



Mayer Domestic Water Improvement District

Meter Upgrade and Radio Read Project

WaterSMART Grants: Small-Scale Water Efficiency Projects

**Funding Opportunity Announcement
No. R22AS00195**

Applicant

Mayer Domestic Water Improvement District
PO Box 416
Mayer, AZ 86333
www.MayerWaterSistrict.com

Project Manager

Mardi Befort
District Manager
12994 E. Central Ave.
Mayer, AZ 86333
Mardi.MayerWaterDistrict@gmail.com
602-558-3700

TABLE OF CONTENTS

Page

1.0 Technical Proposal and Evaluation Criteria	
1.1 Executive summary	2
1.2 Background data	2-3
1.3 Project location	4
1.4 Technical project description and milestones	4-5
1.5 Evaluation criteria	
Evaluation Criterion A – Project Benefits	6-8
Evaluation Criterion B – Planning Efforts Supporting the Project	8-9
Evaluation Criterion C – Project Implementation	9
Evaluation Criterion D – Nexus to Reclamation	10
Evaluation Criterion E – Presidential and Department of the Interior Priorities	11-12
2.0 Project Budget	
2.1 Funding plan and letters of commitment	12
2.2 Budget proposal	12-13
2.3 Budget narrative	13-14
3.0 Environmental and Cultural Resources Compliance	14-15
4.0 Required Permits or Approvals	15
5.0 Official Resolution	15
6.0 Unique Entity Identifier and System for Award Management	15

ATTACHMENTS

1.1 EXECUTIVE SUMMARY

Submission Date: April 18, 2022

Applicant: Mayer Domestic Water Improvement District

Applicant City, County, State: Mayer, Yavapai County, Arizona

Project Location: Mayer Proper, Oak Hills Subdivision, Poland Junction

Funding Group: R22AS00195

Mayer Domestic Water Improvement District (Mayer DWID, MDWID) is a Category A applicant and the purpose of Mayer DWID's Meter Replacement & Radio Read Project is to replace outdated, under-registering, manual read meters with new radio meters, convert newer, accurately recording manual read meters to radio read technology, purchase associated radio read software and hardware, and configure the reading system to interface with the billing system. Most of the MDWID customer account water meters were originally installed between **1972** and **2012**, with a large amount of the installations occurring prior to 1990 before the District was formed. The average age of meters in our system is approximately 25 + years. With the replacement of the outdated, under-registering meters, MDWID will see the accuracy of water accounting increase significantly both for an increase in billed water and a decrease in lost and unaccounted water. The goal is to leverage science and technology to increase the efficiency of the meter reading process, accurately account for metered water use, and reduce lost and unaccounted water; thereby improving water supply reliability and use our water resource more efficiently. The Districts water supply is not always consistent and at times we ask customers to conserve water. The new meters will also help customers monitor their own water usage and can notify them if they have a significant increase in their water usage.

It is estimated that the project will take approximately 12 months to complete and will begin in May of 2023 or approximately 30 days after execution of the grant agreement between our two parties.

This project is not located in a federal facility.

1.2 Background Data

Mayer Domestic Water Improvement District (Mayer DWID, MDWID) was formed in May 1990 when it was purchased from the Mayer Water Company which was founded 1972. We are governed by a five-member board who serve in four-year staggered terms. The Board of Directors are elected by the residents within the boundaries of the Mayer DWID, which include Mayer proper, Oak Hills Subdivision, High Chaparral Subdivision and Poland Junction. MDWID is a Yavapai county improvement district. Yavapai County is the taxing authority, and the Board of Supervisors provides governing oversight of MDWID.

Mayer DWID currently has 17 wells, 10 of which are currently active. These wells are located primarily along the Big Bug Creek and range in depth from 100 to 500 feet deep. The wells can pump approximately 90 GPM. The district has six storage tanks providing up to 728,000 gallons storage, and three booster stations. As a gravity fed system, boosters are required to feed the Oak Hills subdivision and Poland Junction areas. The MDWID system is just under 50 years old and consists of approximately 26 miles of water main. Water distribution mains range in size from 2-inches to 8-inches and is located both underneath the existing road surface or adjacent to the existing road surface. Fire hydrants and service valves are located throughout the district.

