in the middle of the Palouse

Groundwater Basin, which is the aquifer that spans under parts of eastern Washington and northern Idaho, see **Figure 2**.

Moscow is also home to the University of Idaho (UI), Idaho's land-grant institution and primary research university established in 1889. Moscow is known as a college town with primary industries in education and healthcare. UI has 2,321 full-time employees with an average annual enrollment of 11,849 students. The population of Moscow, as estimated by the American Community Survey for 2021, is 26,865 with a total area of 6.85 square miles which are the project boundaries as shown in **Appendix 1. Water Distribution Map.**

Figure 1. Moscow Location Map

1.3 Technical Project Description

1.3.1 Technical Aspects and Scope of Work

The City's project is to complete the "Beta Initial Deployment", which is the second phase of an overall City-wide AMI infrastructure project. This deployment will involve the installation and testing of 500 new AMI meters and the balance of systems interfaces representing basic MDMS functionality, including integration with a customer portal. The Beta Initial Deployment of meters is expected to be geographically dispersed throughout the project area and will incorporate multiple sizes and types of meters with a total of 500 to be purchased and installed by City Water Department staff. Prospective locations will be throughout the City that are representative of a variety of geographical terrain and proximity to "Data Collection Unit (DCU) (hilly areas, flat areas, etc.). This phase is estimated to begin following completion of the Alpha Initial Deployment phase and be completed in a 12 to 14-month timeframe. The initial "Alpha Initial Deployment" phase of the multi-phased AMI metering project has commenced. Orders for the AMI collector infrastructure and associated equipment have been placed, and preliminary preparations for their installation are currently in progress.

The City's current water meters are located underground in outside pits (known as a meter box), typically in or near the public right-of-way at each property. The existing meters are a combination of Sensus and Kamstrup brand meters. The AMI meters selected through a recent Request For Proposal process are Zenner meters. The AMI platform will include ultrasonic commercial and residential water meters, providing a dynamic flow range for all metered accounts. The new meters are designed for two-way communication and suitable for an underground environment. The meter sizes currently placed throughout the City range from 5/8-inch up to 4-inches. A breakdown of the meter sizes is provided below in **Table 1.**

Table 1. Meters Counts and Sizes

SIZE	5/8”	1”	1 ½”	2”	3”	4”	TOTAL
COUNT	5064	867	271	228	11	8	6,449

New AMI Meter Installation – To fully replace the meters, City staff will follow these steps:

1. Locate the meter boxes.
2. Use shears to clear the landscaping and debris for full access.
3. Open the lid and, if necessary, pump out excess water with a portable hand pump.
4. Wipe off the existing meter and record its reading.
5. Manually record the serial numbers of both the existing and new meters.
6. Shut down the service line using a valve key and pipe wrench.
7. Loosen the inlet and outlet couplings.
8. Detach the existing meter from the service line and remove it from the vault.
9. Attach the new AMI meter with fresh gaskets.
10. Turn the service line back on and check for leaks.
11. Connect the wiring between the new meter and the AMI transmitter.
12. Install the AMI module to the underside of the lid.
13. Thread the antenna through a hole cut into the meter box lid.

Meter installation activities will be limited to the area around the meter boxes and there will be no further exterior ground disturbance. Some installations may include meter box improvements or replacements in order to install the new equipment. Each new meter installation will be captured with the global positioning system (GPS) coordinates through a Panasonic Touchpad and incorporated into the City’s geographic information system (GIS), making it easier to locate meters during future field work, repairs, or replacement projects. GIS will also be used to track project status and locations of completed installations.

Public Communication - The City will launch a public outreach plan in advance of the Beta phase of the project and will include communication via the City website, billing inserts, press releases, social media, and various public meetings to educate and assist the public with utilization of the online customer portal. The portal will give customers secure access to manage and monitor details from their water usage data. Customers will be able to view their water usage on a yearly, monthly, daily, and even hourly basis. Currently, water customers do not have access to a web portal and can only see data provided in the monthly readings used for billing. Customers receive their monthly meter readings via mail or email on their billing statements, which includes a bar chart comparing monthly usage throughout the year.

AMI Meter Data - The AMI meter system will wirelessly transmit real-time meter readings to the Water Department’s office, eliminating the current burdensome and labor-intensive method of driving and walking throughout the City to collect monthly meter readings. On-site, in-person visits to individual meters will only be needed in the case of potential leaks, detected issues, and regular maintenance, repair, or replacement. This capability will also be highly beneficial with account closures. As a university city, there are a disproportionate number of accounts closures each semester and throughout the year. The ability to instantaneously generate a final bill with

accurate usage data will make this process far more efficient and equitable.

Project Reporting – Upon receiving notification of a grant award, the City's Grants Manager will assume responsibility for ensuring compliance with all grant-related tasks. This includes executing the grant agreement, preparing and submitting progress/performance and financial reports to include reimbursement requests and final closeout reports.

1.4 Evaluation Criteria

1.4.1 E.1.1 Evaluation Criterion A. Project Benefits

Benefits to the Category A Applicant's Water Delivery System*: Describe the expected benefits to the Category A applicant's water delivery system. Address the following: Clearly explain the anticipated water management benefits to the Category Applicant's water supply delivery system and water customers. Consider:*

- *Will the project result in more efficient management of the water supply?*

The implementation of this project will conserve water and slow the rate of decline of the Palouse Basin Aquifer. Moscow has a multi-pronged water supply strategy with a goal to limit our impact on the aquifer by reducing our water demand. The AMI project is an vital component of our conservation strategy. The ability to accurately measure water usage is a crucial element in conservation. The current manual readings and billing process is very labor intensive. The new AMI technology with wireless data transmission is accurate and efficient, will free up labor resources for more maintenance tasks, and enhances the accuracy of customer billing. Leveraging AMI capabilities will support targeted water conservation programs and the ability to optimize water management resources.

- *Will water be conserved as a result of the project and where will it go and how it will be used?*

The proposed project will enhance water use efficiency and improve water supply reliability in the City. Replacing 500 existing water meters with new AMI equipment and technology will lead to significant water savings. The new AMI system will provide more accurate water usage data, enable leak detection, and offer real-time usage data through a customer portal, promoting water conservation. These conservation efforts are crucial in reducing groundwater usage levels.

Improved Meter Reading Accuracy through Automation - The newly installed AMI meters will have the ability to better detect low and high-water flow conditions. This information will be critical in detecting leaks and will enable the City to charge customers for actual water usage as opposed to average water usage. Obtaining the readings from the current analog meters is time consuming, labor intensive, and results in unnecessary greenhouse gas emissions.

A new AMI system with remote reading software will enhance the accuracy of water metering, reducing water losses in the distribution system. The AMI real-time data tracking system will enable staff to promptly address water usage anomalies caused by leaks and breaks, ensuring more accurate meter readings and billing data for both residential and commercial customers.

Prompt detection of leaks through the new communication technology will mitigate water waste, reduce repair costs, reduce water loss and reduce the usage of the decline aquifer supply.

Decreasing Non-Revenue Water Loss - From 2021 to 2024, the City experienced an average non-revenue water loss of 4.90%, amounting to 116 acre-feet per year or 104,344 gallons per day in distribution system losses. With water provided at an average rate of $3.56 per 748 gallons, this loss translates to $496 per day and an annual revenue loss of $181,040. Transitioning to an AMI system is expected to significantly reduce this water loss through real-time leak detection.

Revenue from operating with AMI meters and sequential data technology will be reinvested in critical capital water projects. This will help mitigate the impact of water rate increases and ensure affordable water service for residents and businesses. Conserved water will remain in the distribution system, meeting other demands and extend the available groundwater supply. This project is crucial for reducing the demand on the aquifer, which currently sees usage outpacing its recharge rate by 0.7 feet per year.

Data Transparency - The AMI system will transmit data via cloud-based software. This data will be accessible in real-time by customers and City staff. Providing access to customers through this portal will provide transparency and empower customers with real-time usage data, which in turn improves water conservation and long-term water use efficiency. City staff will also be alerted by the system of potential leaks, over usage of water, and other inefficiencies in the system such as sharp spikes in usage notifying of a possible water main break.

