WaterSMART Grants: Water and Energy Efficiency Grants for Fiscal Year 2024

Bureau of Reclamation Notice of Funding Opportunity No. R24AS00052

Monte Vista Water District

Advanced Meter Installation – Phase 4

February 22, 2024

Applicant:	Project Manager:
Monte Vista Water District	Juan Ventura Jr.
10575 Central Avenue	10575 Central Avenue
Montclair, Ca. 91763	Montclair, Ca. 91763
	jventura@mvwd.org
	909-267-2119

Table of Contents

Technical Proposal and Evaluation Criteria

Executive Summary

Date: 02/22/2024	Applicant Name: Monte Vista Water District
City: Montclair	Project Length of Time: 24 months
County: San Bernardino	Estimated Completion Date: December 31, 2026
State: California	Located on a Federal Facility: No

Project Summary

Monte Vista Water District (MVWD), located in southwestern San Bernardino County, California, a Category "A" applicant, will replace 1,400 manually read meters with Advanced Metering Infrastructure (AMI) to improve MVWD's water supply reliability through generated water savings. The Project includes purchasing AMI meters, meter interface units (MIU/Antenna), software, and other infrastructure. This newer technology will provide real-time water use data that can be used for advanced leak detection, water loss reduction, and improvements to water conservation and efficiency programs offered by MVWD. The Project will upgrade 1,400 existing residential water meters in MVWD's disadvantaged community (DAC) service area saving an expected **262.33** acre-feet-per-year (AFY) (**3,616.815815** acre-feet for the lifetime of the Project or AFL). These savings will then be used to fund other critical needs and repairs (e.g., pipeline replacements). In addition to quantifiable water savings, the Project will produce energy savings through reduced treatment processing and delivering less water. Leak detection, coupled with water use efficiency programs, can help reduce water waste by identifying and correcting the source of the problem. Efficient water use, leak detection, and reduced water loss will enhance water reliability and sustainability in the region. The Project represents a multiple-year commitment by MVWD to upgrade the entire service area to AMI technology.

Background

Monte Vista Water District (MVWD) is seeking funding from the Bureau of Reclamation's WaterSmart Water Energy and Efficiency (WEEG) for Fiscal Year 2024, funding group 1, to implement the Advanced Meter Infrastructure (AMI) Installation Project Phase 4 to improve MVWD's water supply reliability and sustainability through generated water savings.

MVWD applied for this grant in 2020 and 2021 to secure funding for FY21 and FY22, respectively. MVWD carefully considered the feedback provided by the Bureau's grant reviewers and implemented the recommended adjustments in this application. In 2022, MVWD decided not to apply for the grant, choosing instead to dedicate an additional year to gather additional information after receiving further recommendations.

Established in 1927, MVWD provides retail and wholesale water supply services to a population of over 135,000 within a 30 square mile area, including the communities of Montclair, Chino

Hills, portions of Chino, and the unincorporated area lying between the cities of Pomona, Chino Hills, Chino, and Ontario.

Currently, MVWD manages 10 active groundwater production wells with a total capacity of 31.2 million gallons per day. About 50% of MVWD's water supply is sourced from the Chino Groundwater Basin within the Santa Ana Watershed. The basin boasts a storage volume of five million acre-feet, with the potential for an additional one million acre-feet. To maintain safe groundwater levels, the basin's safe yield is capped at 140,000 acre-feet annually.

MVWD's system, with about 203 miles of pipeline, is comprised of distribution mains ranging from two to eight inches in size beneath existing road surfaces. In 2022, MVWD served an average of 10,654 residential active metered customers, pumping 9,887.57 acre-feet (AF) of groundwater, purchasing 7,742.46 AF of imported water, and delivering 7,832.130 AF of potable water to metered customers.

The average age of MVWD's current meters is well over 15 years. By upgrading to AMI meters, MVWD aims to significantly reduce water losses, improve conservation and sustainability efforts, and provide real-time leak detection technology to reduce unforeseen excessive water bills for residents. By integrating science and technology, the project will result in efficiency improvements in the meter reading processes and will significantly enhance water supply sustainability and reliability, which is an important factor/outcome given that approximately 50% of MVWD's water supply is derived from the Chino Groundwater Basin.

Benefits to the community members include, but are not limited to, advising residents of a need to possibly reduce consumption and/or potential leaks and allowing for immediate repairs, which will help to mitigate the financial impacts associated with abnormally high water bills. These alerts also allow MVWD the opportunity to share information with community members about water-saving programs offered in collaboration with Inland Empire Utilities Agency (IEUA) and Chino Basin Water Conservation District (CBWCD).

The project aligns with state and federal regulations aimed at reducing water loss through leak detection and water conservation as well as reduced water loss, energy savings, and enhanced groundwater supply reliability. MVWD aims to reduce water losses, improve conservation efforts, and provide real-time leak detection technology by upgrading to AMI meters. Implementation of the Project directly aligns with Reclamation's WEEG FY2024 Program in that it will result in quantifiable water and energy savings, implement renewable energy components, and support broader sustainability benefits by allowing more water to be maintained in the system by providing the following:

- Estimated water savings of 262.33 acre-feet per year (AFY) and 3,616.815 acre-feet for the lifetime (AFL) of the meters, and energy savings of 544,533.8425 kilowatt-hours (kWh) per year.
- Reduced time, labor, cost, energy, and Greenhouse House Gas (GHG) and other harmful emissions by reducing vehicle miles traveled by reducing meter reading routes.
- Annual cost savings of $255,056 on imported water purchases, which can be reinvested in other critical needs.

- Immediate water leakage detection, which will reduce energy consumption (less pumping), water waste, and excessively high water bills for a customer.
- Improved individual water consumption patterns.

MVWD's Strategic Plan, Water System Master Plan, and annual operating budget are guiding documents used to plan for maintenance, operations, and system improvements. Due to the impacts of the pandemic, ongoing drought conditions because of climate change, and stricter water quality regulations, MVWD was forced to revise and prioritize its near-term Capital Improvement Project (CIP) budget to focus primarily on groundwater treatment.

Despite these constraints, MVWD has implemented AMI Installation Project Phase 1, which uncovered leaks and mitigated water loss, while securing funding for Phase 2 through IEUA's Member Agency Administered Incentive Program in collaboration with the Metropolitan Water District of Southern California. It is anticipated that Phase 2 will be completed by April 1, 2024. MVWD has also submitted a grant application for the USBR WaterSmart Small-Scale Project Grant for Fiscal Year 2024 for Phase 3 of the AMI installation. The current grant application pertains to Phase 4 of an ongoing comprehensive system-wide water meter replacement program and the transition to AMI meters to improve meter-reading efficiencies, leak detection, water conservation and sustainability efforts that would build upon the success of Phase 1.

Project Location

The AMI project area covers the northwest portion of MVWD's service area: specifically, Census Tract #0607100201 which is located north of Interstate 10 in the city of Montclair, county of San Bernardino, state of California. The approximate project latitude is [34°5'4.9164"N], and the longitude is [117°42'21.7692"W]. According to the Climate and Economic Justice Screening Tool, the community is ranked 96th for air quality (level of inhalable particulate matter) and 90th for linguistic isolation because most households do not have a resident over the age of 14 speaking English. Additionally, the community is identified by the California Environmental Protection Agency as one of the Top 25% Disadvantaged Communities with a CalEnviroScreen 4.0 score of 77. See Figure 1 for the entire service area of

MVWD.

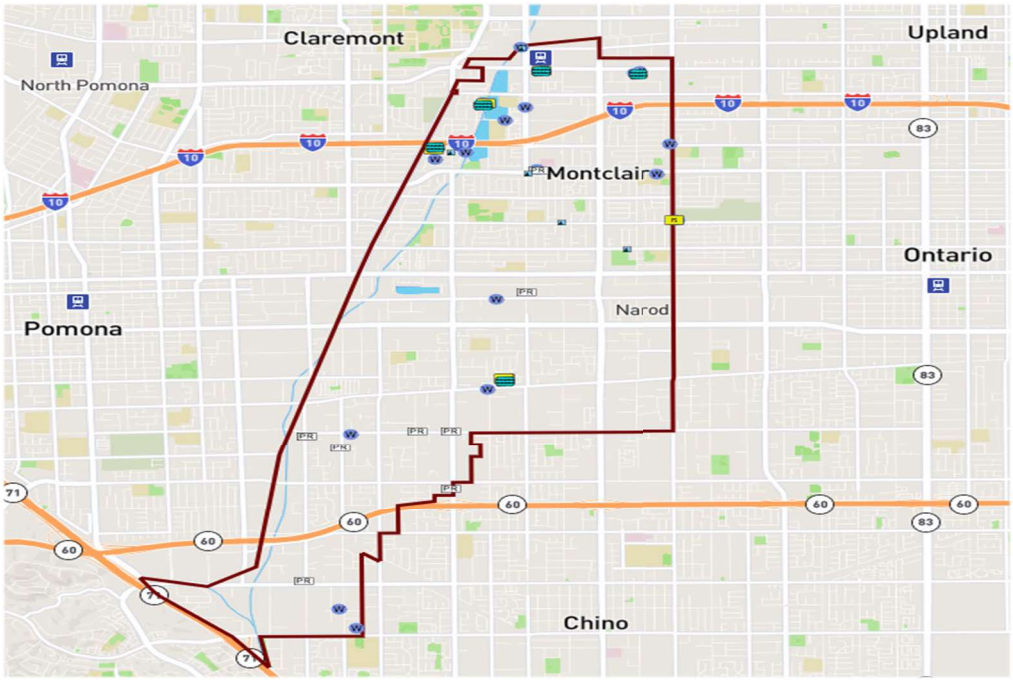


Figure 1: Map of Monte Vista Water District service area.

Technical Project Description

MVWD, like many agencies, faces challenges in delivering cost-effective water services due to competing priorities and budget constraints. As such, water system operations have become increasingly complex and costly, driven by a multitude of state and federal regulations, a diminishing statewide water supply brought about by years of drought and climate change, increased labor shortages, and increases in energy and other operational expenses.

To accurately measure water usage in the distribution system, water meters play a crucial role, and their replacement is essential due to diminishing factors such as water flow and age. The current manual reading and billing process is time-intensive and subject to errors. Leveraging technology, specifically wireless transmission and fixed base systems, has proven to be an accurate and efficient strategy, according to US Environmental Protection Agency Water Sense[1].

This technology not only frees up operator resources for regular system maintenance but also enhances accuracy and effectively identifies water losses that are both financially and environmentally sustainable. Phase 1 was completed on September 28, 2023, and a leak on the underground distribution line was discovered within seven days. The AMI meters allowed MVWD to begin the process of preparing to fix the pipe. Without the new meter, the leak could have taken years to reach the surface, resulting in prolonged water loss and/or property damage.

[1] https://www.epa.gov/watersense/advanced-metering-infrastructure

MVWD's transition to automated meter reading aligns with MVWD's Water Meter Replacement Policy (page 96 of MVWD Comprehensive Policy Manual)[2] derived from the American Water Works Association (AWWA) M6 Manual, which states that small and medium meters shall be replaced every 15 to 20 years.

The AMI Phase 4 project consists of 1,400 meters through a comprehensive scope of work (detailed below). The fixed-based system will be seamlessly integrated with MVWD's existing billing system, enabling wireless water-use data transmission via cloud-based technology every 7.5 minutes. Currently, manual meter readings are taken every two months; therefore, this upgrade will substantially improve data collection and other operational efficiencies.

The following technical description provides a comprehensive overview of the AMI Phase 4 project, outlining the detailed steps, equipment, and materials involved in the installation of 1,400 meters.

Scope of Work

1. Meter Installation:
   - MVWD's Meter Technicians will replace 1,400 manually read meters with ¾ inch AMI meters.
   - Concrete box lids will be replaced with polymer box lids during meter replacement.
2. Materials and Equipment:
   - AMI: State-of-the-art meters equipped with advanced data collection capabilities.
   - Necessary cabling, connectors, and associated hardware for seamless integration.
3. Upgrade Description:
   - The upgrade involves replacing traditional nutating disc manual read water meters with flowIQ® 2200 AMI meters, offering improved accuracy and real-time data transmission.
4. Removal of Materials:
   - Existing water meters slated for replacement will be removed and replaced with the new AMI meters.
   - Disposal or recycling of old meters and associated materials will be conducted in an environmentally responsible manner.
5. Site Laydown and Mobilization Areas:
   - Designated areas will be identified for the temporary storage of materials and equipment.
   - Mobilization plans will be established to streamline the arrival and setup of construction equipment.
6. Areas Impacted by Construction:
   - The project does not require earth disturbance work and therefore will not adversely impact the surrounding environment.
   - The project is expected to be exempt from the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) environmental review processes.

[2] https://www.mvwd.org/DocumentCenter/View/1363/MVWD-Comprehensive-Policy-Manual-PDF

Following the grant award, MVWD staff will assume responsibility for ensuring compliance with all grant-related obligations. This includes executing the grant agreement, submitting regular reports, managing reimbursement requests, and preparing a final completion report, all in accordance with the stipulated Reclamation requirements.

