Increasing Water Use Efficiency in Water Distribution: Crescenta Valley Water District 2-inch Water Meter Enhancement AMI Project

Crescenta Valley Water District

Project Manager
Arturo Montes
Finance and Administration Manager
2700 Foothill Blvd.
La Crescenta, CA 91214
amontes@cvwd.com
818.248.3925

Proposal Contents

Section 1: Technical Proposal and Evaluation Criteria

1.1 Executive Summary

Date:	January 14, 2025
Applicant:	Crescenta Valley Water District
Applicant City, County, State:	La Crescenta, Los Angeles County, California
Project Name:	2-inch Water Meter Enhancement AMI Project
Applicant Category:	A – Local authority with water delivery authority

Crescenta Valley Water District (CVWD, District) is requesting funding to expand and enhance its existing Advanced Metering Infrastructure (AMI) Project in order to further reduce 11.5 acre-feet per year (AFY) of water loss via water use efficiency by replacing and upgrading their existing older medium size water meters (2-inch meters) with new "Smart Meters", which will improve water system resilience. The project will save approximately 173 AFY of water during the 15-year life cycle of the medium size water meter upgrades to "Smart Meters", which is an 10.0% water savings per meter on an annual basis. This estimate is based on the US Environmental Protection Agency (EPA) WaterSense web site. The site (https://www.epa.gov/watersense/advanced-metering-infrastructure) contains a link to an AMI Guidebook by the American Water Works Association (AWWA, 2022) . The AWWA Guidebook indicates that a credible range of water savings from AMI-based programs is within the range of 2 – 10%. This is consistent with what the City of Santa Maria found, which was profiled in WaterWorld Magazine in 2011. They experienced reductions in water losses from 6% to 2% one year after implementing an AMI program (Godwin 2011). A higher end estimate of loss reductions was gathered from a 2013 EPA report, which stated that up to 75 percent of average water system losses are recoverable. This project is anticipated a higher savings of 10% because the system has relatively high water losses; therefore, these upgrades are expected to save proportionally more.

CVWD currently has one hundred fifty-one meters that are located at large apartment and condominium complexes, restaurants, commercial buildings, senior living apartments, and irrigation sites within the CVWD service area. For the proposed Project, CVWD proposes to replace ninety (90) 2-inch meters that are located at multi-family residential complexes, commercial/institutional properties, and irrigation sites within CVWD service area. The USBR grant will allow CVWD to accelerate the medium size meter upgrades to "Smart Meter", monitor water use and reduce the amount of unaccountable water through the older meters.

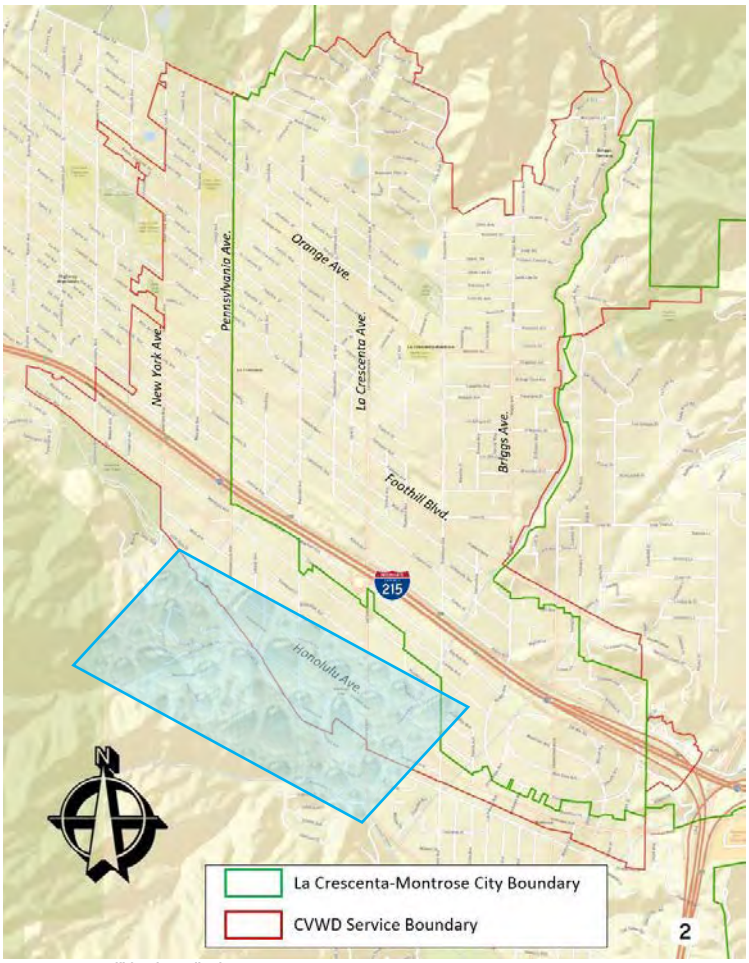
The proposed AMI project contributes to accomplishing the goals of the United States Bureau of Reclamation Small-Scale Water Efficiency Projects Grant by implementing a project that conserves and uses water more efficiently as well as accomplishes other benefits that contributes to water supply reliability in the western United States. The Project is anticipated to start in February 2026 and be completed within 16 months. The Project will not be located on a federal facility or involve federal land.