Explain the significance of the anticipated water management benefits of the water delivery system and water customers. Consider the following:

- *Are customers not currently getting their full water rights at certain times of year?*

The City of Moscow holds all the water rights for the water used in the municipal system. The City does not exceed the use limits of its right at any time of the year.

- *Does this project have the potential to prevent lawsuits or water calls?*

This project will significantly reduce conflict, confusion, and disputes. The accurate meters and real-time data will allow for clearer, more accessible information that will help assure accurate billing. This will reduce calls and questions and help ensure that final amounts are billed and collected in an accurate and timely manner.

- *What are the consequences of not making the improvement?*

Failure to complete this project could result in numerous existing water meter endpoints becoming inactive. Consequently, the City would be unable to read meters accurately and bill customers appropriately, resulting in an increase in non-revenue water loss.

Approximately 3% of the City's current 6,449 meters must be read manually by Water Department staff by opening the meter box and reading the display. The process consists of two staff members driving to the service address and locating the box lid on the premises and physically reading the meter register. There are some locations in Moscow where the boxes are

frequently full of water, the meter is submerged and unable to be seen or read and a handheld pump is used to suction out the water until the meter is visible. The staff member at the meter verbally relays the meter reading via a handheld two-way radio to a staff member in the vehicle, who then records the number on a laptop. Manual meter readings take at least one day per month to complete.

An additional 57% of the City's current meters are automated meter reading (AMR) units, which are read with one-way wireless communication by driving by each meter with a City vehicle outfitted with receiver equipment, antennas, and a laptop computer. These meter boxes are equipped with antennas which transmit the current meter reading to the equipment in the vehicle. This infrastructure requires crews to get within close proximity of each meter location. The City only has one vehicle outfitted with equipment and antennae to obtain the readings. A staff member drives by each meter once a month to obtain the reads. The process for drive-by reads takes approximately two days, plus an additional day to return to any location that did not successfully register a reading, which is only discovered after the data is downloaded at the main office and gaps are identified.

The last 40% of the current water meters are touch-based reads, which require approximately 9 days to read. Touch-based reads involve two staff with meter readers on foot, each using a data collection device equipped with a probe. The meter reader conducts touch-based readings by walking a route to locate the water meter box and touches the probe in close proximity to a coil on top of the lid to collect the meter reading. The City only has two data collection devices to complete the touch-based reading process.

- *Are customers water restrictions currently required?*

Title 5, Chapter 17 of Moscow City Code designates an annual Outdoor Irrigation Season, which is the only period within each calendar year during which outdoor irrigation is allowed within the City. As temperature and precipitation information is provided, the Outdoor Irrigation Season begins 72 hours after a City notification to the public. During this time, outdoor irrigation is only allowed between the hours of 6:00 pm and 10:00 am local time, unless approved by a variance or exception as defined in City Code.

- *Other significant concerns that support the need for the project?*

This AMI project will decrease the distance traveled for monthly meter readings, thereby lowering carbon emissions and fuel expenses. Additionally, it will optimize City staff time by redirecting their efforts from meter data collection to other water system tasks.

Broader Benefits: Describe the broader benefits that are expected to occur as a result of the project. Consider the following:

- *Will the project improve broader water supply reliability at sub-basin or basin scale?*

The Palouse Groundwater Basin, shown in **Figure 2.,** underlies an area approximately 500 square miles in north central Idaho and eastern Washington. Today over 80,000 people share this as their sole drinking water source, located hundreds of feet beneath the rolling hills of the Palouse. In 1967, the concern over declining ground water levels in the Palouse Groundwater Basin and, in

an effort to maintain local control and demonstrate a willingness and ability to work on solutions to the supply challenges, PBAC was formed.

PBAC is a cooperative, multi-jurisdictional, bi-state committee made up of representatives from cities, counties, and universities within the basin area. This includes the City of Pullman, Whitman County, and Washington State University, in Washington state, and the City of Moscow, Latah County, and the University of Idaho, in the state of Idaho. Each entity has two voting representatives on the Committee. Ex-Officio members include representatives from the Washington Department of Ecology (WDOE) and the Idaho Department of Water Resources (IDWR).

Figure 2. Palouse Groundwater Basin

To ensure long-term quality water supply for the Palouse Basin region, PBAC developed and implemented the Groundwater Management Plan (GWMP) and an associated inter-agency agreement, which includes requirements to gather annual pumping numbers, analyze water information, research the Basin's geology, actively engage and educate the community, foster and maintain relationships with state and local agencies, and implement a supplemental water source with the goal of aquifer stabilization. A key component to this plan is additional water conservation. The ability to achieve this additional conservation is dependent on accurate metering, billing, and customer communication. The AMI meter project is a critical component of the plan for a stable water future for the Palouse Basin.

- *Will the proposed project increase collaboration and information sharing among water managers in the region? Please explain.*

The City of Moscow, along with other members of PBAC, collaborate with groundwater professionals and agencies with extensive experience in assessing sustainability and basin management. This includes basin management strategies to ensure self-sufficiency. The City has delicately balanced effectively managing resources with a declining aquifer in a growing region. Any planning process involves assessing future supplies, demand forecasting, and adapting to climate change. This proposed AMI project is a result of long-term, innovative water resource planning, and leveraging the best available science and technology to identify effective practices for managing water resources. Other PBAC members are also currently planning for and/or implementing AMI projects to further conservation efforts. The projects focus on conserving water consumption through accurate data tracking aligns with the goal of regional water conservation efforts of fostering collaboration among water managers to address shared challenges in sustainable water management.

PBAC, and with it the City of Moscow, released a Request for Proposals to conduct a study of the options for developing an alternative drinking water source. This recent initiative will secure a new water source, acquire water rights, and create a plan for a long-term drinking water supply to

supplement the existing groundwater source, which continues to decrease over time. Local water providers are addressing the decline of the aquifer with conservation and continued evaluation of the basin knowing there will need to be an alternate source in the future to support the growing population of the Palouse.

- *Is the project in an area that is experiencing, or recently experienced, drought or water scarcity? Will the project help address drought conditions at the sub-basin or basin scale? Please explain.*

In the late 1800's, when wells were first drilled in the region, the local aquifers were flowing artesian water and rising to as much as 25 feet above the ground surface. This abundant groundwater enabled the communities of Moscow and Pullman to develop, grow and thrive. Since then, water levels have gradually declined, and the basin has become the subject of numerous published studies. Concern over water scarcity is a well-known issue to the community, which is dependent on the steadily declining Palouse Basin Aquifer System.

Over the last 30 years, conservation efforts by our local communities have slowed the rate of water decline. Water levels are presently declining at a rate of approximately 0.7 feet per year, however demand continues to exceed supply. The current usage outpaces the system's ability to recharge. Conservation efforts are a crucial component of a strategy for basin sustainability.

- *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 explain.*

Not applicable to this project.

- *Will the proposed project positively impacts/benefit various sectors and economies within the applicable geographic area (e.g., impacts to agriculture, environment, recreation, and tourism)? Please explain.*

The project seeks to reduce air pollution and greenhouse gas emissions. The implementation of AMI technology will decrease the need for City staff to make monthly trips throughout town solely to obtain water meter readings. Installing 500 AMI meters will result in approximately 3,000 less annual vehicle miles being driven by reducing our contribution to greenhouse gas emissions. The ecosystem will benefit from greenhouse gas emission reduction resulting from this AMI project.

The AMI project increases the climate resiliency of our community and those surrounding us. It will bolster us against any forthcoming water supply decreases that may result from climate change. Our region relies on one aquifer system, which already does not recharge adequately from precipitation and snowmelt. Decreases in precipitation and snowpack due to climate change will also have a negative impact on natural recharge to the aquifer. Increased water conservation is a critical component of the City's Climate Action Plan.

- *Will the project complement work being done in coordination with NRCS in the area (e.g., the area with a direct connection to the districts water supply)? Please explain.*

Many organizations in the region have been working since 1967 in collaboration and cooperation with PBAC to ensure safe, reliable water for generations to come. Since the creation of the 1992 Palouse Basin Ground Water Management Plan, there has been a 13% decline in pumping, even though the population has grown by over 35%. In Idaho, IDWR is our local conservation office which coordinates with the Natural Resource Conservation Service (NRCS). WDOE is the local resource conservation entity for those members of the PBAC that are located in Washington.