Evaluation Criteria

Evaluation Criterion A—Quantifiable Water Savings (25 Points)

1) Describe the amount of estimated water savings. *For projects that conserve water, please state the estimated amount of water expected to be conserved (in acre-feet per year) as a direct result of this project.*

By retrofitting the existing meters with AMI-compatible equipment, MVWD expects to conserve **262.33 Acre-Feet per year (AFY) and 3,616.815 Acre-Feet lifetime (AFL) of meters** of water that would otherwise be lost due to undetected leaks and lack of real-time water consumption data.The annual savings equates to $255,056 annually based on an average per acre foot cost of $972.27 that will be used to fund other critical operational needs.

2) Describe current losses. *Please explain where the water that will be conserved is currently going and how it is being used. Consider the following:*

a. *Explain where current losses are going (e.g., back to the stream, spilled at the end of the ditch, seeping into the ground)?*

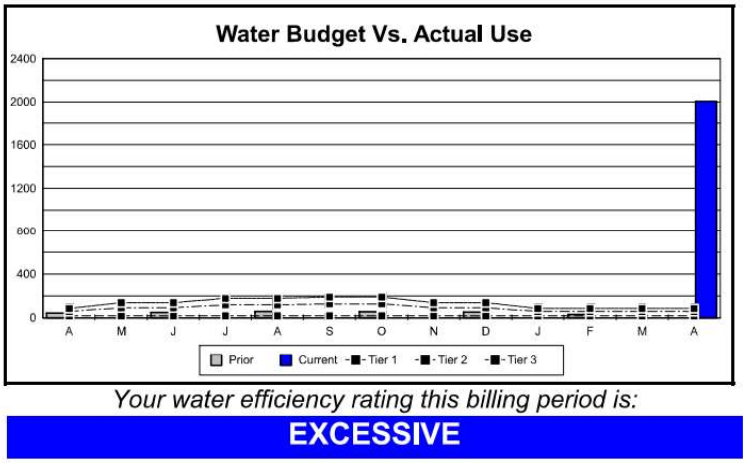
The implementation of AMI meters represents a significant step in effectively managing water demand within MVWD. Accurate measurements are crucial for efficient water resource management. MVWD's random meter accuracy testing revealed alarming inaccuracies, especially in low flow rates. This is because over 60% of the MVWD's meters are operating beyond their useful life of 15 years and are unable to detect low flows. This leads to the oversight of small leaks and unaccounted water usage until it reaches the minimum threshold of 7.48 gallons, making it difficult for MVWD to manage these losses effectively. By installing AMI meters, the customer's water consumption is captured more accurately while providing an opportunity to correct the issue causing the loss of water. Through accurate and timely billing statements, a customer is made aware of their true water footprint and can make repairs or change their habits to conserve and use water more efficiently. Replacing antiquated meters under-registering consumption will reduce water losses, change customer behavior, and maintain more water in the system.

The current two-month billing cycle, consistent with many water retailers manually reading meters, does not allow customers the ability to respond to leaks quickly. For example, a customer may experience an unnoticeable leak beginning any day after their 60-day billing cycle. The earliest indicator of the leak could be a high bill received two months later. One MVWD customer experienced an unnoticeable leak sometime after their meter was read. The leak went undetected and never surfaced. As a result, the customer unknowingly went into Tier 4,

Excessive Use, and had a bill of over $12,000. This customer normally remains within their water budget and uses roughly 49 units (1 unit equals 100 cubic feet or 748 gallons) of water. The leak led to 2005 units, resulting in roughly 1,956 units (195,600 cubic feet or 1,463,088 gallons or 4.49 acre-feet) of water loss in less than 60 days (see consumption reads below).

In addition, this customer was caught off guard, and the high bill resulted in an unforeseen financial hardship. The new AMI meters will enable MVWD to reach out to the unsuspecting customer immediately when a spike in consumption is noted, significantly reducing water losses seeping into the ground and allowing more water to remain in the system for future use.

Consumption Report for Customer with Unnoticed Leak						
Year	February	April	June	August	October	December
2023	29	2005	44	51	56	57
2022	43	43	47	56	55	52



The new AMI technology also provides acoustic leak detection on the distribution side of the meter to assist in addressing the challenges of undetected water losses within the distribution system that may only surface when significant damage occurs. Within seven days of completing Phase 1 the new AMI meters identified an underground distribution line leak, enabling timely repairs and potentially saving an unknown amount of water waste that could have persisted for years. This technology has contributed to reducing water losses and property damage, ensuring more water remains within the system.

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

The project aims to address significant sources of water loss within MVWD's water system. The primary loss stems from meter inaccuracies and unaccounted water usage, leading to financial and environmental resource deletion for MVWD. These losses also stem from leaks within the MVWD distribution system,with water seeping into the ground or being contaminated as runoff before diverting to the storm drain system. By implementing measures

to detect and repair leaks and improve metering accuracy, the project seeks to mitigate these losses, safeguarding both financial and environmental resources for MVWD.

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

There are no known or specific benefits associated with where the current losses are going.

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

The implementation of the AMI project is expected to improve leak detection, provide accurate billing, change customer behavioral water habits, further enhance water conservation efforts, and significantly achieve substantial water savings.

According to Advanced Metering Infrastructure: Reducing Water Loss, Improving Security and Enhancing Resiliency (2020)[3] noted that 15% of the AMI meters installed detected leaks ranging from "extremely small (>100 gpd) to very large (9,000 gpd)." Based on this study MVWD took the lower end of the leaks detected, to be conservative, at 1,000 gallons per day (GPD) leak rate times the number of meters in the project.

Number of Meters	X 15%	=	Meters anticipated to leak	x	Avg Leak Rate (gal per day)	=	Potential daily savings (gal)
1,400	X 15%	=	210	x	1,000	=	210,000 GPD

Next MVWD converts the gallons per day (GPD) to Acre- Feet per day (AFD).

Gallons	X	Conversion factor (AF)	=	AFD
210,000 GPD	x	3.0688832772166E-6	=	**0.6444 AFD**

Next MVWD calculated the annual and lifetime savings. Lifetime savings utilized an average life span of the AMI meters of 15 years.

Potential Daily Savings (AF)	X 365 days	=	Potential Annual Savings (AFY)	X 15 years	=	Potential Lifetime Savings (AFL)
0.6444	X 365	=	**235.206 AFY**	X 15 years	=	**3,528.09 AFL**

When MVWD receives a leak alert from the AMI system, the Customer Service team reaches out to the customer to share information about the water-saving direct installation programs

[3] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8176864/

available to the customer. MVWD anticipates that this communication will increase customer participation in the water-saving programs.

The table below illustrates MVWD customer participation in water-saving direct installation programs from Fiscal Year 2021 through year-to-date Fiscal Year 2024 with associated water savings. (The controller program upgrades inefficient sprinkler timers with weather-based irrigation controllers, and the tune-up program repairs minor irrigation leaks.) The table below also includes participation in MVWD's new Indoor Leak Repair Program that began in December 2022, offering minor leak repairs to indoor fixtures for income-eligible customers.

Program	Sites Serviced	Annual Water Savings (AFY)*	Lifetime Water Savings (AFL)*
Landscape Efficiency Audit Program	34	4.712299	23.561495
Controller Program	101	5.84076	57.563
Tune-up Program	209	50.8	101.6
Indoor Leak Repair Program	16	1.23	3.075
Total	**360**	**62.583059**	**185.7999495**

**Water savings estimates based on data from the Environmental Protection Agency.*

Averaging out the above direct install program success rate equals **0.17 AFY** water savings and a lifetime water savings of **0.52 AF** per site.

Water Savings	/	Total sites	=	Average Water Savings Per Site
62.583059 AFY	/	360	=	**0.17384183 AFY**
185.7999495 AFL	/	360	=	**0.51610971 AFL**

In addition to the water-saving direct installation programs, MVWD participates in Metropolitan Water District of Southern California's rebate program. The Customer Service team also shares this rebate information with customers, and the additional communications will increase participation. The WUE dashboard provides detailed program participation information from the rebate program.

	Number of Devices	Annual Water Savings (AFY)	Lifetime Water Savings (AFL)
Device Rebates	667	6.4948	86.888

Averaging out the above rebate program success rate equals **0.01 AFY** water savings and a lifetime water savings of **0.13 AF** per site.

Water Savings	/	Total sites	=	Average Water Savings Per Site
6.4948 AFY	/	667	=	**0.009737 AFY**
86.888 AFL	/	667	=	**0.13026687 AFL**

Utilizing the program data dashboard hosted by our regional partner Inland Empire Utilities Agency, MVWD can track participation metrics in both the direct install and rebate programs when the customer service team contacts customers with the leak alert. Phase 1 installation resulted in 20% of the meters receiving a "leak alert." MVWD anticipates that 75% of the customers receiving a "leak alert" call will sign up for program participation. The anticipated water savings for program participation are shown below.

AMI Meters installed	x	Leak alerts (%) received	=	Leak Alert Calls
1,400	x	0.2	=	280

Leak Alert Calls	x	Potential Participation rate (%)	=	Potential Participation (sites)
280	x	0.75	=	210

Since the AMI meters are being installed in a Disadvantaged Community, MVWD anticipates that 75% of respondents will participate in water-saving direct installation programs and the remaining 25% will partake in rebates.

Potential program participation (# of sites)	X	Potential Participation	=	Total Potential Program Participation
210	x	25%	=	**52.5 Rebates**
210	x	75%	=	**157.5 Direct Install**

Multiply the potential program participation by the average water savings per year per type of program.

Potential program participation (# of sites)	x	Average Water Savings (AFY)	Average Lifetime Water Savings (AFL)	=	Potential Total savings
Direct Installation Programs					
157.5	x	0.17	---	=	**26.775 AFY**
157.5	x	----	0.52	=	**81.9 AFL**
Rebates					
52.5	x	0.01	----	=	**0.525 AFY**
52.5	x	---	0.13	=	**6.825 AFL**

Adding the direct install and rebate program participation together results in **27.3 AFY and 88.75 AFL** total water savings.

Direct Install	+	Rebate	=	Total Potential Program Water Savings
26.775	+	0.525	=	**27.3 AFY**
81.9	+	6.825	=	**88.725 AFL**

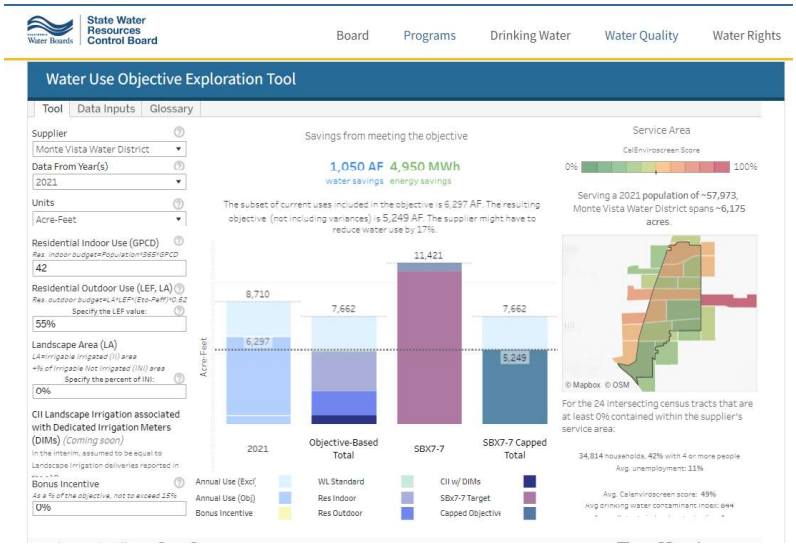
Combining the savings of meter accuracies and potential program participation, water savings equals **262.3 AFY and 3,616.815 AFL (**total anticipated water savings for this project).

	Potential Water Savings (AFY)	Potential Water Savings (AFL)
Meter accuracies savings	235	3,528.09
+	+	+
Potential Program Participation	27.3	88.725
=	=	=
Total	**262.3 AFY**	**3,616.815 AFL**

Moreover, the AMI project aligns with California's Water Use Efficiency (WUE) Legislation, which mandates reductions in water loss. The State Water Resources Control Board (SWRCB) is currently developing regulations that, according to their WUE Objective Exploratory Tool[4], set a target for MVWD to reduce water usage by 1,050 acre-feet per year by 2035. Implementing AMI will greatly enhance MVWD's ability to meet these requirements, further supporting the anticipated water savings.

In summary, the estimated water savings resulting from the AMI project are supported by comprehensive data and calculations, including detecting actual water losses, the potential impact of household leaks, and alignment with state regulations. These calculations provide a thorough understanding of the projected water savings and demonstrate the effectiveness of the proposed measures in reducing water waste.

[4] California State Water Resource Control Board Water Use Objective Exploratory Tool https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/water-use-explorer/



4) Please address the following questions according to the type of infrastructure improvement you are proposing for funding. *See Appendix A: Benefit Quantification and Performance Measure Guidance for additional guidance on quantifying water savings.*

Appendix A:
Performance Measure A.2: Measuring Devices
Measuring Devices: A.2.a. Municipal Metering

For projects that install or replace existing municipal end-user water service meters, the applicant should consider the following:

Whether the project includes new meters where none existed previously or replaces existing meters.