Because Mayer DWID is not situated over a large aquifer, but instead draws from small rivers, our water supply can fluctuate significantly. We can currently service 690 homes. In 2021 we had an average of 620 active metered customers with 70 metered accounts on stand-by. In 2021, MDWID pumped a total of 31.8 million gallons of ground water and delivered 27.4 million gallons of water to metered customers. (See Table 1.)

Month	Active Meters	Water Pumped Gallons	Water Sold Gallons	Water Loss Gallons	Water loss %
January	616	2,514,600	1,896,500	618,100	24.58%
February	619	2,488,600	1,971,700	516,900	20.77%
March	620	2,016,300	1,662,500	353,800	17.55%
April	620	2,495,300	2,193,400	301,900	12.10%
May	620	2,518,500	2,308,900	209,600	8.32%
June	620	3,383,600	3,269,400	114,200	3.38%
July	619	3,743,000	2,963,800	779,200	20.82%
August	619	2,847,900	2,537,500	310,400	10.90%
September	620	2,911,300	2,492,500	418,800	14.39%
October	621	2,370,500	2,145,300	225,200	9.50%
November	621	2,497,800	2,179,000	318,800	12.76%
December	623	2,025,700	1,784,100	241,600	11.93%
YEAR TOTAL/AVG	620	31,813,100	27,404,600	4,408,500	13.92%

Table 1: Water usage, Water Sold and Water Losses for January 2021 through December 2021

Due to funding constraints and other current needs MDWID has been unable to focus our resources to replacing meters in order to calculate where our water loss is going with respect to the meters. MDWID has pursued funding from WIFA for other improvements but was denied because of our inability to repay the loan. In 2021, we completed a rate study with Rural Community Assistance Corporation (RCAC). As a result of this study, we adjusted our rates at the beginning of 2022 but will not see the full benefits of the increased revenue for 5 years.

On October 1, 2021 MDWID applied for the Yavapai County American Rescue Plan Act (ARPA) Water & Sewer Infrastructure Grant Program. In our application we indicated we would be using the ARPA funds to replace undersized and aging waterlines as well as a blending or treatment plan for 2 wells we took off line in March 2021 because they were over the Maximum Contaminant Level (MCL) for nitrates. However, because of the high volume of applicants, Yavapai County has postponed the announcement until May 2022. At that time, they will notify applicants if they will receive the funds and how much an applicant will receive if awarded the ARPA funds. MDWID anticipates having to use over \$150,000 in District funds along with the ARPA funds to complete these necessary improvement projects.

MDWID has not received any funding from Bureau of Reclamation in the past.

1.3 Project Location

MDWID service area, as shown in Figure 2, is in the unincorporated area of Yavapai County and encompasses approximately 48 square miles. The population of this unincorporated community is approximately 1,450 people. The majority of our metered accounts are in the Mayer Proper area. We are located 27 miles south of Downtown Prescott, AZ on Highway 69 and 73 miles north of Downtown Phoenix, The elevation ranges between approximately 4,400 and 4,900 feet above sea level.