PBAC maintains a network of water level monitoring instruments throughout the region and funds a variety of research projects aimed at gaining increased understanding of the behavior of the aquifer system. A thorough index of research involving the aquifer is available to the public via the PBAC's webpage, with 83 publications listed in order of year published, beginning in 1960 to present day. Various research, reports, and monitoring methods parallel conservation goals and methods recommended by NRCS.

1.4.2 E.1.2 Evaluation Criterion B. Planning Efforts Supporting the Project

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

Plan 1: In May of 2021, the City of Moscow's Utility Rate and General Facilities Charge Study final report was accepted. The purpose of the Study was to forecast long-term capital needs and develop a funding plan to support the needs of the City and to develop and recommend rate structures that generate sufficient revenue to meet the water utility's financial obligations on a standalone basis. In January 2025, the City is again conducting a rate study to ensure the system finances responsibly align with system needs and that there is equity across user groups.

Plan 2: In August of 2022, PBAC and the City of Moscow (as a charter member of the organization), adopted the Palouse Groundwater Basin Water Supply Alternatives Report. The Report states that increasing conservation by an additional 15% savings from the existing baseline projection is of the highest priority. Conservation will also extend the life of our existing water supply, and PBAC identifies installing AMI as one of the more important projects to reach that goal.

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

Plan 1: The professional consulting firm FCS Group from Redmond, Washington was hired in 2020 to prepare a Utility Rate and General Facilities Charge Study. The City of Moscow owns and operates its own water system, which provides water to customers within the City limits, with the exception of the University of Idaho who maintains a separate water system. Water service is provided to more than 6,000 active points of service, delivering an average of two million gallons of potable water per day. The City has six active groundwater wells that depend upon the Palouse Basin Aquifer for supply. The water is treated with chlorine prior to distribution and delivered by three elevated tanks, five booster stations, and over 100 miles of water mains.

The Study identifies the cost allocation for "Meters & Services" for purchase, installation, maintenance, and repair. The principle of the Study is to develop a rate analysis structure that collects the appropriate amount of revenue to maintain and operate the water utility through 2025. City staff provide information and work closely with the consultant during the development of the Study.

Plan 2: The Palouse Groundwater Basin is the sole source of drinking water for the communities of Moscow, Idaho; Pullman, Washington; and Palouse, Washington; as well as UI and Washington State University (WSU). Water is obtained from the deeper of two aquifers (lower aquifer), which has a current rate of water-level decline of 0.7 feet per year. Although the rate of decline has decreased over the last 30 years, the aquifer level continues to drop as demand exceeds supply. According to PBAC, it is estimated that 50 years from now a supplemental supply of 2.3 billion gallons of water will be required annually.

PBAC has been supporting research studies about our water source for decades and maintains a database of technical documents related to the basin's hydrogeology. Since its formation, PBAC has identified and studied a number of potential water supply alternatives. In response to declining water levels in 2017, PBAC determined the target water supply for the Palouse Basin for the next 50 years and identified four preliminary water supply alternatives to help meet future demand and stabilize groundwater levels. In 2020, PBAC commissioned Alta Science & Engineering, Inc., located in Moscow, Idaho, to further refine the four water supply alternatives and generate recommendations for the best way to move forward toward project implementation. The plan's first phase is implementing additional conservation measures within the next 5-10 years, with a goal of using 15% less water than is currently being used. Conserving water is the most economical first step in this long-term plan, see **Figure 3.**

Figure 3. PBAC Water Conservation Efforts

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

- *Is the project identified specifically by name and location in the planning effort?*

Plan 1: Yes, updating water meters with latest conservation technology City-wide.
Plan 2: Yes, implementation of AMI for all participants in PBAC that provide water services.

- *Is this type of project identified in the planning effort?*

Plan 1: Yes
Plan 2: Yes

- *Explain whether the proposed project implement a goal, objective, or address a need or problem identified in the existing planning effort?*

Plan 1: Yes, the goal of replacing existing waters meters that are past their useful life and cannot be repaired if they fail.

Plan 2: Reduce water usage by 15% in the next 5-10 years because the aquifer levels continue to drop as demand exceeds supply. According to PBAC, it is estimated that 50 years from now a supplemental supply of 2.3 billion gallons of water will be required annually.

- *Explain how the proposed project has been determined as a priority in the existing planning effort as opposed to other potential projects/measures.*

Plan 1: The City is required to provide water to its citizens and businesses, according to the Idaho State Code. Moscow's Water Distribution system delivers an average of over two million gallons of potable water per day.

Plan 2: Until an alternate water supply can be accommodated to replace the depleting aquifer, the only option available is to conserve water and an AMI system is the most effective and efficient method for water to be conserved City-wide.

Moscow is also in the process of updating our Comprehensive Water System Plan. This update will include AMI metering as a key strategy for water conservation, customer involvement, and general operational health.

Through ongoing planning efforts and the planning efforts specifically described above, it has been deemed a priority to improve the City's water meter network and reading processes, as well as reduce the amount of water loss in the distribution system. This project will build on the work the City has previously planned for and prioritized for implementation.

1.4.3 E.1.3 Evaluation Criterion C. Implementation and Results

- *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.*

Implementation Schedule: Based on the Notice of Funding Opportunity (NOFO) presentation's sample schedule, award notification would be in May 2025 with the execution of an Award Agreement no later than October. The City's AMI Project – Beta Phase will begin in October of 2025 (anticipated to start as soon as the Grant Agreement is executed) and be completed by February 2027. The implementation schedule for the AMI project, by task, is listed below in **Table 2.**

Table 2. Proposed AMI Infrastructure Project Schedule

Approximate Dates	Major Tasks/Milestones
August 2023 – May 2024	Research/Develop/Release RFP for a Complete Transition to a new AMI System with MDMS and Customer Portal - *Completed*
June 2024 – August 2024	Reviewed Proposals – Selected Zenner Meters – Executed and Signed Agreement October 30, 2024 - *Completed*
August 2024 – May 2025	Alpha Initial Deployment (Phase 1) - *In Progress*
May 2025 – October 2025	**Notification of Award, Execution of Grant Agreement**
October 2025 – January 2027	**Project Management, Administration, and Reporting**
November 2025 – January 2026	**Order/Purchase 500 AMI Meters – Beta Initial Deployment (Phase 2)**
February 2026 – November 2026	**AMI Meter Installation/Testing – Continue Beta (Phase 2)**
December 2026 – January 2027	**Project Completion and Grant Closeout**

- *Proposals with a budget and budget narrative that provide a reasonable explanation of project costs will be prioritized under this criterion.*

This project consists of the purchase and installation of 500 new AMI meters within the service area. No engineering or design work will be required for this project. No new policies or administrative actions are required for implementation during this phase of the AMI project.

- *Describe any permits that will be required, along with the process for obtaining such permits*

No special permits or approvals are necessary for the implementation of this project. The work will take place at existing meter locations fully within the City's authority.

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

No engineering or design work is anticipated for this project.

- *Does the applicant have access to the land or water source where the project is located? Has the applicant obtained any easements that are required for the project?*

There are no easements necessary for this project as it will only be the installation of water meters in existing meter boxes.

- *Identify whether the applicant has contacted the local Reclamation office to discuss the potential environmental and cultural resource compliance requirements for the project and the associated costs. Has a line item been included in the budget for costs associated with compliance? If a contractor will need to complete some of the compliance activities, separate*

line items should be included in the budget for Reclamation's costs and the contractor's costs.

Not applicable for this project. Replacement of meters in existing meter box locations.

1.4.4 E.1.4 Evaluation Criterion D. Nexus to Reclamation

- *Is the proposed project connected to a Reclamation project or activity? If so, how?*

No, this project is not in conjunction with the Bureau of Reclamation.

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

No, this project is neither on Reclamation lands nor does it involve Reclamation facilities.

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

No, this project is not located in the same basin as a Reclamation project or activity.

- *Will the proposed work benefit a Reclamation Project area or activity?*

No, based on the project list for our region, there are no Reclamation projects or activities in our basin.