The proposed project will replace 1,400 existing 15-year or older manually read meters with flowIQ® 2200 AMI meters.

Whether the project includes individual water user meters, main line meters, or both.

The project includes individual water user meters with acoustic leak detection on both the consumer and distribution service lines.

If the project replaces existing individual water user meters with new meters, whether new technologies (e.g., automatic meter reading [AMI] meters) will be employed.

Yes, the new meters are flowIQ® 2200 AMI meters with new acoustic leak detection on both the distribution and consumer supply lines.

Include a description of both pre- and post-project rate structuring.

MVWD is on a bi-monthly billing and budget-based tiered rate structure for single-family residential customers. The table below is MVWD's approved rate structure adopted by the Board of Directors on November 8, 2023.

Budget-Based Tiered Rate Single-Family Residential	Effective Jan. 1, 2024	Effective Jan. 1, 2025	Effective Jan. 1, 2026	Effective Jan. 1, 2027
Tier 1	$2.37	$2.56	$2.77	$3.00
Tier 2	$4.27	$4.62	$4.99	$5.39
Tier 3	$4.96	$5.36	$5.79	$6.26
Tier 4	$5.92	$6.40	$6.92	$7.48

Municipal Metering

a. How has the estimated average annual water savings that will result from the project been determined? Please provide all relevant calculations, assumptions, and supporting data.
MVWD utilized leak alert data for Phase 1 of the installed Kamstrup FlowIQ 2000 meters. The data provides a leak rate that is averaged with all meters installed. This leak rate was multiplied by the number of meters to be installed in Phase 4 (1,400) to determine the projected annual water savings. The annual water savings were multiplied by 15, the anticipated life span of the new AMI meters according to the American Water Works Association (AWWA) M6 Manual, which states that small and medium meters shall be replaced every 15 to 20 years, to determine the lifetime water savings.

MVWD also has several water use efficiency programs combined with rebates. Since the project is being installed in a DAC, MVWD anticipates that overall program participation rate will increase by 20%, of which 25% will seek rebates and 75% will sign up for direct install programs. The WUE dashboard provided by Inland Empire Utilities Agency (IEUA) showed detailed data on MVWD's current water savings rate per site and device. This data was multiplied by the projected increases in participation. The final step was adding the two projected savings for a total annual and lifetime water savings for this project.

The calculations, assumptions, step-by-step details, and supporting data for water savings can be seen in the above Section E.1.1. Evaluation Criterion A—Quantifiable Water Savings.

b. How have current system losses and/or the potential for reductions in water use by individual users been determined?
Potential reduction from individual users was determined based on U.S. EPA estimates associated with water-saving direct install programs and rebate participation as described above in Section E.1.1 Evaluation Criterion A – Quantifiable Water Savings. MVWD customers pay tiered rates for consumption. The installation of the new AMI meters will provide accurate meter readings, which in turn will accurately reflect a customer's usage. Providing timely utilization information will educate and motivate customers to reduce consumption, change daily habits, or participate in water-saving programs offered by MVWD.

c. For installing end-user water service meters, e.g., for a residential or commercial building unit., refer to studies in the region or in the applicant's service area that are relevant to water use patterns and the potential for reducing such use. In the absence of such studies, please explain in detail how expected water use reductions have been estimated and the basis for the estimations.

According to the Pacific Institute, metering when coupled with effective pricing structures can reduce water use by 15%-20% (2014)[5]. MVWD has already successfully implemented a budget-based tiered rate structure that incentivizes customers to stay within their customized water budgets. If this grant is awarded, MVWD will be able to update antiquated meter infrastructure, which will reduce current water loss. The combination of modern metering practices, combined with MVWD's conservation-oriented rate structure, will increase MVWD's water supply resiliency.

Additionally, MVWD routinely collaborates with its wholesale water provider, Inland Empire Utilities Agency (IEUA), and other regional retail water agencies to provide water use efficiency (WUE) programs to help support water supply resiliency. The following planning documents address the collaborative efforts in regional WUE and conservation programs. These documents provide action plans for long-term resource planning to ensure adequate water supplies are available to meet existing and future water supply needs, which includes demand reduction and conservation efforts.

- Monte Vista Water District 2020 Urban Water Management Plan (UWMP)[6]

  MVWD's 2020 UWMP demonstrates MVWD's prior, continued, and projected reduction in imported water supplies obtained (either directly or indirectly) from the Sacramento-San Joaquin Delta (Delta). A key component to this is assessing demand management measures as noted in Section 9.2 (beginning page 9-4 of the UWMP). Section 9.2.2 (page 9-5) specifically addresses metering as part of the "Existing Demand Management Measures for Retail Suppliers." In accordance with California Water Code Sections 526 and 527, MVWD meters all customer connections, including separate metering for single-family residential, multi-family residential, commercial, industrial, landscape, and institutional/governmental facilities. Furthermore, if there is new development within MVWD's service area, each facility is individually metered. Service charges for MVWD are based on the customers' connection size.

- Inland Empire Utilities Agency and Water Facilities Authority 2020 Urban Water Management Plan

  IEUA is the wholesale water provider for MVWD and seven other retail water agencies. Section 8.3.1 (page 8-5) of Inland Empire Utilities Agency and Water Facilities Authority's 2020 Urban Water Management Plan addresses "Core Water Use Efficiency Strategies for the Region." This section highlights the development and implementation of regional water use efficiency programs. By taking advantage of economies of scale to stretch limited WUE budgets, retail agencies can benefit from regionally implemented water use efficiency

[5] Pacific Institute Study on Metering in California
https://pacinst.org/wp-content/uploads/2015/04/Metering-in-California.pdf
[6] https://www.mvwd.org/DocumentCenter/View/350/2020-Urban-Water-Management-Plan-PDF?bidId=

programs. This builds upon programs implemented by individual agencies, such as budget-based tiered rate structures and WUE ordinances.

- Inland Empire Utilities Agency Regional Water Use Efficiency Business Plan[7]

  According to the regional Business Plan, IEUA and its retail water agencies actively strive to increase regional sustainability by developing local water supplies and reducing dependence on costly and increasingly unreliable imported water. "These efforts focus on using water more efficiently, eliminating water waste, and drought-proofing the region through increased use of recycled water, groundwater, storm water and other local water supplies. Water use efficiency is universally regarded as the most cost-effective method in which to reduce water demand. As such, the region has heavily invested in water use efficiency initiatives over the years."

- Metropolitan Water District of Southern California 2020 Urban Water Management Plan [8]

  Section 3.4 (page 3-37) of Metropolitan Water District's 2020 Urban Water Management Plan addresses "Demand Management and Conservation." Metropolitan Water District (Metropolitan) is the wholesale water provider for Southern California water agencies. IEUA is a member agency of Metropolitan, which means Metropolitan's conservation programs are available to IEUA and its retail agencies, including MVWD. Demand management through conservation is a core element of Metropolitan's long-term water management strategy. Collectively, Metropolitan's conservation programs and other conservation in the region will reduce Southern California's reliance on the delivery of imported water by almost 1.2 MAF per year by 2030. Metropolitan's water conservation activities include rebates and incentives for water-efficient fixtures, equipment, and turf removal. While Metropolitan does not assign a savings value for public awareness campaigns and conservation education, it is understood that these outreach programs prompt consumers to install water-saving fixtures and change water-use behavior, thereby creating a residual benefit of increasing the effectiveness of complementary conservation programs.

- Santa Ana Watershed 2018 Project Authority One Water One Watershed (OWOW) Plan[9]

  Section 4.3.1. (page 4-38) of the OWOW Plan addresses Water Infrastructure in the Santa Ana Watershed, drawing specific attention to finding ways to improve water reliability for the future by building upon existing water infrastructure systems. The plan addresses water infrastructure in large-scale systems, services, and facilities as well as direct customer connections. The American Society of Civil Engineers conducted evaluations of the infrastructure in the watershed in 2010, as conveyed in an infrastructure report card that evaluated the condition, capacity, operations, and security of infrastructure as criteria for

[7] https://www.ieua.org/fy-2022-2024-regional-water-use-efficiency-business-plan-update/
[8] chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https:/www.mwdh2o.com/media/21641/2020-urban-water-management-plan-june-2021.pdf
[9] https://sawpa.gov/wp-content/uploads/2019/02/OWOW-Plan-Update-2018-1.pdf

assigning grades to the systems. Room for improvement clearly exists with reference to water-related infrastructure grades for the San Bernardino County, particularly because this area struggles to maintain and provide water-related infrastructure.

d. What types (manufacturer and model) of devices will be installed and what quantity of each?
The type of meter that has been selected is the Kamstrup flowIQ® 2200 ¾ inch meter.

Manufacturer/Brand	Model	Meter Size	Meter Quantity
Kamstrup	flowIQ® 2200	¾ inch	1,400

e. How will actual water savings be verified upon completion of the project?
Water savings will be thoroughly verified upon completion of the project through a comprehensive approach that involves utilizing utility data management software to conduct a water balance in the system and comparing usage data from all meters equipped with AMI meters to historical values. Additionally, the installation of meters will be periodically assessed, comparing water usage before and after the AMI meter installation using the same software. This comparative analysis will allow for evaluating water savings values throughout the project duration.

Furthermore, customer engagement trends will be tracked regularly, including leak variances, participation in water use efficiency programs, and rebate applications. The Water Use Efficiency dashboard provided by IEUA will play a crucial role in tracking program participation, allowing for cross-referencing to determine the impact of the AMI Phase 4 installation project on water savings. By combining these methods, the project team can determine the actual water savings achieved accurately.

It is also important to note that the installation of AMI meters, as was the case with Phase 1, will help MVWD in identifying and correcting water losses that may be occurring within the distribution side of the operation resulting in additional water savings beyond those provided highlighted above..

Measuring Devices: A.2.b. Irrigation Metering
Not applicable, irrigation metering is not part of this project.

Evaluation Criterion B—Renewable Energy (20 Points)

Subcriterion B.1-Implementing Renewable Energy Projects Related to Water Management and Delivery

*Up to **20 points** may be awarded for projects that are installing new renewable energy capacity.*
The installation of AMI meters will not include implementation of renewable energy projects related to water management and delivery. However, there will be quantifiable energy savings as

a result of the project and those are described below in E.1.2.2. Subcriterion No. B.2: Increasing Energy Efficiency in Water Management.

Describe the amount of energy capacity. *For projects that implement renewable energy systems, state the estimated amount of capacity (in kilowatts) of the system.*
Section not applicable.

Describe the amount of energy generated. *For projects that implement renewable energy systems, state the estimated amount of energy that the system will generate (in kilowatt hours per year).*
Section not applicable.

Describe the status of a mothballed hydropower plant. *For projects that are bringing mothballed hydropower capacity back online, please describe the following:*
Section not applicable.

Describe any other benefits of the renewable energy project. *Please describe and provide sufficient detail on any additional benefits expected to result from the renewable energy project.*
Section not applicable.

AND/OR

E.1.2.2 Subcriterion B.2—Increasing Energy Efficiency in Water Management

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

This project is expected to achieve significant energy efficiencies totaling **544,533.8425** kilowatt hours per year **(kWh) and 7,517,874.601 kWh per meter lifespan** in three ways:

Reduced pumping and treating.

The project will lead to reduced pumping and treatment processes. By conserving water and optimizing distribution, less water will need to be pumped and treated, resulting in lower energy consumption for pumping operations. This reduction in pumping requirements directly translates to energy savings, as less electricity will be required to operate pumping stations.

Steps to calculate energy savings of reduced pumping and treating.

1. Determine the current energy used per water unit produced. To do this MVWD took the total energy consumed in Water System 9,781,751 kWh divided by the total water delivered 17,775 AF, according to Monte Vista Water District 2020 Urban Water Management Plan (UWMP) (page 6-39).[10]

[10] https://www.mvwd.org/DocumentCenter/View/350/2020-Urban-Water-Management-Plan-PDF?bidId=

Total Energy Consumed (kWh)	/	Total Water Delivered (AF)	=	Energy Used per Water Unit Produced (kWh)
9,781,751	/	17,775	=	**550.31**

2. Multiply the energy used per water unit produced (**550.31 Kwh)** by the potential water savings from section E.1.1 Evaluation Criterion A—Quantifiable Water Savings 262.3 AFY and 3,616.815 AFL. The result is **144,265 kWh annually and 1,990,369.463** kWh meter lifespan energy savings for MVWD implementing this project.

Energy Used per Water Unit Produced (kWh)	x	Potential water savings (AF)	=	Total Energy Savings Per Year (kWh per year)
550.31	x	262.3 AFY	=	**144,265 kWhY**
550.31	x	3,616.815 AFL	=	**1,990,369.463 kWhL**

Lessen conveyance of imported water.