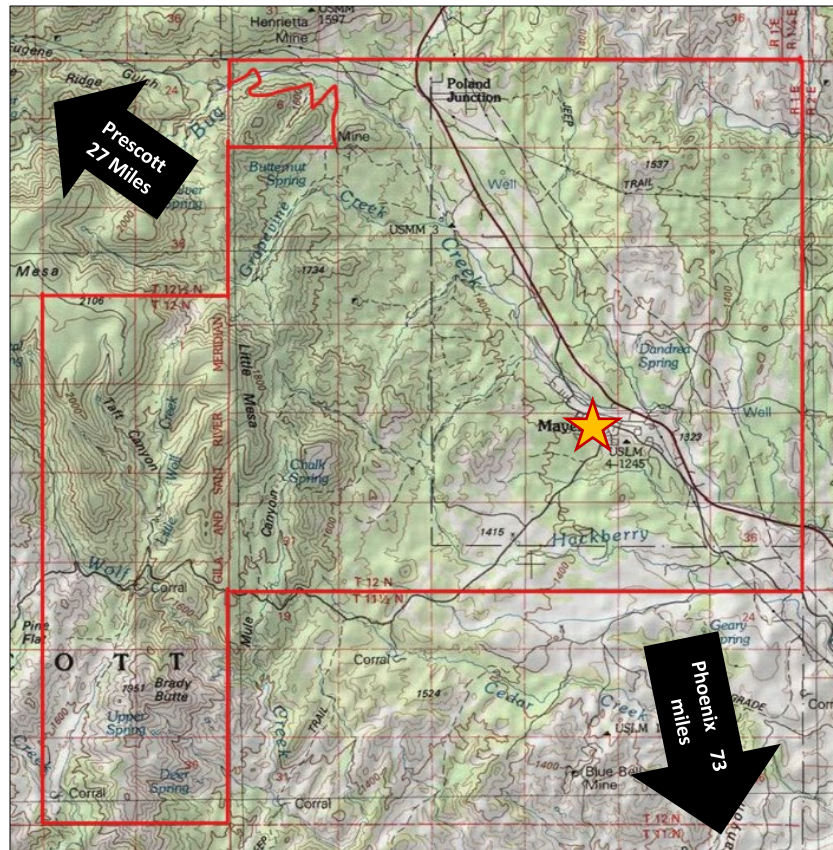


Figure 1: Mayer Domestic Water Improvement District Boundaries

1.4 Technical project description and milestones

In order to accurately capture all water usage in the distribution system, meters are the primary tool for measuring water delivery to each property with water service. To accurately measure water usage for a property, meters should be replaced due to the amount of water flow through the meters and age. Meters in the MDWID service area are mostly 5/8” x 3/4”.

As part of the routine meter reading and billing, each meter must be manually read, and the reads then manually entered in our billing system. This is an incredibly time intensive process and can result in human errors. With the new technology being used since the 1990’s, there is a proven track record that radio read, and fixed base systems are accurate and a time saving tool. It frees up limited operators’ resources to work on the systems regular repairs and maintenance needs. With increased accuracy and efficient reading and recording technology, the system will see decreased

water loss and unaccounted water and leaks can be better identified and addressed in the system quickly and accurately for metered customers. As part of the water system improvements and joining the 20th century with technology, moving MDWID to an automated meter reading and billing system is the next step. With radio read or fixed base meter reading systems being used nationwide, there is a track record for reducing the manual labor in physically reading each meter and sending the reads to a billing office. With radio read and fixed base systems, the reading is automated and system software can do the billing. The change will require replacing existing meters with the radio technology, require a software purchase and annual license and configuration for communicating information between the meter reading and billing systems.

The reason for the water meter replacement program is two-fold: First, American Water Works Association (AWWA) best practices require meters be changed out every ten to twelve or at a threshold of 1 – 2 million gallons of use. Second, the Arizona Department of Water Resources (ADWR) requires water systems to report the amount of water which is either lost or unaccounted throughout the system. The majority of lost or unaccounted water is through inaccurate meters. Replacing the meters on a regular basis meets goals for MDWID and ADWR. It is estimated by replacing the meters MDWID will be able to reduce the lost & unaccounted or non-revenue water **by at least 5% of its total water supply** through improved efficiency and better water management.

METER REPLACEMENT:

The scope is to replace 650 of the 5/8” by 3/4” meters in the water system with new, accurate meters with advanced technology for reading through radio read, reducing manual labor, and increasing efficiencies for capturing leaks, providing a reduction in water loss. This will be done by removing the old meter and replacing it with a new meter.

RADIO READ SYSTEM SOFTWARE, HARDWARE, CONFIGURATION:

The scope is for the purchase, licensing and configuration of radio software and hardware for reading meters in the water system and transmitting meter read information into our billing system and training of field, office, and managerial staff.

Radio Read Meter Project Cost Estimates

Bronze Encoder Meters (650)	\$109,993.00
Transmitters (650)	\$64,480.00
Mobile Read Unit & Accessories	\$6,646.00
Training & Bill Software Integration	\$2,600.00
Engagement / Mobilization	\$3,000.00
First Year Licenses and Users Fees	\$900.00
Meter Installation (MDWID Staff)	\$32,500.00
Project Management & Administration	\$1,500.00
Contingency (3%)	\$3,381.00
Total Cost	\$225,000.00

1.5 Evaluation Criterion

Evaluation Criteria Scoring Summary	Points:
A. Project Benefits	35
B. Planning Efforts Supporting the Project	30
C. Project Implementation	20
D. Nexus to Reclamation	5
E. Presidential and Department of the Interior Priorities	10
Total	100