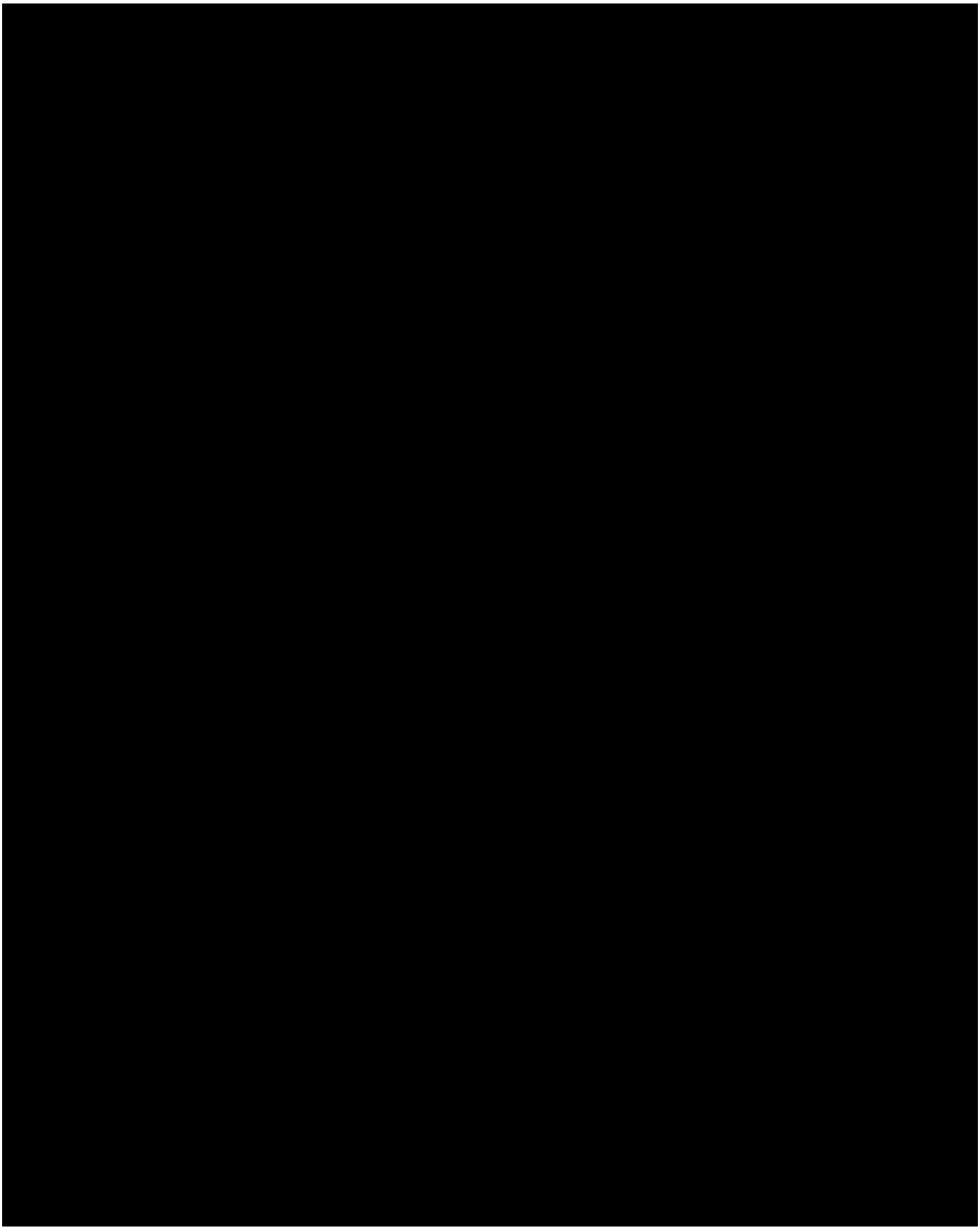

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Figure 4. Rolling Hills of the Palouse

SECTION 2: PROJECT BUDGET

2.1 Funding Plan

The following questions were provided in the notice of funding opportunity (NOFO), and answers to the questions are provided in Black. 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?*

The Funding Plan for this project is to utilize the water capital accumulation for the City's cost-share portion of the project. These funds will be programmed in the City's FY2026 Budget, which starts in October 2025. The total estimated project costs (including federal and local cost shares) for this project are $224,436. The City is requesting $100,000 (45% of total project costs) in federal cost-share from the Bureau of Reclamation under this grant request with the remaining amount of $124,436 (55%) to be funded by the City. These funds will be in the form of monetary cash contributions for the purchase of the AMI water meters and in-kind labor for project management and meter installation.

- *Any third-party in-kind costs (i.e., goods and services provided by a third party)?* No.
- *Any cash requested or received from other non-Federal entities?* No.
- *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.*

  No project costs are anticipated prior to the award.

2.2 Budget Proposal

Table 3. summarizes all funding sources (Federal and non-Federal) for the proposed project.

Table 3. Total Project Costs

Source	Amount	Percentage
Costs to be reimbursed with the requested Federal funding	$ 100,000	45%
Costs to be paid by City of Moscow	$ 124,436	55%
Value of third-party contributions	$ 0.00	0%
TOTAL PROJECT COST	**$ 224,436.00**	**100%**

The Budget Proposal for this project is provided in **Table 4.**, which lists all the budget categories in the NOFO. The budget items consist of costs associated with the implementation of the

proposed project as described in detail below:

Table 4. Budget Proposal

Budget Item Description	Computation		Total Cost
	# of Units / Hours	Rate Per Unit/Hour	
Salaries and Wages			**$ 16,604**
Public Utility Manager	78	$43	$ 3,354
Water Distribution Operator	250	$28	$ 7,000
Water Distribution Operator – Apprentice	250	$25	$ 6,250
Fringe Benefits			**$ 7,810**
Public Utility Manager	78	$20	$ 1,560
Water Distribution Operator	250	$13	$ 3,250
Water Distribution Operator – Apprentice	250	$12	$ 3,000
Travel			
Not applicable			$ 0
Equipment			
Not applicable			$ 0
Supplies and Materials			**$ 200,022**
Two-Way Communication Ultra-Sonic Water Meters - Zenner			
5/8 Inch Water Meter	365	$251	$ 91,615
1 Inch Water Meter	68	$326	$ 22,168
1.5 Inch Water Meter	42	$1,363	$ 57,246
2 Inch Water Meter	20	$975	$ 19,500
3 Inch Water Meter	3	$1,705	$ 5,115
4 Inch Water Meter	2	$2,189	$ 4,378
Contractual/Construction			
Not applicable			$ 0
Other/Environmental and Regulatory Compliance			
Not applicable			$ 0
Total Direct Costs			**$ 224,436**
Indirect Costs			
Not applicable			$ 0
TOTAL ESTIMATED PROJECT COSTS			**$ 224,436**

2.3 Budget Narrative

Salaries, Wages, and Fringe Benefits: Justin Kilborn, Public Utility Manager for the Water Department, will manage the project and will order the water meters and schedule installation with 78 hours estimated for these tasks. Two (2) City employees in the positions of Water

Distribution Operator and Water Distribution Operator – Apprentice will install the 500 new AMI meters over a 10-month period estimating one (1) hour per meter to install, including travel time for a total of 500 hours. The meter installation project will commence in FY2026, and it is anticipated that all employees will receive a cost-of-living increase of 3% and merit increase of 2% equaling a total of 5% overall increase based on current rates. We certify the labor rates are the actual rates for those employees in the positions listed.

The Fringe Benefits are calculated individually for each employee as the rates vary depending on the choice of plan for Major Medical benefits. The Fringe benefits include Retirement (11.89%), Major Medical (varies 20-28%), Life Insurance (.59%), FICA (7.65%) and Workers Compensation (2.7%). For the purposes of this project the % rate is calculated as a rate per hour. The City does not have an indirect cost rate or union dues.

Travel: This project does not require travel; therefore, no travel costs are included in the budget.

Equipment: No equipment costs are included in this project.