The project will decrease the conveyance of imported water. MVWD currently imports 50% of its water supply from the State Water Project (SWP). The SWP supplies water from Northern California to Southern California via 700 miles of aqueduct and 29 pumping stations. According to Study 1 by the California Public Utilities Commission (2010)[11], water traveling from the Delta to Southern California is highly energy intensive because of the elevation difference, of roughly 3,000 feet. The study notes that the energy required to convey the water increases with each pumping station reaching more than 2,500-4,600 kWh/AF. Since MVWD is located near the end of the SWP, MVWD has chosen to go between the kWh/AF noted in the study of **3,000kWh/AF**. Based on this study, MVWD estimates that 393,450 kWh/AFY will be saved annually and 5,425,222.5 kWh/AFL for imported water.

By conserving and efficiently utilizing local water resources, there will be less reliance on imported water sources. By reducing the conveyance of imported water, the project will indirectly save energy associated with its transportation.

Steps to calculate energy savings of imported water:

1. Divide potential annual and lifetime water savings by 50% to determine the potential imported water savings.

Potential water savings	/	50%	=	Potential Imported water savings
262.3 AFY	/	50%	=	131.15 AFY

[11] CPUC. 2010. Study 1: Embedded Energy in Water Studies Study 1: Statewide and Regional Water-Energy Relationship. California Public Utilities Commission, San Francisco, CA, USA.

3,616.815 AFL	/	50%	=	1,808.4075 AFL

2. Multiply the result from above by the total energy to convey water. The results are 393,450 kWh in annual and 5,425,222.5 in meter lifetime energy savings.

Potential Imported water savings	x	Energy consumed (kWh/AF)	=	Potential Energy savings
131.15 AFY	x	3,000	=	393,450 kWh/AFY
1,808.4075 AFL	x	3,000	=	5,425,222.5 kWh/AFL

Decrease vehicular greenhouse gas emissions.

There will be reduced vehicle use resulting from the implementation of AMI technology. Currently, the MVWD drives approximately 15,696 miles per year to manually read 12,424 meters. By equipping these meters with AMI, MVWD will be able to obtain metering data remotely, eliminating the need for monthly driving routes. This transition will directly reduce vehicular greenhouse gas emissions and associated energy consumption, contributing to environmental sustainability.

Steps to calculate vehicular greenhouse gas emissions savings:

1. MVWD's three Meter Reading Technicians drove 15,696 miles in 2023 reading meters. Divide this number by the total meters in MVWD (12,424). The result is **1.26 miles** driven per meter.

Miles Driven	/	Meters	=	Miles driven per year per meter.
15,696	/	12,424	=	**1.26 MPY**

2. Multiply per meter miles driven by this project's total number of meters (1400). The result is **1,768.71 miles** in reduced driving for this project.

Miles driven per year per meter	X	Meters in this Project	=	Potential Miles Saved per year
1.26	X	1,400	=	**1,768.71 MPY**

3. To calculate the lifetime miles per year, MVWD multiplied 1,768.71 potential miles saved per year by 15, the anticipated lifespan of AMI meters. The result is **26,530.65** miles per lifetime of the AMI meter saved.

Miles driven per year per meter	X	Lifespan of AMI meter	=	Miles driven per meter lifespan
1,768.71	X	15	=	**26,530.65 MPL**

4. MVWD utilized the average dashboard data from the three meter-readers' trucks to determine the average miles per gallon. The average miles per gallon of the three trucks is 9.5 miles per gallon. This number was divided into the potential miles saved to determine the potential gallons of gasoline saved. The result is **186.18** gallons per year potentially saved and **2,792.7** gallons over the lifespan of the meter potentially saved.

Potential Miles Saved	/	MPG	=	Potential Gallons Saved
1,768.71	/	9.5	=	**186.18 GY**
26,530.65	/	9.5	=	**2,792.70 GL**

5. Estimated energy savings in the form of kWh from the reduced gasoline consumption are calculated using US EPA parameters specified as 1.25 therms/gallon of fuel and 29.3 kWh/therm.

Potential Gallons Saved	x	Conversion therms	=		x	Conversion kWh	=	Potential kWh saved
186.18 GY	x	1.25	=	232.725	x	29.3	=	**6,818.8425 kWh/Y**
2,792.7 GL	x	1.25	=	3490.875	X	29.3	=	**102,282.6375 kWh/L**

Approximately **6,818.8425 kWh/year** and **102,282.6375 kWh/lifespan** will be saved due to less driving for this project.

To determine the overall energy savings of the project, MVWD added the three together.

Reduced Pumping & treating (kWh)	+	Lessen conveyance (kWh)	+	Decrease Driving (kWh)	=	Total energy savings (kWh)
144,265	+	393,450	+	**6,818.8425**	=	**544,533.8425 kWh/Y**
1,990,369.463	+	5,425,222.5	+	**102,282.6375**	=	**7517874.601 kWh/L**

Overall, the implementation of this water conservation and efficiency project is expected to save **544,533.8425 kilowatt hours per year (kWh) and 7,517,874.601 kWh over the lifetime of the AMI meters,** equivalent to the annual energy usage of 91 homes. These energy efficiencies

result from decreased pumping requirements, minimized conveyance of imported water, and reduced vehicle use highlighting the multi-faceted benefits of the project in both water conservation and energy savings.

How will the energy efficiency improvement combat/offset the impacts of climate change, including an expected reduction in greenhouse gas emissions.
Energy efficiency improvements, such as the implementation of advanced metering infrastructure (AMI) technology to upgrade existing water meters, play a crucial role in combating climate change and a reduction in GHG emissions by lowering energy demands, vehicle miles traveled, as well as mitigating the potential over drafting of the regional aquifer and/or the need to import additional water from outside sources.

For example, according to the EPA Greenhouse Gas Equivalencies Calculator[12], saving **100,000 kWh** of electricity directly corresponds to a reduction of approximately **69.9 tons** of greenhouse gas emissions. In the case of this project, the total energy savings resulting from the implementation of AMI technology amounts **to 544,533.8425 kWh per year and 7,517,874.601 kWh for the lifetime of the meters or approximately 52,519 tons of greenhouse reduction for the lifetime of the meters.** This substantial reduction in energy consumption not only contributes to lower operating costs but also mitigates the environmental impact by decreasing the emission of heat-trapping gases into the atmosphere.

In essence, energy efficiency improvements, such as those achieved through the adoption of AMI technology, offer a dual benefit of conserving resources and reducing greenhouse gas emissions. By addressing both the water-energy nexus and promoting sustainable practices, these initiatives play a pivotal role in the larger battle against climate change, helping to create a more resilient and sustainable future.

If the project will result in reduced pumping, please describe the current pumping requirements and the types of pumps (e.g., size) currently being used. How would the proposed project impact the current pumping requirements and energy usage?
MVWD manages and maintains a network of 203 miles of potable water distribution pipelines, along with 7 potable water pump stations utilized for water movement within the system. These pump stations not only facilitate the movement of water but also play a crucial role in treating potable water to maintain safety and quality standards. Decreasing the demand for potable water will consequently lessen the energy required for water transportation, thereby mitigating some of the increasing electricity expenses associated with water distribution.

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

MVWD purchases treated water from Water Facilities Agencies (WFA) via the State Water Project. The energy calculations use SWP as the point of origin for 50% of MVWD's water

[12] US EPA Greenhouse Gas Equivalencies Calculator https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator

supply. The remaining energy calculations use MVWD as the point of origin for the pumping and treating of local groundwater.

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

Yes, MVWD operates 10 active groundwater wells. The treatment is calculated with pumping energy by taking the total energy consumed in the Water System 9,781,751 kWh divided by the total water delivered 17,775 AF, according to Monte Vista Water District 2020 Urban Water Management Plan (UWMP) (page 6-39). There are no separate calculations for the treatment.

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

Yes, MVWD currently conducts bi-monthly meter reading manually and drive-by routes alongside each meter to collect consumption data. Following Project implementation, these routes will be eliminated for 1,400 meters, reducing **1,768.71 miles per year and 26,520.65 miles per lifespan of the AMI meters** driven by MVWD personnel. A reduction in vehicle miles driven will reduce greenhouse gas emissions carbon dioxide equivalent of approximately 3,648 pounds and 54,716 pounds respectively as outlined below.

The greenhouse gas reduction was calculated using the US EPA Greenhouse Gas Equivalency Calculator[13] website using the following parameters:

Miles saved	/	Average miles per gallon	=	Gallons of gasoline
1,768.71	/	9.5	=	**186.18 GY**
26,530.65	/	9.5	=	**2,792.70 GL**

The results of **186.18 gallons per year and 2,792.70 gallons over the lifetime of meters** are inserted into the US EPA GHG Equivalency Calculator, which generated a carbon dioxide equivalent reduction of **3,648 pounds and 54,716 pounds,** respectively.

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

Section not applicable.

Evaluation Criterion C—Other Project Benefits (15 points)

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

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

[13] US EPA Greenhouse Gas Equivalencies Calculator https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator

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

The project area is grappling with severe water resilience and sustainability challenges, primarily driven by the exacerbation of drought conditions due to climate change. Governor Gavin Newsom's executive order on July 8, 2021, urging Californians to reduce water usage by 15%, underscores the gravity of the situation. Furthermore, on August 17, 2021, escalating drought conditions prompted the Metropolitan Water District (Metropolitan) to declare a "Condition 2-Water Supply Alert," necessitating extraordinary conservation measures by retail water agencies. Heavy rainfall in the fall of 2023 provided some much-needed relief from the severe three-year drought. This rainfall ended the executive orders in April 2023, shifting the project area from "drought" to "drought recovery."

While the additional rainfall has helped to restore the Chino Groundwater Basin, the Western Riverside Council of Government's San Bernardino County Resilience Strategy[14] and County of San Bernardino County Vulnerability Assessment[15] have identified major increases in extreme heat days with all areas of the county projected to experience at least 27 additional extreme heat days (defined as days exceeding the 95th percentile of daily maximum temperatures over the historical baseline time period between 1976 and 2005). Droughts are also expected to become more frequent and intense in San Bernardino County and more broadly, throughout southern California by mid-century.

Population growth further compounds water system demands and reliability issues within MVWD's service area. Since 2010, the area has witnessed a blended growth rate of 7.2%, resulting in an estimated 2021 population of 58,977. To meet the escalating demand from this growing population, efficient water management measures are imperative to safeguard water resources. The combination of population growth, increased water demand, continuing drought risks, and over-drafting of groundwater resources are collectively impacting MVWD's efforts to provide and maintain clean and sustainable water.

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

MVWD's service area is currently in drought recovery mode after a severe three-year drought.

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

The projected increases in severity and duration of drought or water scarcity in the project area are deeply concerning. In response to California's water supply facing escalating challenges, the State Water Resources Control Board (SWRCB), at the direction of legislation, is taking proactive measures by developing the Conservation is a Way of Life legislation regulations.

These regulations, including urban water use objectives and reductions for all water suppliers, are vital steps toward mitigating the worsening water scarcity crisis. Through the implementation

[14] Western Riverside Council of Government San Bernadino Resilience Strategy
[15] https://www.gosbcta.com/plan/regional-greenhouse-gas-reduction-plan/

of water budgets, which encompass various factors such as efficient residential indoor use, outdoor use, commercial, industrial, and institutional (CII) outdoor use, as well as strategies to tackle water loss, the SWRCB aims to combat the increasing strain on California's water resources.

Moreover, the water use efficiency (WUE) legislation mandates reductions in water loss, aligning perfectly with our AMI project's objectives. The SWRCB has set a target for MVWD to reduce water usage by 1,050 acre-feet per year by 2035, as indicated by their WUE Objective Exploratory Tool[16]. By implementing Advanced Metering Infrastructure (AMI), we can significantly enhance our ability to meet these stringent requirements.

Finally, both the Western Riverside Council of Government's San Bernardino County Resilience Strategy and County of San Bernardino County Vulnerability Assessment referenced previously have identified major increases in extreme heat days and that drought conditions are expected to become more frequent and intense in San Bernardino County and more broadly, throughout southern California by mid-century.

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

According to the White House Justice Screening tool, the majority of MVWD's service area is in a high polluted area ranked in the 96th or higher percentile for PM2.5 with a major source being diesel trucks. This highly polluted area is due to freeways located on all sides of the city with Interstate 10 located to the north, State Route 60 to the south, State Route 71 to the west, and Interstate 15 to the east. With the increased population and increased number of cars and heavy-duty trucks on the freeway, air quality is anticipated to degrade further.

Demands for electricity, combined with excessive seasonal temperatures or a lack of water to drive hydro-electric production, are also driving the costs of operations as well as threatening the ability to provide adequate fire flows in the event of a localized disaster.

Please describe how the project will directly address the concern(s) stated above.
The AMI project aims to address the pressing concerns related to water loss, inefficient water usage, and the impending challenges of drought and water scarcity.

Firstly, the project's primary focus on reducing water loss and improving residential indoor and outdoor water use is crucial in achieving mandated targets. MVWD can closely monitor and manage water usage more effectively by employing advanced technologies embedded within the AMI system. This allows for the identification and rectification of leaks and inefficiencies promptly, thereby significantly reducing water loss. Additionally, by providing real-time data and insights into water consumption patterns, residents can be empowered to make informed decisions about their water usage, leading to more sustainable practices at the individual level.