Evaluation Criterion A – Project Benefits (35 points)

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 to address water reliability concerns, including making water available for multiple beneficial uses and resolving water related conflict in the region. 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 A applicant's water supply delivery system and water customers. Explain the significance of the anticipated water management benefits for the Category A applicant's water delivery system and customers. Consider: Are customers not currently getting their full water right at certain times of year? Does this project have the potential to prevent lawsuits or water calls? What are the consequences of not making the improvement? Are customer water restrictions currently required? Other significant concerns that support the need for the project.

The meters for this project are the latest technology and will serve to better manage the Mayer DWID's water supply, as well as provide more accurate readings for true accountability of production water. The average age of meters in our system is estimated to be more than 25 years old, with our oldest meters in place since water system inception in 1972. It is anticipated that by replacing our outdate and under-registering water meters MDWID will be able to reduce our Lost & Unaccounted (non-revenue water) *by at least 5%* of our total water supply through simply recording and billing accurately for our customer's water usage. We will, therefore, be able to match pumping more effectively to usage for more efficient water management. Finally, drive-by radio read technology will allow us to read customer meters more frequently and thus be able to identify and address unusually high usage and potential leaks. Any tool which allows us to match pumping to usage and reduce draw from the sub-basin, not only benefits our customer but also our neighboring communities who also rely on the temperamental Agua Fria Subbasin and the negative impacts on the overlapping Prescott AMA.

MDWID is in the Agua Fria groundwater subbasin which is located next to and overlaps with the Prescott AMA. Due to the limited nature and variability of the water supply, MDWID currently has a self-imposed moratorium on new water connections. Only through conservation, reduced water loss and increased production capacity can Mayer lift this moratorium and support residential and commercial growth in the local economy. Regionally, we will reduce unaccounted for water and thereby reduced water pumped from our taxed groundwater sources and reduce

pressure on the Agua Fria River subbasin upon which so many communities rely. This will have a positive impact on water management in the area and sustain water supplies to our neighboring communities on the rivers, subbasins and aquifers. By better managing the water draw through accounting accuracy, reduced pumpage will also reduce the amount of electricity and extend well and pump life. Additionally, water customers will be billed accurately for their water usage encouraging conservation and contributing to our system's financial stability.

The project will be of great benefit to current and future water customers in the MDWID and to the neighboring communities in our geographic area relying on water drawn from the Agua Fria subbasin and the intersecting Prescott AMA. (See Figure 2.)