Materials and Supplies: The City released a Request for Proposals (RFP) on May 20, 2024, for Advanced Metering Infrastructure, Meter Data Management, and Customer Portal. The proposals were due June 21, 2024. In July of 2024 vendor presentations and interviews were held, and the responses were reviewed and ranked based on the Evaluation Criteria in the RFP to select a final vendor per 2 CFR§200 requirements. An Agreement was executed with Zenner USA Inc. on October 30, 2024. A total of 500 two-way communication ultra-sonic meters will be purchased from Zenner USA Inc for $200,022. Meter prices are based on Zenner's response to a Request for Proposals and are a negotiated cost as documented in an Agreement executed on October 30, 2024.

Contractual/Construction: No contractual or construction are included in this project.

Third-Party In-Kind Contributions: There are no third-party in-kind contributions.

Other Expenses: Grant administration, reporting and reimbursement request duties will be performed by the City of Moscow Grants Division as part of their regular full-time duties. No costs for these activities are included in the budget.

Indirect Costs: No indirect costs are included in the proposed budget.

Total Estimated Project Costs: The total cost for the proposed project is $224,436. Funding sources for the project includes anticipated grant funding from this request of $100,000, or 45% of the total project cost. The City will contribute in-kind Salaries/Wages of $16,604 and Fringe Benefits of $7,810. The City will also contribute a cash match of $100,022, from the Water Department Capital Improvement Budget for FY2026. Total in-kind and cash match is $124,436, which is 55% of the Total Project Costs. No other Federal funding has been requested or received for the proposed project.

Note: The City of Moscow is registered (maintaining an active registration) in the System for Award Management (SAM). The City is also registered to process payments through the Department of Treasury Automate Standard Application for Payments (ASAP) system with the Bureau of Reclamation.

SECTION 3. ENVIRONMENTAL AND CULTURAL RESOURCES COMPLIANCE

- *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.*

The proposed project will have no impact on the surrounding environment. The project does not include earth-disturbing work, as it involves replacement of existing municipal water meters. Existing meter boxes will be opened, the current meters will be removed, and new AMI meters will be installed. There are no anticipated environmental impacts with the proposed project.

- *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?*

According to the Information and Planning Consultation (IPaC) mapping tool within our project area, the US Fish & Wildlife Ser. identifies the Spalding's Catchfly (a flowering plant) as threatened species. There are no anticipated impacts to any of these species with the proposed project. According to the IPaC mapping tool, there are no critical habitats within the project area.

- *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.*

There are wetlands in the project boundaries, but they do not fall under the Clean Water Act jurisdiction as "Waters of the United States," and the project is not expected to impact any wetlands. The project has no ground disturbances and involves only existing water meter boxes.

- *When was the water delivery system constructed?*

The City of Moscow was founded in the 1870's and incorporated in 1887. The City's first well was drilled in 1892. The well was artesian but by 1914, the water level was reported to be over 100 feet below the surface. Additional wells were drilled in 1925, 1928, 1958, 1964, 1982 and 2016. Major components were added in the early 1900's with continual updates and expansion to the present day which has included five new booster stations being built from 2017 through 2024.

- *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.*

No, not applicable. The project will not result in modifications to individual features of an irrigation system.

- *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.*

The City of Moscow is not in an irrigation district. There are sites listed and eligible for listing on the National Register of Historic Places located within the City but there are no anticipated impacts to any of the historic sites as a result of this AMI project.

- *Are there any known archeological sites in the proposed project area? There are no known archaeological sites in the proposed project area.*

No, there are no known archeological sites in the proposed project area. The AMI meters will be installed into existing meter boxes and there are no anticipated impacts to any archaeological sites.

- *Will the proposed project have a disproportionately high and adverse effect on low income or minority populations?*

No. The project will not have a disproportionately high or adverse effect on low income or minority populations. However, the project will have positive impacts on low income and minority populations because every property owner with a new AMI water meter will have access to an online portal that allows them to view their water usage in real-time. Having this information will allow customers to be more cognizant of their water use and allow them to catch water spikes caused by leaks or plumbing fixtures left on inadvertently. Lastly, the water conservation produced by this project benefits everyone who shares this aquifer system as their water source and whose future water security is in jeopardy due to its steady decline.

- *Will the proposed project limit access to and ceremonial use of Indian sacred sites or result in other impacts on tribal lands?*

No. The project will not limit access to any ceremonial use of Indian sacred sites or result in other negative impacts on tribal lands.

- *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 project will not contribute to the introduction, continued existence, or spread of noxious weeds or any non-native species known to occur in the area.

SECTION 4: REQUIRED PERMITS AND APPROVAL

No permits are required for this project.

SECTION 5: OVERLAP OR DUPLICATION OF EFFORT STATEMENT

The grant application submitted for consideration under this program does not in any way duplicate any proposal or project that has been submitted for funding consideration to any other potential funding source. However, the City would like to continue to apply for future WaterSMART grant opportunities, as applicable and available, to continuously improve our water system.

SECTION 6: CONFLICT OF INTEREST DISCLOSURE STATEMENT

At the time of submission, there exists no actual or potential conflict of interest. The City of Moscow will comply with the conflict-of-interest provisions of 2 CFR§200 in the procurement of purchasing AMI meters. The City acknowledges that as a grant award recipient, it will be responsible for notifying the Financial Assistance Officer in writing of any conflicts of interest that may arise during the life of the award.

SECTION 7: UNIFORM AUDIT REPORTING STATEMENT

The City of Moscow was required to submit a Single Audit report for the most recently closed fiscal year for FY2023. The Single Audit for FY2024 is underway and will be completed in March 2025. Our EIN is 82-6000227. The report is available on the Federal Audit Clearinghouse website. For more information contact Sarah Decker, sdecker@ci.moscow.id.us.

SECTION 8: CERTIFICATION REGARDING LOBBYING AND DISCLOSURE OF LOBBYING ACTIVITIES

SF-LLL is not applicable. The City of Moscow acknowledges that it is strictly prohibited from using funds under a grant or cooperative agreement for lobbying activities and must provide the required certifications and disclosures pursuant to 43 CFR §18 and 31 USC §1352.

SECTION 9: LETTERS OF SUPPORT

Appendix 2. Letters of Support from the following organizations are included:

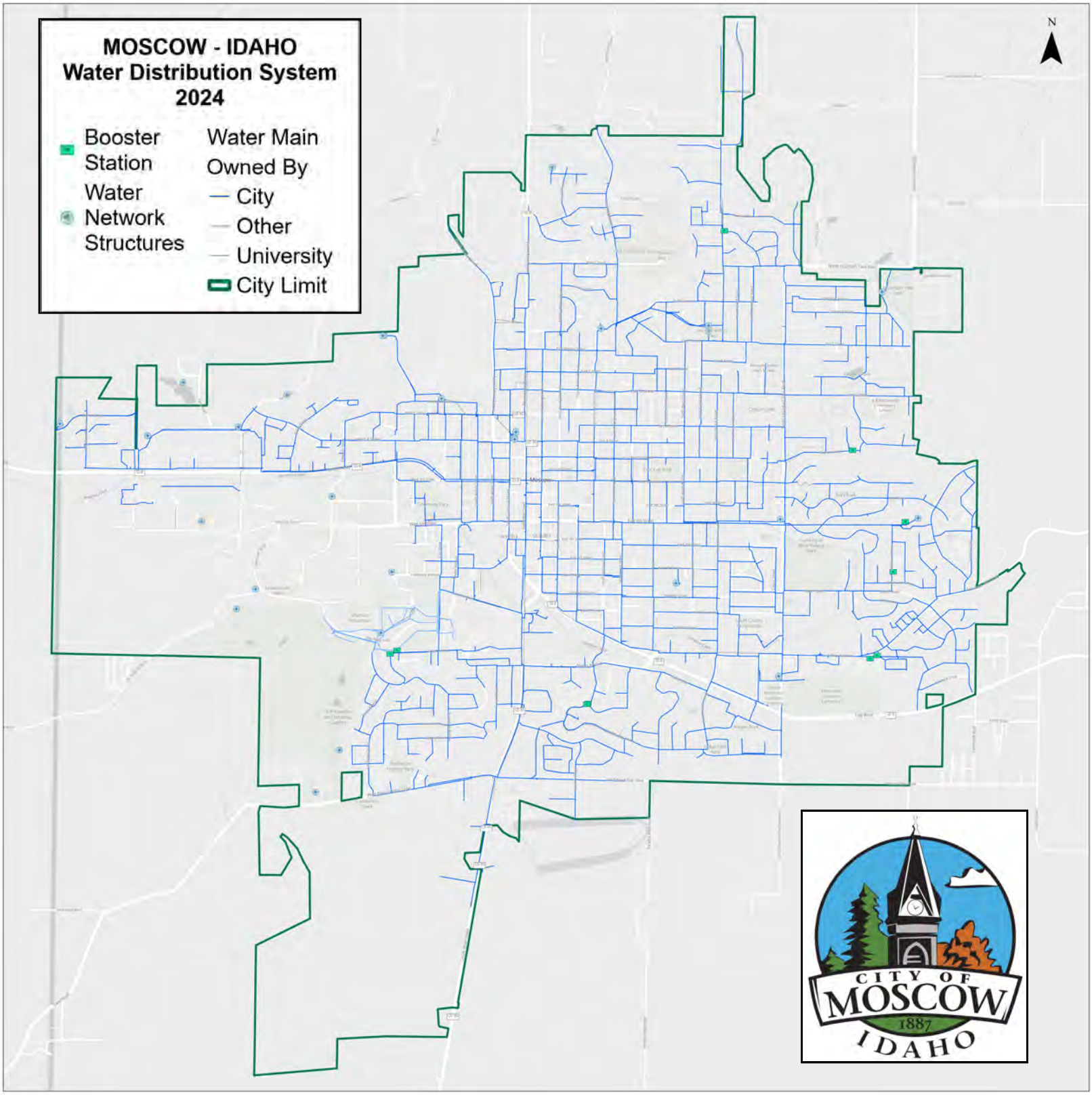
Idaho Department of Environmental Quality (IDEQ)
Palouse Basin Aquifer Committee (PBAC)
Palouse Basin Water Summit, Inc.
Latah County Board of Commissioners
City of Pullman, Washington
Avista Utilities
University of Idaho (UI)
Palouse-Clearwater Environmental Institute
Moscow Chamber of Commerce
Latah Realty
State Farm Insurance

SECTION 10: OFFICIAL RESOLUTION

City Staff presented to Moscow City Council at the January 6, 2025 meeting and received approval to submit this grant request and confirmed up to $125,000 in cash match. See **Appendix 3. Resolution No. 2025-01 Authorizing Application and Preauthorizing Acceptance of an Award**.

SECTION 11: LETTERS OF FUNDING COMMITMENT

Moscow is solely providing the non-federal share for this request. There is no cost-sharing funding from a third party or any other source.


MOSCOW - IDAHO
Water Distribution System
2024
Booster Station
Water Network Structures
Water Main Owned By
City
Other
University
City Limit
N
CITY OF
MOSCOW
1887
IDAHO

1410 N Hilton Street
Boise, ID 83706 • (208) 373-0502

Brad Little, Governor
Jess Byrne, Director

United States Bureau of Reclamation
Water Resources and Planning Office
PO Box 25007
Denver, CO 80225

Re: City of Moscow, Idaho, Application for WaterSMART Small-Scale Water Efficiency Project Funding

Dear Bureau of Reclamation,

It is our pleasure to write a letter to support the City of Moscow as they seek federal funding to implement Advanced Metering Infrastructure (AMI). Implementation of AMI will allow the City of Moscow to automate the City's water meter reading operations and improve water use efficiency. If the City is awarded this grant, the benefits of AMI in Moscow will be seen by customers, businesses, and providers across the board. With this funding the city, will be able to move forward with installing 500 new meters during the second year of their phased project.

AMI is the essential next step in expanding an already robust Water Conservation Program within the City of Moscow. The real-time data collection and availability will allow both customers and the water provider to conserve and manage water use more effectively. The implementation of AMI will achieve real quantifiable water and energy savings through increased efficiencies, decreased water pumping, and reduced greenhouse gas emissions. The efforts toward water conservation are crucial not just for those within city limits, but for all 80,000+ individuals whose sole drinking water source is the declining Palouse Basin Aquifer System.

The Idaho Department of Environmental Quality is excited to see communities move towards tools that improve water use efficiency. Water availability is increasingly limited due to the pressures of warming temperatures on snowpack and declining aquifers. The City of Moscow continues to be a strong partner in the region's effort to ensure a sustainable drinking water supply as part of the Palouse Basin Aquifer Committee. If funded, this project will emphasize their commitment to responsible water supply management of a multi-state resource.

In closing, I strongly support the City of Moscow's WaterSMART grant application and their efforts to implement AMI. Funding will support the ongoing commitment to move toward the future of water in Moscow and continue the long-term effort to ensure water security and strong infrastructure for a safe and thriving community.

Sincerely,

MaryAnna Peavey
Grant & Loan Bureau Chief
Drinking Water Protection and Finance Division

MHP

PALOUSE BASIN
AQUIFER
committee

January 7, 2025

United States Bureau of Reclamation
Water Resources and Planning Office
PO Box 25007
Denver, CO 80225

Re: City of Moscow, Idaho, Application for WaterSMART Small-Scale Water Efficiency Project Funding

Dear Bureau of Reclamation,

On behalf of the Palouse Basin Aquifer Committee, (PBAC), I want to express our sincere, strong and enthusiastic support for the City of Moscow's Advanced Metering Infrastructure **(AMI)** WaterSMART Small Scale Efficiency Grant Application.

PBAC's mission is to ensure a long-term, quality water supply for the Palouse Basin region. The original committee, made up of representatives from the University of Idaho, Washington State University, and the cities of Pullman, Washington, and Moscow, Idaho, was formed in 1967 to address concerns with declining ground water levels in the area. The primary role of PBAC is to encourage the member entities to implement the Palouse Basin Ground Water Management Plan, enacted in 1992. Additional roles involve education and information exchange, monitoring of pumping and ground water levels, and funding of ground water system research. PBAC maintains a network of water level monitoring instruments throughout the Palouse Basin and funds a variety of research projects aimed at gaining increased understanding of the behavior of the basin aquifer systems. PBAC also administers an informational website (www.palousebasin.org) and manages a central clearinghouse of technical documents related to basin hydrology.

As a part of the Palouse Basin, Moscow's commitment to and investment in AMI for their municipal water system could not come at a more critical juncture. Focusing on water management technology not only provides a timely, robust, and effective conservation tool but offers both the City and their customers great insights and real-time information on water use. This program also aligns well with PBAC's long-term water supply strategies and plans for the next decade and beyond. Therefore, we strongly encourage the Bureau of Reclamation to fund Moscow's AMI funding request.

Sincerely,

Mike Faupel
Executive Director

875 Perimeter Drive, Moscow, ID 83844 | 208-885-6429 | pbac@uidaho.edu | palousebasin.org

PALOUSE BASIN WATER SUMMIT, INC.

January 7, 2025

United States Bureau of Reclamation
Water Resources and Planning Office
PO Box 25007
Denver, CO 80225

Re: City of Moscow, Idaho, Application for WaterSMART Small-Scale Water Efficiency Project Funding

Dear Bureau of Reclamation,

On behalf of the Board of Directors of the Palouse Basin Water Summit, Inc. (PBWS), please accept this letter as our support and endorsement of your City of Moscow's WaterSMART Small-Scale Grant Application for their Advanced Metering Infrastructure Project.

In 2003, former Moscow, ID City Councilman Jon Kimberling, and myself, while serving as the Latah County, ID Commission Chair, founded the Palouse Basin Water Summit. This important annual event is intended to raise awareness and foster a collaborative, long-term water management strategy for Palouse Basin groundwater and the communities which rely solely on this aquifer, including Pullman. Since 1967, when annual measurements of the aquifer began, the Palouse Basin communities have seen a slow and steady decline in our water supplies. The Summit creates an important dialogue and opportunity for the cities of Moscow, ID and Pullman, WA, University of Idaho and Washington State University as well as Latah (ID) and Whitman (WA) counties, business and industry, conservation, and resource agencies to engage in meaningful conversations, invest in research and technologies, and explore ways to better manage this critical resource.