[16] California State Water Resource Control Board Water Use Objective Exploratory Tool https://www.waterboards.ca.gov/water_issues/programs/conservation_portal/water-use-explorer/

Secondly, given the imminent challenges posed by drought and water scarcity, immediate action is imperative to protect the resiliency and sustainability of the regional aquifer as well as reduce MVWD's reliance on imported water By implementing such initiatives and adhering to state regulations, MVWD can pave the way for a more resilient water system that can withstand the pressures of climate change and growing demand. The utilization of advanced technologies enhances operational efficiency and enables proactive measures to mitigate the impacts of water scarcity.

Furthermore, the current meter reading process at MVWD involves driving to each meter bi-monthly, which consumes significant time and resources and contributes to air pollution. The implementation of AMI will revolutionize this process by eliminating the need for physical meter readings. Instead, automated data collection will occur remotely, reducing the required driving time and consequently decreasing air pollutants. This transition aligns with broader sustainability goals while simultaneously improving operational efficiency and resiliency.

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

Yes, the project is expected to result in more efficient management of MVWD's potable water supply portfolio. The implementation of AMI in MVWD's delivery system will replace manually read meters with real-time water use data collection. This technological upgrade enables immediate leak detection, reduces water losses, and supports conservation and sustainability. The shift to AMI allows for enhanced efficiency in water supply and demand management, providing accurate and timely information for more effective decision-making. Additionally, leveraging AMI capabilities will support targeted water use efficiency programs, contributing to optimized water management within MVWD. Overall, the project is designed to significantly improve the efficiency of water supply management in MVWD's system.

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

MVWD's water supply consists of about 50% groundwater and 50% imported water. The project aims to promote water conservation and sustainability by fostering behavioral changes amongst customers to reduce and manage their water bills. Additionally, the implementation of improved efficiency in leak detection is expected to reduce water losses and related damage to public or private property. Conservation efforts are crucial for restoring and replenishing significantly low groundwater levels. Such actions also reduce the reliance on costly imported water that is gravely impacted by extreme weather conditions like drought.

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

Yes, by implementing strategies such as conservation measures and minimizing water loss, MVWD can reduce its reliance on imported water from the State Water Project. This reduction in demand can potentially free up unused water resources, which can then be reallocated to other regions within the state. Consequently, this reallocation of water resources could also alleviate pressure on the Colorado River, thereby aiding in compliance with interstate compacts.

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

There is no tension or litigation over water in the Chino Groundwater Basin. The retail water suppliers who receive water from the Chino Groundwater Basin work collaboratively to conserve and protect the precious resource.

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

Will the project benefit species (e.g., federally threatened or endangered, a federally recognized candidate species, a state listed species, or a species of particular recreational, or economic importance)?

No, the project is not anticipated to directly benefit species, as there are no endangered, federally recognized candidate species, state-listed species, or species of particular recreational or economic importance identified in MVWD's service area. However, on a broader scale, the project's focus on efficient water management and reduced reliance on imported water may contribute to broader conservation efforts. By requiring less imported water, the project could potentially offer indirect benefits to other regions that supply water, promoting more sustainable water usage practices on a larger scale.

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

By swiftly detecting leaks on both the distribution side and the consumer side, water loss will be reduced significantly. The reduction in water loss will allow the water to remain in the system for longer periods of time. Conserving water daily will help maintain groundwater basin levels allowing for more availability in the future when the next drought occurs.

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

On a broader scale, the project's focus on efficient water management and reduced reliance on imported water may contribute to broader conservation efforts improving species statuses. By needing less imported water, the project could potentially offer indirect benefits to other regions that supply water, promoting more sustainable water usage practices on a larger scale.

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

Several direct ecosystem benefits will ensue through the project's focus on reducing water loss and enhancing conservation efforts in the Chino Groundwater Basin. One significant benefit will be the improvement of regional soil health. By minimizing water loss and implementing effective conservation strategies, the groundwater basin's recharge capacity can increase, leading to better soil moisture levels and nutrient availability. This improvement in soil health is crucial as it directly influences various ecosystem functions and services.

Furthermore, the enhanced soil health resulting from the project will contribute to improved flood mitigation in the region. Healthy soil with good structure and organic matter content can absorb and retain water more effectively, reducing the risk of surface runoff during heavy rainfall events. This capacity for water absorption plays a vital role in flood control measures, helping to mitigate the impact of flooding on both human communities and natural habitats. Additionally, the project's focus on reducing driving and associated pollution will have direct benefits for the local ecosystem. Decreased pollution levels will enhance air and water quality, benefiting plant, animal, and insect life in the surrounding environment. Moreover, the reduction in carbon emissions due to decreased driving will contribute to carbon sequestration efforts over time, further improving air quality and supporting ecosystem health.

In summary, the project's initiatives targeting water conservation and pollution reduction in the Chino Groundwater Basin will lead to direct ecosystem benefits such as improved soil health and enhanced flood mitigation capabilities. These benefits will ripple through the ecosystem, fostering healthier habitats for plant, animal, and insect communities, and ultimately contributing to the overall resilience and sustainability of the region's ecosystem.

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

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

The project takes a multifaceted approach to address the impacts of climate change in MVWD's service area and region, an area that recently endured a severe three-year drought, with an awareness that droughts will continue to occur. The implementation of AMI stands out as a key strategy, offering real-time data on water consumption and enabling swift identification of inefficiencies. Moreover, the AMI technology allows for swift leak detection, preventing significant water loss and contributing to climate-related water scarcity mitigation.

In parallel, a dedicated customer outreach initiative is designed to educate users on the benefits of regional programs promoting water-efficient habits. This proactive approach encourages behavioral changes, aligning with broader climate change mitigation efforts. The reduction of water losses through efficient management not only strengthens water supply sustainability but also lessens dependency on imported water sources. By conserving water locally, the project aims to ensure water supply resiliency and promote sustainability in the face of changing climate conditions.

Furthermore, the project addresses the financial stability of vulnerable communities, particularly low-income residents, by focusing on leak detection. The reduction in water bills alleviates financial stress exacerbated by climate-related disruptions. Overall, the proposed project aligns with climate-resilient development goals, promoting efficient and sustainable water infrastructure that enhances the community's readiness to face the challenges posed by climate change.

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

Yes, the project does seek to improve ecological resilience to climate change, albeit indirectly. The project addresses key challenges exacerbated by climate change, by implementing AMI and associated water conservation measures in the Chino Groundwater Basin, thereby contributing to ecological resilience.

Firstly, the project's focus on reducing water loss and enhancing conservation efforts directly aligns with the need to adapt to changing climate patterns, including increased frequency and intensity of droughts. By efficiently managing water resources, the project helps mitigate the impacts of water scarcity, a critical concern in regions facing climate-induced changes in precipitation patterns.

Moreover, the project indirectly enhances the ecosystem's capacity to withstand climate-related stressors by improving soil health through reduced water loss and better conservation practices. Healthy soils can better retain moisture, support plant growth, and facilitate carbon sequestration – all of which are essential for ecosystem resilience in the face of climate change.

Additionally, the project's efforts to reduce driving and associated pollution contribute to climate change mitigation and improved air quality by lowering greenhouse gas and other harmful emissions. While this aspect may not directly improve ecological resilience, it indirectly supports broader efforts to mitigate climate change impacts, thereby benefiting the overall resilience of ecosystems in the region.

Overall, while the primary focus of the AMI project may not be explicitly framed as improving ecological resilience to climate change, its objectives and outcomes align closely with key strategies for climate adaptation and mitigation. By addressing water conservation, soil health, and pollution reductions, the project contributes to building ecological resilience in the Chino Groundwater Basin and surrounding ecosystems, ultimately helping communities better cope with and adapt to the challenges posed by climate change.

Does the proposed project seek to reduce or mitigate climate pollutions such as air or water pollution?

Yes, the proposed project seeks to reduce or mitigate climate pollution such as air pollution. By implementing advanced metering technology, the project will eliminate the need for manual meter reading, thereby reducing the necessity for driving to read meters. This reduction in vehicular travel directly leads to a decrease in carbon emissions, which are a significant contributor to air pollution. Therefore, the project's initiative to streamline meter reading

processes will effectively reduce air pollution, contributing to overall environmental quality and public health benefits in the region.

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

No, the proposed project does not explicitly include green or sustainable infrastructure to improve community climate resilience. While the project focuses on implementing advanced metering technology to improve water management and reduce water loss, it does not specifically address the integration of green or sustainable infrastructure measures aimed at enhancing community climate resilience. However, the project indirectly contributes to climate resilience by conserving water resources, which can help communities adapt to and mitigate the impacts of climate change, particularly in regions facing water scarcity and increasing frequency of droughts.

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

Yes, the project strengthens water supply sustainability, thereby increasing resilience to climate change. The introduction of AMI enhances the efficiency and accuracy of water management, allowing for more precise monitoring and control of water resources. This contributes to the overall sustainability of the water supply system by reducing water waste, improving leak detection, and promoting conservation.

In addition to the direct benefits mentioned earlier, the project fosters climate change resiliency in other ways. By implementing targeted water use efficiency programs and leveraging collaboration with external agencies like the Inland Empire Utilities Agency and Chino Basin Water Conservation District, MVWD aims to optimize water use efficiency. This proactive approach addresses the broader impacts of climate change by promoting responsible water consumption practices and reducing the overall demand on water resources.

Furthermore, the project's contribution to climate change resiliency extends to the greater community. The reduction in water bills for vulnerable residents, coupled with the prevention of property damage through swift leak detection, enhances the financial stability of the community. This, in turn, builds resilience by mitigating the economic impacts of climate-related challenges on individuals and households.

In summary, the proposed project not only strengthens water supply sustainability but also contributes to climate change resiliency through improved efficiency, conservation efforts, and community-level support.

Evaluation Criterion D—Disadvantaged Communities, Insular Areas, and Tribal Benefits (15 points)

Subcriterion D.1. Disadvantaged Communities

The White House Council Environmental Quality's interactive Climate and Economic Justice Screening tool was instrumental in identifying the designated DAC area to be served by the

project. According to the tool, 1,400 customers in tract no 0607100201 are classified as a DAC, marked by their challenging circumstances, including high rankings in air pollution (96th percentile for PM2.5), traffic proximity (98th percentile due to their location near major freeways and roads within 500 meters), and linguistic isolation (90th percentile, as the majority of households lack individuals over the age of 14 proficient in English).

The proposed project aims to install AMI meters within Census Tract #0607100201 with real-time leak detection. This technological enhancement is particularly beneficial for the identified community, as it allows MVWD to promptly notify customers of water leaks through representatives proficient in their language. The implementation of AMI meters addresses the economic stability of these customers by preventing unnoticed leaks for extended periods, a common issue with current manually read meters. This swift leak detection not only mitigates financial burdens on residents but also reduces water losses while contributing to enhanced resiliency in the Chino Groundwater Basin.

Subcriterion D.2. Tribal Benefits

The project does not directly serve and/or benefit a Tribe.

Evaluation Criterion E—Complementing On-Farm Irrigation Improvements (8 points)

Although this project is not directly aligned with on-farm irrigation improvements, it will still benefit those types of projects significantly. The implementation of AMI meters, aimed at reducing water loss and decreasing reliance on imported water from the State Water Project, indirectly complements on-farm irrigation improvements eligible for NRCS (Natural Resources Conservation Service) financial or technical assistance.

By reducing the demand for imported water, the AMI project creates an environment where more water resources remain within the northern and central California regions. This improves overall water availability and enhances the viability and potential for on-farm irrigation improvements. Farmers, with the support of NRCS assistance, can utilize these preserved water resources more efficiently, investing in upgrades to irrigation systems or adopting water-saving technologies.

Although the AMI project's primary focus is on optimizing water management practices and reducing water loss, its ripple effects extend to supporting on-farm irrigation improvements. The synergy lies in the shared goal of water conservation and efficiency, where the AMI project and on-farm improvements contribute to sustainable water use in agriculture.

In essence, while the AMI project may not be directly involved in on-farm irrigation initiatives, its efforts to conserve water and decrease reliance on imported water indirectly create favorable conditions for such projects. This collaborative approach underscores the interconnectedness of water management efforts and highlights the potential for complementary strategies to enhance agricultural sustainability and resilience in California.

Evaluation Criterion F—Readiness to Proceed (8 points)

Identify and provide a summary description of the major tasks necessary to complete the project.
Given that Phase 4 is a continuation of a multiphase project, the planning and preparation stages have been completed, and the appropriate AMI technology has been selected. To ensure proper system integration and standardization, MVWD intends to install the same AMI meters in the first phases. MVWD does not anticipate any permits required as all installed meters are replacing existing ones, and permits have not been necessary for the first phases.

Describe any permits that will be required, along with the process for obtaining such permits.
No permits are required.

Identify and describe any engineering or design work performed specifically in support of the proposed project.
No engineering design work is needed for this project as it is a continuation of work conducted under Phases 1, 2, and 3.