1.2 Project Location

The 2-inch Water Meter Enhancement AMI project area is located mostly in the La Crescenta Area, which is in the unincorporated areas of Los Angeles County, California and is directly adjacent to the City of La Canada Flintridge on the east and the City of Glendale on the west. This 2-inch Water Meter Enhancement AMI Project involves replacement of the existing 2-inch metering system within CVWD's water service area. See Figure 1 below for a map showing the approximate area for the project. Due to the scale of the

map, CVWD would provide a series detailed maps with all project locations along with the grant completion report.

Figure 1 –CVWD Service Boundary and General Project Location



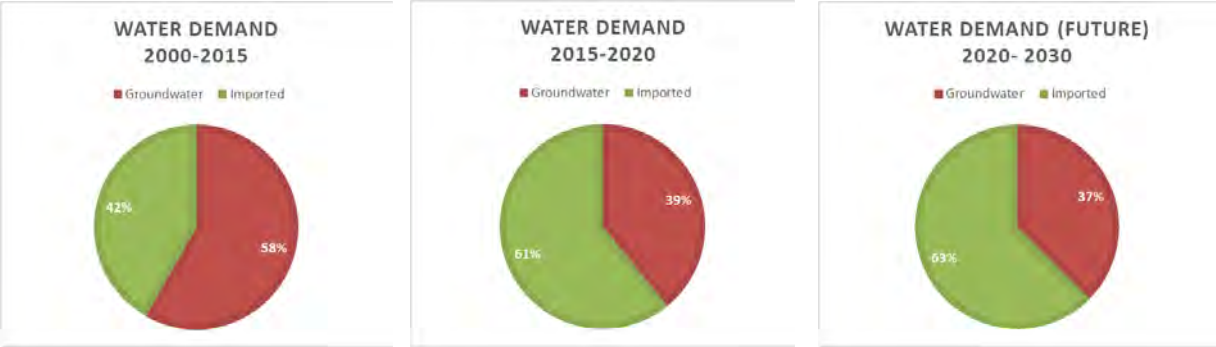
1.3 Technical Project Description

CVWD's service area is located in the Crescenta Valley area of Los Angeles County in the foothills of the San Gabriel Mountains, between the San Fernando and San Gabriel valleys. CVWD provides water distribution and sewage collection within its four-square mile service area to the unincorporated communities of La Crescenta, Montrose, and Verdugo City as well as a small portion of the City of Glendale and City of La Cañada-Flintridge. The service area ranges in elevation from approximately 1,200 feet to almost 3,000 feet above sea level. Figure 1 shows a map of CVWD's service boundaries. CVWD's water sources are 12 local groundwater wells, one mountain tunnel (gravity fed), and imported water supply through three separate connections with the Foothill Municipal Water District (FMWD) whom is a wholesaler to Metropolitan Water District of Southern California (MWD), and an emergency inter-tie with the City of Glendale.

From 2015 to Present, imported water represents approximately 60 percent of CVWD's water. Groundwater from the Verdugo Basin provides approximately 40 percent of CVWD's water. See Figure 2. These percentages switched over a 15-year period when CVWD was pumping 60 percent from groundwater supplies and only importing 40 percent of its supply. Recent drought and groundwater

contamination have dramatically impacted CVWD. As a result, the District is looking to implement the AMI Program as a way to conserve water by reducing unaccountable water and thereby reducing the amount of imported water into the District. In the future due to drought CVWD anticipates increase imported water demand as represented in the 2020-2030 projections shown in Figure 2.