We appreciate the great work the City of Moscow is doing with respect to water conservation and we applaud their commitment to employing AMI technologies on the water infrastructure. The benefits of AMI technology are immense and with the declining aquifer, it is one of the most important investments we can make locally. We encourage the Bureau of Reclamation to fund Moscow's grant request.

Sincerely,

Jon Kimberling
205 S. Main
Moscow, ID 83843
(208) 882-4414

Paul Kimmell

Latah County
BOARD OF COUNTY COMMISSIONERS

P.O. Box 8068 ♦ 522 South Adams ♦ Moscow, Idaho 83843
(208) 883-7208 ♦ bocc@latahcountyid.gov
Thomas C. Lamar ♦ Kathie LaFortune ♦ John Bohman

January 7, 2025

United States Bureau of Reclamation
Water Resources and Planning Office
PO Box 25007
Denver, CO 80225

Re: City of Moscow, Idaho, Application for WaterSMART Small-Scale Water Efficiency Project Funding

Dear Bureau of Reclamation,

The Latah County Commissioners hereby endorses and support the City of Moscow's application for a WaterSMART Grant to be used for Advanced Metering Infrastructure.

As members of the Palouse Basin Aquifer Committee, Latah County is quite aware of the continued issues our aquifer faces in supporting a growing population in the City of Moscow and at the University of Idaho. We believe the AMI proposal will help the residents of Moscow be more efficient users of our limited water supply through making it easier to conserve water, while it will help the City become more quickly aware of and repair leaks and other service disruptive issues and decrease administrative costs for all.

The Board of Commissioners for Latah County also believe this will help the use of the Palouse Basin deep groundwater aquifer be more sustainable going into the future. We ask you to award this grant request to the City of Moscow.

Sincerely,

Thomas C. Lamar
Chair

Kathie LaFortune
Commissioner

John Bohman
Commissioner

CITY OF Pullman
PUBLIC WORKS

January 7, 2025

United States Bureau of Reclamation
Water Resources and Planning Office
PO Box 25007
Denver, CO 80225

Re: City of Moscow, Idaho, Application for WaterSMART Small-Scale Water Efficiency Project Funding

Dear Application Review Team,

Planning for the sustainable use of water resources and implementing high quality, permanent projects to conserve our shared water source is critical to achieving our reduced groundwater pumping goals. Efforts to improve water measurement, such as this proposal by the City of Moscow to install new water meters, is central to improving the management of our depleting water resource and achieving reduced pumping goals. This project would detect new leaks in real time so repair can be can be made before serious water loss or property damage occurs. The City of Moscow is a key participant in the various water conservation efforts that are ongoing in the Palouse Groundwater Basin, and upgrading its metering system to more accurately track and conserve municipal water usage.

Sincerely,

Sean R. Wells, P.E.
City of Pullman Public Works Director

January 7, 2025

United States Bureau of Reclamation
Water Resources and Planning Office
PO Box 25007
Denver, CO 80225

Re: City of Moscow, Idaho, Application for WaterSMART Small-Scale Water Efficiency Project Funding

Dear Bureau of Reclamation,

On behalf of Avista Utilities, please accept this letter of support for City of Moscow's WaterSMART Small-Scale Water Efficiency Grant Application. As the electric and natural gas utility serving the Moscow, we are excited to support investments in advanced metering infrastructure (AMI) for your municipal water system.

Avista performed a Smart Grid Demonstration Project in 2009 which provided us with important insights and information on the value and importance of AMI investments for our customers. Avista has become a proven leader in the use of AMI having installed nearly 500,000 smart meters in our Idaho and Washington Service Area. We recognize how this technology not only offers a conduit to more accurate and efficient energy data capture and management but also the empowerment of providing customers with the tools to help manage their energy use.

This same AMI technology when installed for municipal water management equally offers multiple benefits to the City of Moscow and its water customers. Like many communities in the western U.S., Moscow relies on a sole source aquifer which supplies 100% of their water needs. It is critical to be investing in AMI water infrastructure for enhanced water conservation as well as improved day-to-day water management.

Avista supports Moscow's commitment to invest in AMI water infrastructure and urges the Bureau of Reclamation to funding their request so they may continue as a great steward of your water resources.

Sincerely,

Paul J. Kimmell
Business & Public Affairs
5702 SR 270
Pullman, WA 99163 / (509) 336-6236 / paul.kimmell@avistacorp.com

January 7, 2025

United States Bureau of Reclamation
Water Resources and Planning Office
PO Box 25007
Denver, CO 80225

Re: City of Moscow, Idaho, Application for WaterSMART Small-Scale Water Efficiency Project Funding

Dear Bureau of Reclamation,

I am writing to express the University of Idaho's support of the City of Moscow's federal grant application for installing advanced metering infrastructure for water customers city-wide. This project is aligned with the University of Idaho's land-grant mission of research, education, and outreach, supports the common good, promotes sustainability and supports the provisioning of critical municipal services that impact our employees and students.

The installation of advanced metering infrastructure will provide area residents with detailed water usage information that they can use to conserve water and money. It also quickly identifies any issues so that they can be swiftly resolved. Regionally, the reduced use of water will help sustain the Palouse Basin Aquifer System, which is the only drinking water source for more than 80,000 people. Advanced metering infrastructure eliminates travel to read water meters and reduces the energy use for pumping. Mitigating greenhouse gas emissions benefits not only the region but the globe.

The University of Idaho is a key partner with the City and other regional entities and advanced metering infrastructure is the next step in conserving our limited water resources. We encourage the Bureau of Reclamation to fund the City of Moscow's grant request to help all those living on the Palouse conserve our depleting water resources.

Sincerely,

Daniel R. Ewart
Vice President for Information Technology and Chief Information Officer
Community Liaison
Email: dewart@uidaho.edu
Phone: 208-885-2271

PALOUSE-CLEARWATER
ENVIRONMENTAL INSTITUTE

January 7, 2025

United States Bureau of Reclamation
Water Resources and Planning Office
PO Box 25007
Denver, CO 80225

Re: City of Moscow, Idaho, Application for WaterSMART Small-Scale Water Efficiency Project Funding

Dear Bureau of Reclamation,

It is with great pleasure that we write this letter of support for the City of Moscow's endeavor to fund installing Advanced Metering Infrastructure (AMI) in our community.

The Palouse-Clearwater Environmental Institute (PCEI) is actively "Connecting People, Place and Community" throughout the Palouse region and has partnered with the City of Moscow for over a decade to educate and engage community in smart water use choices. The City of Moscow has had a Conservation Program as part of the City's Water Comp Plan since 2012. AMI is the next step in continuing and increasing conservation within Moscow; a natural engagement that falls in line with the City's long-term commitment to conservation.

PCEI and the City of Moscow are always looking for innovative ways to support our community in reducing our long-term ecological impact through natural resource use, cost, time, energy, and other savings. Additionally, water conservation awareness, practices and tools that can be used by all are mutually beneficial to our local ecology as well as the users. Improving water use efficiency in real-time as well as our ability to gather data will allow for leaks or unintended water use to be identified almost immediately rather than monthly. This would be huge as both a prevention and treatment tool to being water-wise in a water limited region.

Our community receives its water entirely from an aquifer which is slowly declining as the community also continues to grow. Water conservation and innovation is critical to keeping our community and local ecosystem healthy and vibrant. These funds will allow continuation and improvement upon the already robust Conservation Program in the City of Moscow. AMI allows for users to quantify their conservation efforts as well as improve their ability to make a difference through their water use choices.

Thank you for your consideration of this grant request, there is community support and appreciation for the foresight of seeking to be a more sustainable community.