Describe any new policies or administrative actions required to implement the project.
No new policies or administrative actions are required to implement the project.

Describe the current design status of the project.
No design work is required. MVWD is replacing existing, inefficient meters with AMI.

Please also include an estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates. Was the expected timeline for environmental and cultural compliance discussed with the local Reclamation regional or area office?
The project has no potential environmental and cultural resource compliance requirements. The project does not involve digging or disruption to the environment. The project is replacing outdated, inefficient meters with new AMI technology. No line item is necessary. Upon successfully receiving this grant award, MVWD will proceed with installing 1,400 AMI meters as outlined below.

AMI Installation Project Phase 4 Schedule*

Tasks/Milestones	**Schedule**
Design and Engineering Phases • Review and finalize specifications and requirements for AMI meters. • Issue Request for Proposals • Award contract to provide AMI meters	Completed
Procure AMI Meters	03/01/2025 - 06/01/2025
Construction/Installation • Begin installation of AMI meters	06/01/2025 – 10/01/2026

• Integrate and test new AMI meters with existing systems	
Quality Control/Testing and Calibration • Test AMI meters for accuracy and efficiency • Calibrate systems to ensure optimal performance	10/01/2026 – 12/31/2026
Assumes a start date based on award announcement in December 2024.	

Evaluation Criterion G—Collaboration (5 points)

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

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

The proposed project enjoys widespread support from various stakeholders, including regional agencies, local governments, and elected officials. The Inland Empire Utilities Agency (IEUA), City of Chino, and Chino Basin Water Conservation District (CBWCD) are among the key supporters.

IEUA's support for the project stems from its recognition of its potential benefits. IEUA offers several regional programs to assist customers with using water efficiently in their outdoor settings. Programs include, but are not limited to, direct installation of sprinkler timers and a sprinkler tune-up program that repairs minor leaks in irrigation and sprinklers. By implementing AMI, IEUA foresees increased conservation participation among MVWD customers, which in turn enhances the effectiveness of regional water conservation programs. Additionally, IEUA recognizes that the project contributes to the overall health of the Chino Groundwater Basin, aligning with its mission to ensure sustainable water management practices in the region.

CBWCD's involvement as a supporter of the project is significant. They provide valuable resources to customers of the MVWD, such as sprinkler check-up programs and design templates for waterwise landscapes. By participating in the project, CBWCD aims to support MVWD customers in adopting efficient outdoor water use practices, thus contributing to the conservation efforts within the Chino Groundwater Basin.

Furthermore, the project has garnered support from elected officials, including San Bernardino County Fourth District Supervisor Curt Hagman, California Assemblymember Freddie Rodriguez, and US Congresswoman Norma Torres. These officials recognize the importance of AMI meters in addressing ongoing water shortage and resiliency issues at both the regional and state levels. They support the project because conservation measures, such as those facilitated by AMI technology, are essential steps towards preserving water resources for future needs.

In summary, the project enjoys widespread support from regional agencies, local governments, and elected officials due to its potential to enhance water conservation efforts, improve water

management practices, and address critical water shortage challenges in the region. The active involvement and endorsements from these stakeholders underscore the significance of the project in advancing sustainable water management and resilience initiatives within the Chino Basin and beyond.

What is the significance of the collaboration/support?
The collaboration and support from various stakeholders hold significant importance for the success and impact of the proposed project.

Firstly, the involvement of regional agencies like the Inland Empire Utilities Agency (IEUA) underscores a unified approach toward addressing water management challenges. Their support not only provides valuable expertise but also facilitates the integration of the project into existing regional water conservation programs, amplifying its effectiveness across the broader water management landscape.

Additionally, the partnership with the Chino Basin Water Conservation District (CBWCD) brings specialized resources and knowledge to the project. Their contribution enables the implementation of targeted water conservation initiatives and empowers customers with the tools and guidance needed to optimize water use efficiency, particularly in outdoor irrigation practices.

Moreover, the backing of elected officials, including San Bernardino County Fourth District Supervisor Curt Hagman, California Assemblymember Freddie Rodriguez, and US Congresswoman Norma Torres, lends political support and advocacy to the project. Their endorsement enhances visibility and credibility and strengthens the project's position in securing funding and resources for implementation.

Overall, the collaboration and support from these diverse stakeholders signify a collective commitment towards advancing sustainable water management practices and resilience efforts within the region. By leveraging their expertise, resources, and influence, the project stands poised to conserve water, reduce reliance on imported water sources, and promote long-term resilience in the face of water scarcity challenges.

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

Yes, this project is expected to increase the possibility and likelihood of future water conservation improvements by other water users. The introduction of AMI meters represents a significant advancement over the current meters, which are known to underread actual consumption. By providing accurate usage data and precise billing, the new AMI meters will prompt customers to adjust their behaviors when they observe increases in their bills. This awareness of actual consumption levels will incentivize customers to cut back on water usage to reduce expenses.

Moreover, the implementation of leak alert notifications through the AMI system adds another layer of engagement and participation in water conservation efforts. With the ability to receive timely alerts about potential leaks or abnormal usage patterns, customers are empowered to take

proactive measures to address water wastage promptly. Additionally, the proactive involvement of the customer service team in contacting customers through alert programs further enhances participation and engagement in conservation initiatives.

As a result, the combination of accurate billing, leak alert notifications, and proactive customer engagement is expected to foster a culture of water conservation among users. This increased awareness and participation in conservation efforts benefits individual customers and contribute to broader regional water conservation goals. By encouraging responsible water usage behaviors and facilitating timely responses to leaks or inefficiencies, the project ultimately aids in conserving water resources and promoting sustainability within the region.

Will the project benefit multiple sectors and/or users (e.g., agriculture, municipal and industrial, environmental, recreation, or others)?
Yes, the project is poised to benefit multiple sectors and users across various domains, with a particular emphasis on environmental benefits.

The project's focus on water conservation and reduction of water loss has significant environmental implications. By preserving water resources and minimizing wastage, the project contributes to the health of ecosystems, supports aquatic habitats, and helps maintain water quality in rivers, streams, and wetlands. These environmental benefits extend to wildlife populations and overall ecosystem resilience, fostering biodiversity and ecological stability.

In summary, the project's environmental benefits are central to its objectives, promoting sustainable water use practices that safeguard natural ecosystems and enhance environmental health for present and future generations.

Evaluation Criterion H—Nexus to Reclamation (4 points)

Describe the nexus between the proposed project and a Reclamation project or Reclamation activity. Please consider:
Does the applicant have a water service, repayment, or operations and maintenance (O&M) contract with Reclamation?
No, MVWD does not have a water service, repayment, or operations and maintenance (O&M) contract with Reclamation.

If the applicant is not a Reclamation contractor, does the applicant receive Reclamation water through a Reclamation contractor or by any other contractual means?
MVWD does not receive Reclamation water through a Reclamation contract nor by any other contractual means. MVWD contracts with the Water Facilities Authority for its imported water supply.

Will the proposed work benefit a Reclamation project area or activity?
Yes, the project will decrease water loss within MVWD's service area by increasing conservation within the Chino Groundwater Basin and allowing for more water to be available for other projects overseen by Reclamation.

Is the applicant a Tribe?
No, MVWD is not a Tribe.

Performance Measures

Provide a brief summary describing the performance measure that will be used to quantify actual benefits upon completion of the project (e.g., water saved or better managed, energy generated or saved).
The performance measure for quantifying the actual benefits of the project upon completion involves several key components. The project will replace 1,400 existing 15-year or older manually read meters with flowIQ® 2200 AMI meters, incorporating new acoustic leak detection technology.

To determine the estimated average annual water savings resulting from the project, MVWD utilized leak flow rate data from the Advanced Metering Infrastructure: reducing Water Loss, Improving Security and Enhancing Resiliency study. The anticipated life span of the new AMI meters (15 years) was then applied to calculate lifetime water savings. Additionally, MVWD anticipates a 20% increase in overall program participation due to the project, with 25% seeking rebates and 75% participating in direct installation programs.

Actual water savings will be verified upon completion through utility data management software, comparing usage data from all meters equipped with AMI to historical values. Periodic assessments of meter installations will be conducted, tracking water usage before and after AMI installation. MVWD staff will track AMI leak alerts received and record the leak rate. Customer engagement trends, such as leak variances and participation in water use efficiency programs, will also be tracked regularly. By combining these methods, the project team aims to accurately determine the actual water savings achieved. Furthermore, it is noted that the AMI meters anticipate saving water on the distribution side; though this amount is not metered, MVWD staff will record the number of leaks detected.

MVWD staff will track the energy savings by calculating the actual mileage driven by the three Meter Reader Technicians, utilizing the same calculations as described in the anticipated savings section. MVWD updates its Urban Water Management Plan (UWMP) every 5 years. At the conclusion of the 2025 UWMP MVWD, staff will compare the 2020 to 2025 total energy consumed in Water System and total water delivered to calculate actual energy saved.

The reduction in greenhouse gas emissions will be calculated by utilizing the actual miles driven after the conclusion of the project and following the same calculations noted in the projected savings section.

MVWD staff is prepared to track the data and provide as accurate savings as possible.

Budget Narrative

Funding Plan

MVWD has allocated sufficient capital reserves from Fiscal Year Ending 2024 Budget ($337,938) and Fiscal Year Ending 2025 Budget ($165,000), and Fiscal Year Ending 2026 Budget ($165,000) to cover its portion of the matching grant for the proposed project, designated under Capital Improvement Project Number MA2024-X2, MA2025-X2, and MA2026-X2 Annual Meter Replacement Program, respectively. These funds will be utilized to contribute MVWD's required matching amount, ensuring the successful implementation of the project.

A full-service retrofitting project is a massive project and MVWD has broken it into smaller pieces as funding allows it to accomplish the goal. Phase 1 was achieved through planning and budgeting as well as sound financial stewardship. Phase 2 was completed in collaboration with the Inland Empire Utilities Agency and Metropolitan Water District of Southern California through an external funding source. MVWD is well-prepared to commit these resources to the matching grant, underscoring its dedication to enhancing water supply management through advanced metering technology.

Furthermore, MVWD is committed to actively supporting the coordination and monitoring of the project. MVWD staff are ready to lend their expertise and skills to ensure the success of the proposed initiative. This collaborative approach emphasizes MVWD's comprehensive commitment to the project's success and the overall improvement of water supply efficiency.

Budget Proposal

Table 1 – Total Project Cost

Projected Cost Table			
Budget Object Category	**Total Cost**	**Federal Estimated Amount**	**Non-Federal Estimated Amount**
Personnel	**$86,080**		
Fringe Benefits	**$41,319**		
Travel	**$0**		
Equipment	**$0**		
Supplies	**$656,600**		
Contractual	**$0**		
Construction	**$0**		
Other Direct Costs	**$59,094**		
Total Direct Costs	**$843,093**		
Indirect Charges	**$0**		
Total Costs	**$843,093**	**$337,237**	**$505,856**

Cost Share Percentage	**40%**	**60%**

Table 2 – Budget Proposal

BUDGET ITEM DESCRIPTION	COMPUTATION		Quantity Type	TOTAL COST
	$/UNIT	Quantity		
Personnel				**$86,080**
Meter Technician Y1	$37.00	560	Hours	$20,720
Meter Technician Y2	$37.93	560	Hours	$21,241
Senior Meter Technician Y1	$45.00	194	Hours	$8,730
Senior Meter Technician Y2	$46.13	194	Hours	$8,949
Senior Customer Service Rep. Y1	$39.00	64	Hours	$2,496
Senior Customer Service Rep. Y2	$39.98	64	Hours	$2,559
Program Specialist Y1	$35.00	64	Hours	$2,240
Program Specialist Y2	$35.88	64	Hours	$2,296
Customer Service & IT Manager Y1	$65.00	128	Hours	$8,320
Customer Service & IT Manager Y2	$66.63	128	Hours	$8,529
Fringe Benefits				**$41,319**
Meter Technician Y1	$17.76	560	Hours	$9,946
Meter Technician Y2	$18.21	560	Hours	$10,196
Senior Meter Technician Y1	$21.60	194	Hours	$4,190
Senior Meter Technician Y2	$22.14	194	Hours	$4,296
Senior Customer Service Rep. Y1	$18.72	64	Hours	$1,198
Senior Customer Service Rep. Y2	$19.19	64	Hours	$1,228
Program Specialist Y1	$16.80	64	Hours	$1,075
Program Specialist Y2	$17.22	64	Hours	$1,102
Customer Service & IT Manager Y1	$31.20	128	Hours	$3,994
Customer Service & IT Manager Y2	$31.98	128	Hours	$4,094
Travel				
Not Applicable				
Equipment				
Not Applicable				
Supplies				**$656,600**
3/4" Mach10 AMI Water Meter	$392	1400	Each	$548,800
Meter Box Retrofit Lids	$ 77	1400	Each	$107,800
Contractual				
Not Applicable				

Construction		
Not Applicable		
Other		**$59,094**
Sales Tax		$59,094
Indirect Costs		
Not Applicable		
TOTAL ESTIMATED PROJECT COSTS		**$843,093**

Budget Narrative

Personnel

The Customer Service & IT Manager is the project manager and will oversee the project. The Senior Meter Technician will assist the project manager in planning, coordinating, and scheduling the AMI meter installation conducted by the Meter Technician. The Senior Customer Service Representative will assist the project manager with administrative items associated with customer accounts. The Program Specialist will assist the project manager in customer outreach by contacting high water users to educate and promote MVWD's water-saving programs. The project is anticipated to be a 24-month project, and the hourly rate is based on the average of all personnel occupying this position for year 1 and a 2.5% increase for year 2. The total has been rounded to the nearest dollar. Compensation rates are consistently applied to Federal and non-Federal Activities.