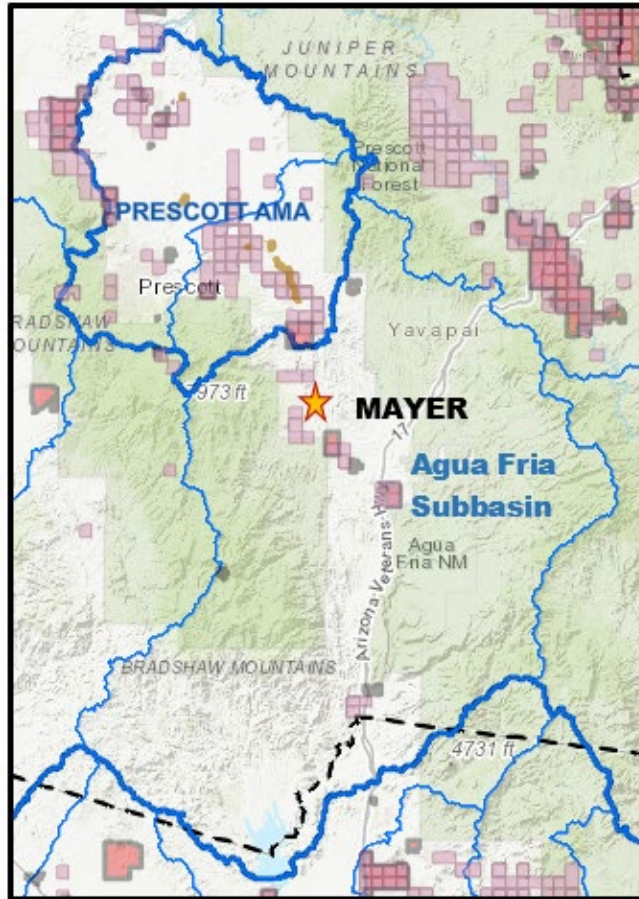


Figure 2: Agua Fria Subbasin Boundary & Overlapping Prescott AMA

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

If successful the MDWID plans on presenting this information at the Annual Rural Water Association Conference, AZ, and any other platform the information can be shared and used by other small water systems statewide who are struggling with high non-revenue or lost & unaccounted water numbers, meter reading inefficiencies and wish to equip themselves with the information needed to apply for federal grant opportunities; as well as immediate information sharing with neighboring small water providers in Yavapai County. We plan to also publish information on the grant project and outcomes on MDWID website, in other local publications, as well as with the Yavapai County Board of Supervisors and community stakeholders.

Any anticipated positive impacts/benefits to local sectors and economies (e.g., agriculture, environment, recreation, tourism)

About 53% of residents of the unincorporated areas of MDWID are 65 or older and the median income is about \$30,000 per year. The MDWID is a public water district, funded primarily by user water rates, the reliability and financial viability of the system is crucial to sustaining and growing the area. Rate increases represent a significant burden to many customers in our economically depressed area. Realizing savings in operational efficiencies and water production from meter conversion to radio read technology will positively benefit MDWID's bottom line, move us toward lifting the moratorium on expansion, and allow savings to be redirected to other investments in infrastructure.

As noted in the Bureau of Reclamation's *Overview of Disadvantaged Communities and Native American Tribes in the Santa Ana River Watershed*, residents living in severely disadvantaged or disadvantaged communities are often disproportionately impacted by high infrastructure costs, poor water quality, and failing septic systems. MDWID wants to ensure that all community members, especially those with fewer resources, have access to technologies that save money and precious water resources.

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).

It is estimated that by replacing the remaining outdated water meters MDWID will be able to reduce the lost & unaccounted or non-revenue water by 5% of its total water supply through improved efficiency and better water management.

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.

No on-farm efficiency work is being completed using CRCS assistance.

Evaluation Criterion B – Planning Efforts Supporting the Project (30 Points)

Up to 30 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 Category A applicant. This criterion prioritizes projects that are identified through local planning efforts and meet local needs.

MDWID Board of Directors approved its current fiscal year 2021-2022 budget with \$20,000 allotted to system repairs and maintenance, an additional \$42,000 for supplies including meters and \$258,050 for improvement projects. Even with limited funds in a small system the importance of this project has been identified by the system manager and board as a priority. Without the grant, the project will need to be funded over a period of five years. The receipt of this grant will allow the project to begin in 2023 and be completed within 12 months thus the benefits to the system, the users and the aquifer will be realized earlier. The MDWID is committed to meeting the objective of this BOR Funding Opportunity of leveraging funds and resources not only to complete the work, but also evaluate the results. Additionally, as part of our water conservation plan, we work with our users on water conservation education, and often ask them to reduce their water use during times of low supply. This project will allow us to better engage our customers in actively

managing their own use and quickly identify and attend to leaks. We received ADEQ approval for a new well for additional capacity to meet system demands throughout the year. We were able to use our remaining \$63,556.74 CAP Funds for this new source of water. This is an additional component in our comprehensive water management plan.

Evaluation Criterion C – Project Implementation (20 points)

Up to 20 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.

As well as being a recognized priority of district managerial staff, the board has approved system repairs, maintenance, and equipment improvement in each of the last two years fiscal budgets. Although the Fiscal Year 2022-2023 budget has not yet been approved. Funding is planned with a portion of the allotment designated for the metering project. Again, without grant funding this project would have an implementation timeline of three to five years. Receipt of grant funding would move the entire project up for completion in 2023-2024.

MDWID does not anticipate that permits will be required as all meters will be installed in the place of existing system water meters. All project-related approvals will be handled by the MDWID Board and operations or contract staff and executed in a timely and efficient manner. Capability of purchasing meters and equipment is established through the MDWID’s Board policies for procurement and contracts necessary to provide the equipment, software, hardware, programming, and installation services on the project. Procurement activity and site work will proceed according to the schedule below. No engineering work is necessary. There are no environmental compliance costs associated with this project.