Sincerely,

Thomas C. Lamar
Executive Director

Mailing Address: PO Box 8596, Moscow, ID 83843 - Nature Center: 1040 Rodeo Drive, Moscow ID
(208) 882-1444 | pcei.org | info@pcei.org

MOSCOW chamber of commerce + visitor center

January 7, 2025

United States Bureau of Reclamation
Water Resources and Planning Office
PO Box 25007
Denver, CO 80225

Re: City of Moscow, Idaho, Application for WaterSMART Small-Scale Water Efficiency Project Funding

Dear Bureau of Reclamation,

This letter is in support of the City of Moscow's grant application to provide funding for installing Advanced Metering Infrastructure (AMI) for water customers in the city. As the Moscow Chamber of Commerce, we partner with the City of Moscow and major utilities like Avista to improve the quality of our community. We see the benefits of what AMI technology will provide both businesses and residents in Moscow.

The integrated technology of the AMI smart meters combined with communications networks and data management allow for efficient two-way communication and real-time data provided to the City and its water customers.

This data provides, among other benefits, detailed consumption usage, efficiency of automation and the ability for customers to set goals to reduce consumption and quickly see their results to adjust behavior. Moscow needs this technology as part of its overall water conservation strategy.

We strongly encourage the Bureau of Reclamation to fund Moscow's AMI grant request to help us conserve our limited water resources. So that we may continue to enhance and preserve the quality of life in our community.

If I can provide any additional information to support the City of Moscow in these efforts, please contact me at director@moscowchamber.com or (208) 882-1800.

Sincerely,

Samantha Martinet
Executive Director
Moscow Chamber of Commerce + Visitor Center
Bringing Commerce + Community Together

411 S Main St ◆ P.O. Box 8936
Moscow, ID 83843
(208)882-1800
Moscowchamber.com

Latah Realty LLC
128 E. Third
Moscow, ID 83843
Bus (208) 883-1525
Fax (208) 883-3747
E-mail: inquire@latahrealty.com
www.latahrealty.com

January 7, 2025

United States Bureau of Reclamation
Water Resources and Planning Office
PO Box 25007
Denver, CO 80225

Re: City of Moscow, Idaho, Application for WaterSMART Small-Scale Water Efficiency Project Funding

Dear Bureau of Reclamation,

It is my pleasure to write a letter to support the City of Moscow as they seek federal funding to implement Advanced Metering Infrastructure (AMI). Implementation of AMI will allow the City of Moscow to automate the City's water meter reading operations and improve water use efficiency. If the City is awarded this grant, the benefits of AMI in Moscow will be seen by customers, businesses and providers across the board. With this funding the City will be able to move forward with installing new AMI meters to replace the older generation water meters with smart meters and transmitters, and implementing a customer portal.

AMI is the essential next step in expanding an already robust Water Conservation Program within the City of Moscow. The real-time data collection and availability will allow both customers and the water provider to more effectively conserve and manage water use. The implementation of AMI will achieve real quantifiable water and energy savings through increased efficiencies, decreased water pumping, and reduced greenhouse gas emissions. The efforts toward water conservation are crucial not just for those within city limits, but for all 80,000+ individuals whose sole drinking water source is the declining Palouse Basin Aquifer System.

Implementation of AMI would will be beneficial to the companies and properties located in Moscow. As a real estate broker/agent, undetected water leaks and limited data on the timing of the leak have led to unnecessary expenses and water misusage. This system would allow our property owners and managers to determine and resolve water leak issues in real time rather than waiting until the end of the month to address the matter.

In closing, I strongly support the City of Moscow's WaterSMART grant application and their efforts to implement AMI. Funding will support the ongoing commitment to move toward the future of water in Moscow, and continue the long-term effort to ensure water security and strong infrastructure for a safe and thriving community.

Regards,

Sean Wilson, Co-Owner,Latah Realty, LLC

FARMERS INSURANCE

Member of Presidents Council

Jon Kimberling, CPCU, CLU, RICP
205 S Main St
Moscow, ID 83843
Office 208-882-4414
Cell 208-596-1654
Fax 208-882-4510
jkimberling@farmersagent.com

January 7, 2025

United States Bureau of Reclamation
Water Resources and Planning Office
PO Box 25007
Denver, CO 80225

Re: City of Moscow, Idaho, Application for WaterSMART Small-Scale Water Efficiency Project Funding

Dear Bureau of Reclamation,

The City of Moscow is seeking federal funding to upgrade their domestic water meters. We support this project and its ability to better manage the water resources of Palouse Basin Aquifer system.

The City's Advanced Metering Infrastructure Project will replace older domestic water meters in upgraded new meters that can communication data analytics as a water management tool. This new metering system will not only assist the city, but the water users will also be able to check their water usage at any time. In addition, the smarter metering system will also be able to alert high flows that point toward leakage in a timely manner- hours rather than monthly. The project will increase efficiency in Moscow's distribution system and help achieve the city's goal of providing quality drinking water to its users through efficient management and conservation.

As the co-founder of the Palouse Basin Water Summit and a long-time downtown business owner, I've always taken a great interest in the importance of our most precious resource- water. I'm very proud of the ongoing efforts of the City of Moscow who have an outstanding record of responsible use of this resource. I'm confident that any federal funding that you invest in Moscow will be well spent.

Sincerely,

Jon Kimberling,CPCU,CLU,RICP
Agent
Kimberling Insurance Agency

RESOLUTION NO. 2025 – 01

A RESOLUTION OF THE CITY OF MOSCOW, IDAHO, A MUNICIPAL CORPORATION OF THE STATE OF IDAHO, AUTHORIZING THE APPLICATION FOR A GRANT AND PREAUTHORIZING THE ACCEPTANCE OF U.S. DEPARTMENT OF INTERIOR, BUREAU OF RECLAMATION GRANT MONIES FOR THE CITY OF MOSCOW'S ADVANCED METERING INFRASTRUCTURE PROJECT SUPPORTING THE PURCHASE OF TWO-WAY ULTRASONIC WATER METERS; AND PROVIDING THIS RESOLUTION SHALL BE EFFECTIVE UPON ITS PASSAGE AND APPROVAL.

WHEREAS, the City of Moscow qualifies to apply for the WaterSMART Small-Scale Water Efficiency Program through the U.S. Department of Interior, Bureau of Reclamation grant monies up to the maximum of One-Hundred Thousand Dollars ($100,000) to be used for specific projects supporting the City's Advanced Metering Infrastructure, Meter Data Management System, and Customer Portal Project with appropriate matching funds already secured; and

WHEREAS, the turnaround time between receipt of the award and the time permitted to accept the grant and return the required executed grant authorization documents will be limited; and

WHEREAS, the City Council believes it to be in the best interest of the City of Moscow to authorize the application for the grant and preauthorize the acceptance of said grant monies;

NOW, THEREFORE, BE IT RESOLVED by the Mayor and City Council of the City of Moscow that all matters stated above are true and correct and are incorporated herein by reference as if copied in their entirety and shall be adopted with the following:

1. The City Council of the City of Moscow approves the City to submit a grant application for $100,000 to the Water SMART Small Scale Water Efficiency Program.

2. The City Council of the City of Moscow ensures that the City is capable of providing the amount of funding contributions specified in the funding request and/or award.

3. That the Mayor and the City Attorney be authorized and they are hereby preauthorized and directed to accept the U.S. Department of Interior, Bureau of Reclamation grant monies and execute any required documents for the acceptance of said Grant monies.

4. That the Mayor and the Finance Director are each hereby preauthorized and directed to take further action as may be appropriate in order to affect the purpose of this Resolution.

5. That provisions of this Resolution shall be deemed severable and the invalidity of any provision of this Resolution shall not affect the validity of the remaining provisions.

6. That this Resolution shall be effective upon its passage and approval.

PASSED on Motion by the Following Vote:

	Aye	Nay	Abstain	Absent
Hailey Lewis	X			
Drew Davis	X			
Sandra Kelly	X			
Gina Taruscio	X			
Julia Parker	X			
Bryce Blankenship	X			

ADOPTED by the City Council of the City of Moscow, Idaho and **APPROVED** by the Mayor of the City of Moscow, this 6th day of January, 2025.

Arthur D. Bettge, Mayor

CERTIFICATION and **ATTESTATION**. I hereby certify that the above is a true copy of the Resolution passed at a regular meeting of the City Council, City of Moscow, held on January 6, 2025 and attest to the Mayor's signature.

Laurie M. Hopkins, City Clerk

CITY OF MOSCOW INCORPORATED JULY 12 1887 STATE OF IDAHO