Personnel				
Meter Technician Y1	$37.00	560	Hours	$20,720
Meter Technician Y2	$37.93	560	Hours	$21,241
Senior Meter Technician Y1	$45.00	194	Hours	$8,730
Senior Meter Technician Y2	$46.13	194	Hours	$8,949
Senior Customer Service Rep. Y1	$39.00	64	Hours	$2,496
Senior Customer Service Rep. Y2	$39.98	64	Hours	$2,559
Program Specialist Y1	$35.00	64	Hours	$2,240
Program Specialist Y2	$35.88	64	Hours	$2,296
Customer Service & IT Manager Y1	$65.00	128	Hours	$8,320
Customer Service & IT Manager Y2	$66.63	128	Hours	$8,529
Total				**$86,080**

Fringe Benefits

Fringe benefits are based on hours for each staff member and include benefits and required taxes paid for each position. Fringe rates have been computed at $17.76 for year 1 and $18.21 for year 2 per hour for the Meter Technician, $21.60 for year 1 and $22.14 for year 2 per hour for the Senior Meter Technician, $18.72 for year 1 and $19.19 for year 2 per hour for the Senior Customer Service Representative, $16.80 for year 1 and $17.22 for year 2 per hour for the

Program Specialist, and $31.20 for year 1 and $31.98 for year 2 per hour for the Customer Service & IT Manager and are applied to the 56-, 194-, 64-, 64-, and 128-hour estimates, respectively, for each position. The fringe benefits are more than 35% of compensation in accordance with MVWD salary schedule.

Fringe Benefits				
Meter Technician Y1	$17.76	560	Hours	$9,946
Meter Technician Y2	$18.21	560	Hours	$10,196
Senior Meter Technician Y1	$21.60	194	Hours	$4,190
Senior Meter Technician Y2	$22.14	194	Hours	$4,296
Senior Customer Service Rep. Y1	$18.72	64	Hours	$1,198
Senior Customer Service Rep. Y2	$19.19	64	Hours	$1,228
Program Specialist Y1	$16.80	64	Hours	$1,075
Program Specialist Y2	$17.22	64	Hours	$1,102
Customer Service and IT Manager Y1	$31.20	128	Hours	$3,994
Customer Service & IT Manager Y2	$31.98	128	Hours	$4,094
Total				**$41,319**

Travel

The project does not require any travel costs; therefore, no travel expenses are included in the budget.

Equipment

The project does not require any additional equipment; therefore, no equipment charges are included in the budget.

Supplies

The project includes the purchase of 1,400: 3/4" flowIQ® 2200 CF ALD 7-1/2"LL AMI meters and 1,400-meter box retrofit lids to be installed. The same meters and lids were purchased for Phases 1 and 2. The vendor who supplied the AMI meters for phases 1 and 2 also supplied the estimate for Phase 4. The meters will replace the current outdated meters already in place.

Supplies			
Supply Item	Quantity	Unit Cost	Total
3/4" flowIQ® 2200 CF ALD 7-1/2"LL	1,400	$392	$548,800
Meter Box Retrofit Lids	1,400	$77	$107,800
Total			**$656,600**

Contractual

This project does not include any contractual costs. Section not applicable.

Construction
There is no construction required for this project. Section not applicable.

Other Direct Costs
The project accrues an applicable sales tax of 9% on the purchase of meters and lids noted in the supplies section.

Other Direct Costs	
Sales Tax	**$59,094**

Indirect Costs
The project does not require any indirect costs; therefore, no indirect expenses are included in the budget.

Environmental and Cultural Resources Compliance
Please answer the questions from Section H.1 Environmental and Cultural Resource Considerations.

Environmental and Cultural Resource Considerations

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 involves the replacement of existing meters and does not entail any earth-disturbing work or activities that would impact the surrounding environment. As a result, there are no anticipated impacts on soil, air, water quality or quantity, or animal habitat within the project area. The nature of the project involves retrofitting existing infrastructure without introducing any new elements that could adversely affect the environment. Consequently, no specific steps are required to minimize environmental impacts, as the project is designed to be minimally invasive and focused on meter replacement.

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?
No, there are no species listed or proposed to be listed as a Federal threatened or endangered species, nor is there any designated critical habitat in the project area. Therefore, no activities associated with the proposed project would affect such species or habitats.

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.

No, there are no wetlands or other surface waters inside the project boundaries that potentially fall under the Clean Water Act (CWA) jurisdiction as "Waters of the United States." Therefore, the proposed project is not expected to have any impact on such water bodies.

When was the water delivery system constructed?
Monte Vista Water District, a county water district, was established by a vote of the people in 1927. Shortly thereafter, general obligation bonds were issued to construct MVWD's first reservoir. In the decades that followed, MVWD built a distribution system of pipelines, wells, pumps, and reservoirs to serve the growing community. The system is not considered a historical site.

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, the proposed project will not result in any modification of or effects to individual features of an irrigation system, such as headgates, canals, or flumes. There have been no extensive alterations or modifications to those features previously.

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.
No, there are no buildings, structures, or features in the irrigation district that are listed or eligible for listing on the National Register of Historic Places.

Are there any known archeological sites in the proposed project area?
No, there are no known archaeological sites in the proposed project area.

Will the proposed project have a disproportionate and adverse effect on any communities with environmental justice concerns?
No, conversely, this project will assist low-income and minority populations by improving water loss, supporting swift leak detection, reducing damage and costs associated with leaks, and keeping water affordable.

Will the proposed project limit access to, and ceremonial use of, Indian sacred sites or result in other impacts on Tribal lands?
No, the proposed project will not limit access to, and ceremonial use of, Indian sacred sites, nor will it result in other 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 proposed project does not contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area.

Required Permits or Approvals

No permits or approvals needed. MVWD is replacing existing outdated meters with new AMI meters.

Overlap or Duplication of Effort Statement

The project under consideration demonstrates a strategic and non-duplicative approach to securing funding for distinct phases of MVWD's meter retrofitting initiative. MVWD has already been awarded funding though the Member Agency Administered Program, in collaboration with Inland Empire Utilities Agency and Metropolitan Water District of Southern California, specifically for Phase 2. Simultaneously, an application was submitted to Reclamation WaterSmart Small-Scale Water Efficiency Projects Grants for Phase 3. This project (Phase 4) is complemented by cost-share funds sought from California Assemblymember Freddie Rodriguez for Fiscal Year 2025. Importantly, none of these funding applications, including the awarded funds for Phase 2, are designated for Phase 4, the segment targeted in this funding opportunity. MVWD's meticulous planning involves breaking up the meter retrofitting plan into distinct phases, allowing for efficient execution and resource allocation. This strategic division facilitates seeking funding from different sources for various phases, ensuring there is no overlap or duplication of effort in the pursuit of the overall retrofitting goal.

Conflict of Interest Disclosure Statement

No known conflict of interest exists.

Uniform Audit Reporting Statement

Section not applicable, MVWD is not required for the most recently closed fiscal year to submit a Single Audit report.

Certification Regarding Lobbying

See attached

SF-LLL: Disclosure of Lobbying Activities (if applicable)

Section not applicable.

Letters of Support

NORMA J. TORRES
35TH DISTRICT, CALIFORNIA

2227 RAYBURN HOUSE OFFICE BLDG
WASHINGTON, DC 20515
PHONE: (202) 225-6161
FAX: (202) 225-8671

3200 INLAND EMPIRE., SUITE 200B
ONTARIO, CA 91764
PHONE: (909) 481-6474
FAX: (909) 941-1362

Congress of the United States
House of Representatives
Washington, DC 20515

COMMITTEE ON APPROPRIATIONS

SUBCOMMITTEES:
FINANCIAL SERVICES AND GENERAL GOVERNMENT

STATE, FOREIGN OPERATIONS, AND RELATED PROGRAMS

TRANSPORTATION, HOUSING AND URBAN DEVELOPMENT, AND RELATED AGENCIES

COMMITTEE ON HOUSE ADMINISTRATION

SUBCOMMITTEES:
OVERSIGHT, RANKING MEMBER

ELECTIONS

February 20, 2024

The Honorable Deb Haaland
Secretary
U.S. Department of the Interior
1849 C Street, N.W.
Washington, DC 20240

Camille Calimlim Touton
Commissioner
Bureau of Reclamation
1849 C Street, N.W.
Washington, DC 20240

Dear Secretary Haaland and Commissioner Touton:

As the representative for California's 35th Congressional District, I write to express my support for the Monte Vista Water District's (MVWD) funding application to the Bureau of Reclamation's "WaterSMART Grants: Water and Energy Efficiency Grant" program. MVWD is seeking funding for Phase 4 of its Advanced Metering Infrastructure (AMI) Installation Project, a vital initiative aimed at modernizing and enhancing the efficiency of residential water meters within its disadvantaged community service area.

It has come to my attention that MVWD'S current water consumption data is captured only once every two months. I have been told that this infrequent and outdated data collection method hampers the agency's ability to promptly detect and repair leaks, representing a significant obstacle to achieving sustainable water use and supply objectives.

To address these pressing concerns, the AMI Installation Project will provide access to hourly water use data. This continuous flow of information will empower staff to swiftly identify and address leaks, significantly reducing water loss linked to agency-level leaks. Additionally, the implementation of AMI technology will reduce the need for meter technicians to drive their meter reading routes, minimizing the carbon footprint associated with traditional meter readings. Furthermore, AMI technology will be integrated into customer engagement software, granting customers access to hourly water usage, consumption trends, and other conservation tools to manage water use. This proactive approach will allow staff to reach out to customers, alert them of any abnormalities and promote available programs.

Water infrastructure serves as a powerful means to safeguard the long-term viability and prosperity of communities. For the reasons provided, I respectfully request that you give this proposal your full and fair consideration pursuant to all applicable rules and regulations.

Sincerely,

Norma J. Torres
Member of Congress (CA-35)

CAPITOL OFFICE
1021 O STREET
SUITE 8710
SACRAMENTO, CA 95814
(916) 651-4022

DISTRICT OFFICES
100 SOUTH VINCENT AVENUE
SUITE 401
WEST COVINA, CA 91790
(626) 430-2499

1520E N. MOUNTAIN AVENUE
SUITE 201
ONTARIO, CA 91762
(909) 460-6064

WWW.SENATE.CA.GOV/RUBIO
SENATOR.RUBIO@SENATE.CA.GOV

California State Senate

SENATOR
SUSAN RUBIO
TWENTY-SECOND SENATE DISTRICT
ASSISTANT MAJORITY WHIP

STANDING COMMITTEES
INSURANCE, CHAIR
ENERGY, UTILITIES & COMMUNICATIONS
GOVERNMENTAL ORGANIZATION
HEALTH

SELECT COMMITTEE
SCHOOL CLIMATE & STUDENT SAFETY, CHAIR

JOINT COMMITTEES
RULES
ARTS

APPOINTMENTS
GOVERNOR'S COUNCIL ON HOLOCAUST AND GENOCIDE EDUCATION
DOMESTIC VIOLENCE ADVISORY COUNCIL

February 20, 2024

Commissioner Camille Calimlim Touton
Bureau of Reclamation
1849 C Street NW.
Washington, D.C. 20240

Re: Support for Monte Vista Water District's WaterSMART Grant Application

Dear Commissioner Touton,

I write in strong support of Monte Vista Water District's (MVWD) application for funding from the WaterSMART: Water and Energy Efficiency Grants for Fiscal Year 2024 program, administered by the U.S. Bureau of Reclamation.

If awarded, this grant would fund Phase 4 of MVWD's Advanced Meter Infrastructure (AMI) Installation Project. This project will upgrade existing residential water meters to AMI technology, enabling MVWD to monitor and capture potential leaks in real-time. In addition, this project would allow for water consumption data to be captured hourly, compared to the current bi-monthly interval. Furthermore, this project will reduce the need for meter technicians to drive meter reading routes, decreasing overall vehicle miles traveled. Upon completion of this project, MVWD's entire service area will be equipped with AMI technology, including customers throughout its disadvantaged community service area.

This project will deliver much needed benefits to residents in the 22nd Senate District by providing greater access to water usage data and facilitating water conservation efforts throughout the region. These improvements will protect water supply reliability and efficiency, mitigate greenhouse gas emissions, and ensure that MVWD can continue its mission of providing high quality water services. I urge you to give Monte Vista Water District's application every consideration. Please do not hesitate to contact my Legislative Director, Krystal Moreno or at (916) 651-4022 if any questions arise.