PROJECT SCHEDULE / MILESTONES

(Milestones are based on days after Grant Award)

Option A: Meters Installed by MDWID Staff

- | | |
|---|-----------|
| 1. Procure Radio Read Meters, Parts, Hardware & Software: | 60 Days |
| 2. Radio Read Integration & Training: | 30 Days |
| 3. Meter Installation: | 12 Months |
| 4. Completion of Project: | 30 Days |

Option B: Meters Installed by Contractor

- | | |
|--|---------|
| 1. Procure Radio Read System & Meter Installation Contracts: | 60 Days |
| 2. Meter Installation by Contractor: | 90 Days |
| 3. Radio Read Integration & Training: | 30 Days |
| 4. Completion of Project: | 30 Days |

Evaluation Criterion D – Nexus to Reclamation (5 Points)

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

Reclamation and the U.S. Department of Agriculture’s (USDA) Natural Resources Conservation Service (NRCS) have collaborated to align program resources in areas of the Western United States where our mission areas overlap (17 Western States), to improve the impact of the agencies’ respective drought resiliency and water efficiency investments. This project aligns with those goals and will improve drought resiliency and water efficiency in an aquifer that intensely supports commercial and residential development, as well as ranching and other farming and grazing activities.

Our project supports the following Department and Reclamation priorities as detailed below and elsewhere in this application:

This project is an innovative application of an existing science/technology. With the installation of this technology, MDWID will be able to accurately account for metered water use. This technology enables MDWID to manage its water by aligning production with accurate metered use and directing lost and unaccounted for water efforts to other areas of infrastructure and system management such as leaks, fire protection, flushing, etc. MDWID sees this technology as a best management practice over our water resources.

The MDWID knows that in times of drought that regional collaboration is extremely important. We share our aquifer with neighboring communities, private water providers, individual and agricultural users. Through the conversion of our meters, we are demonstrating to our neighbors that we are collecting and reporting accurate data. As our neighbors, we report our annual water use through ADWR, and most major water providers look at what their neighbors report to the State. It is important that not only our neighbors, the State, and our customers feel confident in the accuracy of our water use and billing data.

As a small public water system relying heavily on user rates in an economically depressed area, MDWID would not be able to make necessary improvements to infrastructure and advancements in technology for water management without collaboration and funding from public sources. In fact, that was instrumental in the water system moving from a private system to a publicly maintained water district in 1972. As we continue to deal with drought conditions and funding restrictions, we are focusing on efforts on grant opportunities as a means of reaching water efficiency goals in a fiscal responsible and timely manner.

Evaluation Criterion E – Presidential and Department of the Interior Priorities (10 Points)

*Up to 10 points may be awarded based on the extent that the project demonstrates support for the Biden-Harris Administration’s priorities, including E.O. 14008: Tackling the Climate Crisis at Home and Abroad, E.O. 13985: Advancing Racial Equity and Support for Underserved Communities Through the Federal Government, and the President’s memorandum, Tribal Consultation and Strengthening Nation-to-Nation Relationships. Points will be allocated based on the degree to which the project supports the priorities listed, and whether the connection to the priority(ies) is well supported in the application. **Without repeating benefits already described in previous criteria, describe in detail how the proposed project supports a priority(ies) below.***

Points will be awarded based on the extent the project will reduce climate pollution; increase resilience to the impacts of climate change; protect public health; and conserve our lands, waters, oceans, and biodiversity. Address the following as relevant to your project. Please describe how the project will address climate change, including: Please provide specific details and examples on how the project will address the impacts of climate change and help combat the climate crisis. Does this proposed project strengthen water supply sustainability to increase resilience to climate change? Does the proposed project contribute to climate change resiliency in other ways not described above?

MDWID spends 12 hours each month driving through the system to manually read each meter, this also includes rereading misread meters and verifying high meter reads. With the drive by radio read meters, MDWID will reduce driving time by 10-11 hours a month, 120-132 hours a year. Thus, reducing carbon emissions. By accurately calculating water at customer meters MDWID will be more precise in collecting water loss data and be able to pinpoint other areas where water loss is occurring and work towards making the necessary repairs and improvements within the distribution system to lower water loss. This technology also will allow MDWID customers to have the ability to monitor their own water usage in order to conserve water by using the “Eye-On-Water app to set up alarms for daily water usage or alerts for high spikes in water usage.

Points will be awarded based on the extent to which the Project serves economically disadvantaged or underserved communities in rural or urban areas. Will the proposed project serve or benefit a disadvantaged or historically underserved community? Benefits can include, but are not limited to, public health and safety by addressing water quality, new water supplies, or economic growth opportunities. Please describe in detail how the community is disadvantaged based on a combination of variables that may include: Low income, high and/or persistent poverty, High unemployment and underemployment, Racial and ethnic residential segregation, particularly where the segregation stems from discrimination by government entities, Linguistic isolation, High housing cost burden and substandard housing, Distressed neighborhoods, High transportation cost burden and/or low transportation access, Disproportionate environmental stressor burden and high cumulative impacts, Limited water and sanitation access and affordability, Disproportionate impacts from climate change, High energy cost burden and low energy access, Jobs lost through energy transition and Access to healthcare. If the proposed project is providing benefits to an underserved community, provide sufficient information to demonstrate that the community meets the underserved definition in E.O. 13985, which includes populations sharing a particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life.

MDWID has a large population of those on a fixed income, unemployed, underemployed, those in need of low-income housing and there is no access to public transportation. With the ever-increasing cost of energy, MDWID recognizes the need in the community for reasonable water rates. With the first increase in water rates in almost 20 years, the MDWID Board of Directors took into consideration the impact increasing customers water bills would have on the community while still trying to balance the needs of running a water distribution system. With the installation of new meters, customers can use the “Eye-On-Water” app to monitor their own water usage throughout the month in order to keep their water bills low as MDWID is an economically disadvantaged community this feature will benefit those who struggle each month to pay their water bill.

Points will be awarded based on the extent to which the Project will honor the Federal government’s commitments to Tribal Nations. Does the proposed project directly serve and/or benefit a Tribe? Will the project improve water management for a Tribe? Does the proposed project support Tribal resilience to climate change and drought impacts or provide other Tribal benefits such as improved public health and safety by addressing water quality, new water supplies, or economic growth opportunities?

MDWID does not directly serve or benefit a Tribe.

2.0 Project Budget

2.1 Funding Plan and Letters of Commitment

The project is fully funded from MDWID and has been approved by the Board as part of the pending FY 2022-2023 Year Budget. The funding commitment was made by motion at the March 24, 2022, board meeting, as a of a formal resolution. The MDWID Board formally approved submission of the grant and commitment of \$125,000 in capital and operating funds for the project.

2.2 Budget Proposal

Table 1. Summary of Non-Federal and Federal Funding Sources

FUNDING SOURCES	AMOUNT
Non-Federal Entities	\$ 0.00
Non-Federal Subtotal	\$ 0.00
REQUESTED RECLAMATION FUNDING	

Table 2. Total Project Cost Table

SOURCE	AMOUNT
Cost to be reimbursed with the requested Federal funding	\$ 100,000.00
Cost to be paid by the applicant	\$ 125,000.00
Value of a third-party contributions	\$ -
TOTAL PROJECT COST	\$ 225,000.00

Table 3. Budget Proposal

BUDGET ITEM DESCRIPTION	COMPUTATION		Quantity Type	TOTAL COST
	\$/Unit	Quantity		
Salaries and Wages				
Meter Installation	\$ 50.00	650	Each	\$ 32,500.00
Management \$ Administration	\$ 1,500.00	1	Each	\$ 1,500.00
Fringe Benefits				
Travel				
Equipment				
Meters: Badger E25 5/8"x3/4" bronze ultrasonic, w/encoder	\$ 169.22	650	Each	\$ 109,993.00
Transmitter: Badger ME Orion	\$ 99.20	650	Each	\$ 64,480.00
Mobile Radio Read Unit \$ Accessories	\$ 6,646.00	1	Each	\$ 6,646.00
Supplies and Materials				\$ -
Contractual/Construction				\$ -
Training and Billing Integration	\$ 2,600.00	1	Each	\$ 2,600.00
Mobile Engagement Fee	\$ 3,000.00	1	Each	\$ 3,000.00
Licensing & Fees	\$ 900.00	1	Each	\$ 900.00
Other				\$ -
Contingency (2%)	\$ 9,783.90	1	Each	\$ 3,381.00
TOTAL DIRECT COSTS				\$ 225,000.00
Indirect Costs				\$ -
N/A				
TOTAL ESTIMATED PROJECT COSTS				\$ 225,000.00