Sincerely,

Susan Rubio

Susan Rubio
State Senator, District 22

STATE CAPITOL
P.O. BOX 942849
SACRAMENTO, CA 94249-0053
(916) 319-2053
FAX (916) 319-2153

DISTRICT OFFICE
13160 7TH STREET
CHINO, CA 91710
(909) 902-9606
FAX (909) 902-9761

Assemblymember.Rodriguez@assembly.ca.gov
www.assembly.ca.gov/Rodriguez

Assembly
California Legislature

FREDDIE RODRIGUEZ
ASSEMBLYMEMBER, FIFTY-THIRD DISTRICT

COMMITTEES
CHAIR: EMERGENCY MANAGEMENT
AGING AND LONG-TERM CARE
COMMUNICATIONS AND CONVEYANCE
HEALTH

CHAIR: JOINT LEGISLATIVE COMMITTEE
ON EMERGENCY MANAGEMENT
JOINT COMMITTEE ON FAIRS
ALLOCATION AND CLASSIFICATION

February 1, 2024

Bureau of Reclamation
Financial Assistance Support Section
P.O. Box 25007, MS 84-27815
Denver, CO 80225

Re: Letter of Support for MVWD's Grant Application
WaterSMART Water and Energy Efficiency Grants for Fiscal Year 2024, Notice of Funding Opportunity No. R24AS00052

Dear Selection Committee,

I write in support of Monte Vista Water District's application to the Bureau of Reclamation's WaterSMART: Water and Energy Efficiency Grants for Fiscal Year 2024 program for funding its Advanced Metering Infrastructure (AMI) Installation Project. By providing access to hourly water use data, AMI technology allows MVWD staff to find and address leaks faster, significantly reducing water loss. In addition, AMI technology minimizes the need for meter technicians to drive their meter reading route, thus reducing the carbon footprint associated with traditional meter readings.

AMI conversion will allow for more precise implementation of district-metered areas, cutting back on water loss from agency-level leaks. Additionally, AMI is the technology needed to utilize customer engagement software, which will provide customers with access to hourly water usage, consumption trends, and other conservation tools to manage water use and increase water efficiency.

I strongly support MVWD's application for grant funding to implement the AMI Project. Once completed, the AMI installation project will increase water efficiency by modifying customers' water use behavior as well as facilitating prompt leak detection and repair by both the customer and the district.

If you have any questions regarding our support of this application, please do not hesitate to contact Senior Legislative Aide Allison Kustic at 916-319-2053 or allison.kustic@asm.ca.gov.

Sincerely,

FREDDIE RODRIGUEZ
Assemblymember, 53rd District
Chair, Assembly Committee on Emergency Management

cc: Justin Scott-Coe, General Manager, Monte Vista Water District

CURT
HAGMAN
FOURTH DISTRICT SUPERVISOR

February 01, 2024

Bureau of Reclamation
Financial Assistance Support Section
P.O. Box 25007, MS 84-27815
Denver, CO 80225

Re: Letter of Support for MVWD's Grant Application
WaterSMART Water and Energy Efficiency Grants for Fiscal Year 2024, Notice of Funding Opportunity No. R24AS00052

Dear Selection Committee,

I support Monte Vista Water District's application to the Bureau of Reclamation's WaterSMART: Water and Energy Efficiency Grants for Fiscal Year 2024 program for funding its Advanced Metering Infrastructure (AMI) Installation Project. By providing access to hourly water use data, AMI technology allows MVWD staff to find and address leaks faster, significantly reducing water loss. In addition, AMI technology minimizes the need for meter technicians to drive their meter reading route, thus reducing the carbon footprint associated with traditional meter readings.

AMI conversion will allow for more precise implementation of district-metered areas, cutting back on water loss from agency-level leaks. Additionally, AMI is the technology needed to utilize customer engagement software, which will provide customers with access to hourly water usage, consumption trends, and other conservation tools to manage water use and increase water efficiency.

I strongly support MVWD's application for grant funding to implement the AMI Project. Once completed, the AMI installation project will increase water efficiency by modifying customers' water use behavior as well as facilitating prompt leak detection and repair by both the customer and the district.

If you have any questions regarding our support of this application, please do not hesitate to contact me at 909 465-5265

Sincerely,

Curt Hagman
Fourth District Supervisor
County of San Bernardino

Inland Empire Utilities Agency
A MUNICIPAL WATER DISTRICT

6075 Kimball Avenue • Chino, CA 91708
P.O. Box 9020 • Chino Hills, CA 91709
TEL (909) 993-1600 • FAX (909) 993-1985
www.ieua.org

February 1, 2024

Bureau of Reclamation
Financial Assistance Support Section
P.O. Box 25007, MS 84-27815
Denver, CO 80225

Re: Letter of Support for MVWD's Grant Application
WaterSMART Water and Energy Efficiency Grants for Fiscal Year 2024, Notice of Funding Opportunity No. R24AS00052

Dear Selection Committee,

Inland Empire Utilities Agency (IEUA) supports Monte Vista Water District's application to the Bureau of Reclamation's WaterSMART: Water and Energy Efficiency Grants for Fiscal Year 2024 program for funding its Advanced Metering Infrastructure (AMI) Installation Project. By providing access to hourly water use data, AMI technology allows MVWD staff to find and address leaks faster, significantly reducing water loss. In addition, AMI technology minimizes the need for meter technicians to drive their meter reading route, thus reducing the carbon footprint associated with traditional meter readings.

AMI conversion will allow for more precise implementation of district-metered areas, cutting back on water loss from agency-level leaks. Additionally, AMI is the technology needed to utilize customer engagement software, which will provide customers with access to hourly water usage, consumption trends, and other conservation tools to manage water use and increase water efficiency.

IEUA supports MVWD's application for grant funding to implement the AMI Project. Once completed, the AMI installation project will increase water efficiency by modifying customers' water use behavior as well as facilitating prompt leak detection and repair by both the customer and the district.

If you have any questions regarding our support of this application, please do not hesitate to contact our Grants and Government Affairs Officer, Ashley Womack, at 909-925-7205.

Sincerely,
INLAND EMPIRE UTILITIES AGENCY

Shivaji Deshmukh

Shivaji Deshmukh, P.E.
General Manager

cc: Justin Scott-Coe, General Manager, Monte Vista Water District

CHINO BASIN Water Conservation District | Waterwise Community Center

Chino Basin
Water Conservation District
Waterwise Community Center

4594 San Bernardino St
Montclair, CA 91763
Ph. (909) 626-2711
Fax. (909) 626-5974
info@cbwcd.org
cbwcd.org

August 14, 2023

Bureau of Reclamation
Financial Assistance Support Section
P.O. Box 25007, MS 84-27815
Denver, CO 80225

Re: Letter of Support for MVWD's Grant Application
WaterSMART Water and Energy Efficiency Grants for Fiscal Year 2024

Dear Selection Committee,

Chino Basin Water Conservation District supports Monte Vista Water District's application to the Bureau of Reclamation's WaterSMART: Water and Energy Efficiency Grants for Fiscal Year 2024 program for funding its Advanced Metering Infrastructure (AMI) Installation Project. By providing access to hourly water use data, AMI technology allows MVWD staff to find and address leaks faster, significantly reducing water loss. In addition, AMI technology minimizes the need for meter technicians to drive their meter reading route, thus reducing the carbon footprint associated with traditional meter readings.

AMI conversion will allow for more precise implementation of district-metered areas, cutting back on water loss from agency-level leaks. Additionally, AMI is the technology needed to utilize customer engagement software, which will provide customers with access to hourly water usage, consumption trends, and other conservation tools to manage water use and increase water efficiency.

Chino Basin Water Conservation District strongly supports MVWD's application for grant funding to implement the AMI Project. Once completed, the AMI installation project will increase water efficiency by modifying customers' water use behavior as well as facilitating prompt leak detection and repair by both the customer and the district.

If you have any questions regarding our support of this application, please do not hesitate to contact me at (909) 626-2711.

Sincerely,

Elizabeth Skrzat
General Manager

cc: Justin Scott-Coe, General Manager, Monte Vista Water District

CITY of CHINO

January 30, 2024
Bureau of Reclamation
Financial Assistance Support Section
P.O. Box 25007, MS 84-27815
Denver, CO 80225

Re: Letter of Support for MVWD's Grant Application
WaterSMART Water and Energy Efficiency Grants for Fiscal Year 2024, Notice of Funding Opportunity No. R24AS00052

Dear Selection Committee,

City of Chino supports Monte Vista Water District's application to the Bureau of Reclamation's WaterSMART: Water and Energy Efficiency Grants for Fiscal Year 2024 program for funding its Advanced Metering Infrastructure (AMI) Installation Project. By providing access to hourly water use data, AMI technology allows MVWD staff to find and address leaks faster, significantly reducing water loss. In addition, AMI technology minimizes the need for meter technicians to drive their meter reading route, thus reducing the carbon footprint associated with traditional meter readings.

AMI conversion will allow for more precise implementation of district-metered areas, cutting back on water loss from agency-level leaks. Additionally, AMI is the technology needed to utilize customer engagement software, which will provide customers with access to hourly water usage, consumption trends, and other conservation tools to manage water, use and increase water efficiency.

City of Chino strongly supports MVWD's application for grant funding to implement the AMI Project. Once completed, the AMI installation project will increase water efficiency by modifying customers' water use behavior as well as facilitating prompt leak detection and repair by both the customer and the district.

If you have any questions regarding our support of this application, please do not hesitate to contact me at 909.334.3535

Sincerely,

Hye Jin Lee
Public Works Director

cc: Justin Scott-Coe, General Manager, Monte Vista Water District

13220 Central Avenue, Chino, California 91710
Mailing Address: P.O. Box 667, Chino, California 91708-0667
(909) 334-3250 • (909) 334-3720 Fax
Web Site: www.cityofchino.org

Letter of Partnership (Category B Applicants)

Section not applicable, applicant is a category A applicant.

Official Resolution

RESOLUTION 868-24

RESOLUTION OF THE BOARD OF DIRECTORS OF THE MONTE VISTA WATER DISTRICT, COUNTY OF SAN BERNARDINO, STATE OF CALIFORNIA, AUTHORIZING THE MONTE VISTA WATER DISTRICT TO ENTER INTO A FINANCIAL ASSISTANCE AGREEMENT UNDER THE WATERSMART GRANTS: WATER AND ENERGY EFFICIENCY GRANTS FUNDING FOR FISCAL YEAR 2024 WITH THE U.S. DEPARTMENT OF INTERIOR – BUREAU OF RECLAMATION AND DESIGNATING A REPRESENTATIVE TO EXECUTE THE FINANICIAL ASSISTANCE AGREEMENT, AND ANY AMENDMENTS THERETO, FOR THE MONTE VISTA WATER DISTRICT ADVANCED METER INSTALLATION PROJECT

WHEREAS, Monte Vista Water District ("District") has the authority to construct, operate, and maintain its water system; and

WHEREAS, the United States Department of the Interior – Bureau of Reclamation under the WaterSMART: Water and Energy Efficiency grant program will make funding available to qualifying applicants; and

WHEREAS, the District's 2021-2025 Strategic Plan Initiative 3.4 states that the District will develop and implement a meter testing, repair, and replacement plan based on a comprehensive existing meter inventory; and

WHEREAS, this grant funding opportunity will allow the District to address its aging infrastructure while bearing a shared-cost; and

WHEREAS, the District's 2021-2025 Strategic Plan Goal 5 is to maintain responsible stewardship of District funds to address future needs; and

WHEREAS, the Board of Directors of the Monte Vista Water District finds and determines that it is in the best interest of the District and its residents to apply for such a grant opportunity.

NOW, THEREFORE, BE IT RESOLVED the Board of Directors of the Monte Vista Water District does determine as follows:

1. That the Monte Vista Water District is authorized to enter into a financial assistance agreement under the WaterSMART Grants: Water and Energy Efficiency Grants Funding for Fiscal Year 2024 with the U.S. Department of the Interior – Bureau of Reclamation for the Monte Vista Water District Advanced Meter Installation Project – Phase 4; and

2. That the Board of Directors of Monte Vista Water District authorizes the general manager to execute the financial assistance agreement, and any amendments thereto; and

3. That Monte Vista Water District has the capacity to provide the amount of funding and/or in-kind contributions specified in the grant cost share requirements; and

4. That Monte Vista Water District will work with the U.S. Department of Interior – Bureau of Reclamation to meet established deadlines for entering into a cooperative agreement.

APPROVED AND ADOPTED this 14th day of February 2024.

Sandra S. Rose
President of the Board of Directors
MONTE VISTA WATER DISTRICT

ATTEST:

Justin M. Scott-Coe
Secretary to the Board of Directors
MONTE VISTA WATER DISTRICT

Letters of Funding Commitment

Section not applicable

Unique Entity Identifier and System for Award Management

Monte Vista Water District UEI #: J5Y5Z7WCG3Z1