2.3 Budget Narrative

The budget for the MDWID Meter Replacement and Radio Read Conversion Project consist of the purchase of 650 new Meters with Radio Read Technology, in this case we have chosen the Badger E25 5/8" x 3/4" bronze ultrasonic meter w/ encoder and Badger ME Orion Transmitter from Badger Meter in Scottsdale, Arizona at a cost of \$268.42 each.

The software and hardware for the radio read, field vehicle reading system includes the Trimble Yuma 7 Tablet with antenna, reliever, Orion ME s/w and charger at \$6,646.38

The total cost for Beacon Orion ME Mobilization, staff training and bill integration with staff training, customer service support, warranty, and first year licenses and service fees customer service support are \$6,500.

The installation costs for the meters are estimated to be \$35,000, based on current staff salaries and wages. For staff to complete the project as well as attend to other necessary duties for system maintenance and administration, the meter change out will occur over a 12-month period. As Option B, upon grant award MDWID will bid the cost for meter installation to determine if a private contractor can meet or beat our in-house cost for installation and complete that installation in 60 days or less.

The project will begin once the funds have been released with the procurement of the meters, radio read vehicle-based hardware unit and software. The installation will be completed as detailed above based on market conditions for contractor pricing or monthly implementation schedule determined and completed by staff.

3.0 Environmental and Cultural Resources Compliance

The application should include the answers to:

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

The project will not require any earth-disturbing work or any work that will affect the air, water, or animal habitat in the project area nor any impacts on the surrounding environment.

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?

We are not aware of any endangered species in 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.

None of which we are aware.

When was the water delivery system constructed?

The water delivery system was constructed in 1972.

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, it will not.

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.

There maybe, but this project does not include new construction, renovation of existing structures or moving of earth.

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

No, there are not.

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

No, it will not. Actually, it will benefit low-income populations.

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

No, it will not.

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, it will not.

4.0 Required Permits or Approvals

No permits are required for this project work.

5.0 Official Resolution

Resolution 2022-3-24 provided in attachment A

6.0 Unique Entity Identifier and System for Award Management

Mayer Domestic Water Improvement District is registered in SAMS

- Mayer Domestic Water Improvement District Registered Name
- CAGE: #8NP24 | DUNS: #832904580
- MAYER, AZ, USA

Attachments

- A. MDWID Resolution 2022-3-24
- B. MDWID FY2022-2023 Tentative Budget
- C. MDWID March 2022 P & L Statement
- D. Quote from Badger Meter
- E. SAM Verification Active Registration Status
- F. Mandatory Federal Forms
 - SF-424 Application for Federal Assistance
 - SF-424A Budget Information
 - SF-424D Assurances
 - Project Abstract Summary

**MAYER DOMESTIC WATER IMPROVEMENT DISTRICT
RESOLUTION NO.: 2022-3-24**

WHEREAS, Mayer Domestic Water Improvement District authorizes to submit a proposal to the US Bureau of Reclamation in response to FY 2022 WaterSMART Small-Scale Water Efficiency Projects grant funding opportunity to install new Radio read meters within its distribution system. The project will reduce water losses and more effectively manage water demand.

NOW, THEREFORE, BE IT RESOLVED that the Mayer Domestic Water Improvement District Board agrees to and authorize the following;

- The Mayer Domestic Water Improvement District Board have reviewed and support the proposal submitted;
- The Mayer Domestic Water Improvement District is capable of providing the amount of funding needed for the matching grant from the WaterSMART Grand; and
- If selected for a WaterSMART Grant, Mayer Domestic Water Improvement District will work with the Reclamation to meet the established deadlines for entering into a cooperative agreement.

This resolution was adopted by the Governing Board of

MAYER DOMESTIC WATER IMPROVEMENT DISTRICT

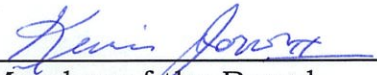
on March 24 2022.




Chairman



Clerk



Member of the Board



Member of the Board

Member of the Board