Figure 2 CVWD Past, Current, and Future Water Sources



Quantity of Water Supply Managed and Water Rights

CVWD manages and supplies about 3,946 AFY of water per year based on the five-year period from 2018 – 2022. On a long-term basis, approximately 40 percent of CVWD's annual water demand is met by the local groundwater supply and 60 percent by imported water. This ratio does change depending on the water supply conditions, local weather, and water demand. CVWD operates 11 separate water pressure zones served by 14 pumping stations and 17 storage reservoirs totaling 17.5 million gallons. According to 2020 CVWD billing data, CVWD serves a population of over 32,462 with 8,233 potable water accounts and has a five-year (2016 - 2020) average annual potable water demand of approximately 4,216 AFY. Using more recent data from 2018 – 2022, the five-year average is 3,946 AFY. There is no recycled water within the service area and two studies were previously conducted to determine if recycled water could be generated via a satellite treatment facility utilizing local sanitary sewer demands. In April 2022, the District awarded a contract to conduct a 2023 Wastewater Master Plan with the goal to determine potential long-term opportunities for CVWD to reallocate the wastewater for alternative groundwater recharge supply.

Densification of customer single-family to multi-family growth is steady although the Crescenta Valley area as the area is nearly built out. Residential growth is occurring through increased housing density in the multiple-unit zoned areas (primarily Montrose Area) as well as limited in-fill housing developments on random parcels in La Crescenta.

1.4 2020 Actual Water Usage

The single-family residential sector comprises approximately 85 percent of CVWD connections and accounts for almost 59 percent of demand. Multi-Family customers are the next largest group with 9 percent of connections with almost 20 percent of demand and is the target of the 2-inch Water Meter Enhancement AMI Project. The residential sector makes up 89 percent of the overall demand within CVWD service area which has the greatest potential for water conservation. Commercial, industrial, institutional, and irrigation customers make up the remainder of the 11 percent water market demand. See Table 1 for details.

Table 1 – CVWD Water Usage by Sector

2020 Actual Demand					
Sector	Accounts	Percent	Use (AF)	Percent	Avg AF/Per Account

2020 Actual Demand					
Single Family Resident	6,955	85%	2,490	59%	2.8
Multi Family Resident	695	9%	836	20%	0.8
Commercial, Industrial, Inst.	408	6%	279	7%	1.5
Irrigation	68	1%	234	6%	0.3
Fire	107	1%	376	9%	0.3
Total	8,233	100%	4,216	100%	2.0

CVWD 2020 Urban Water Management Plan (Chapter 2).

1.5 Projected Growth and Water Demand

According to the 2020 CVWD Urban Water Management Plan, the population within the CVWD is anticipated to grow less than 3% percent over the next 25 years. The service area population is projected to increase from 32,462 in 2020 to 35,103 in 2045 at a rate of 3% per annum. See Table 2 for details. The population in 2023 was 32,665 based on the Electronic Annual Report (EAR) report filed with the State Water Resources Control Board (SWRCB).

Since CVWD's population is expected to increase via densification in the next 25 years, additional conservation measures are necessary to meet future growth. The timing is optimal for CVWD's expanded implementation of AMI capital improvement plan to meet these future demands. The 2-inch Water Meter Enhancement AMI Project will allow CVWD to conservatively save 173AFY, and better manage demand.

Table 2 – Projected Demand - 2025-2045 Average

Water Sources	2025	2030	2035	2040	2045
Demand					
Total Normal Demand (ac-ft)	**3,979**	**4,041**	**4,105**	**4,170**	**4,236**
% of 2020 Actual Demand (4,216 ac-ft)	94,4%	95.9%	97,4%	98.9%	100.5%

CVWD 2020 Urban Water Management Plan (Chapter 2).

1.6 Problems and Needs

This project is a water conservation project that will directly improve CVWD's future water management, conservation, and water supply reliability efforts. Currently, meter-reading personnel must physically drive to each of the 8,233 metered locations within the CVWD service area to manually read water meters on a bi-monthly basis. This method is inefficient because it requires excessive field and office labor, vehicle maintenance costs, and contributes to greenhouse gas emissions from all the vehicle miles traveled.

This project involves replacement of 90 meters with AMI system such as smart meters that register low and high flows through e radio transceivers, and an AMI data collection system.

1.6.1 How the Project Address Problems and Needs

AMI is a transformational technology. This technology will provide CVWD with an excellent data collection platform, a bi-directional control network, automate a very expensive and at times challenging business function and provide a better platform for customer interaction. The deployment of the 2-inch Meter Enhancement AMI Project will open the door to a wealth of water usage data and community trends

previously unavailable to CVWD and its customers. In this proposed project, 90 of CVWD's existing water meters will be replaced with "Smart meters" that will be compatible with the existing AMI backhaul communication system, which was installed in 2021. The AMI system, which will provide real-time data, as well as allow meters to be read remotely from a central location through a radio-frequency- based fixed communications network. Implementation of an AMI program will improve CVWD's water resource management, improve customer and CVWD communication and proactivity, streamline water conservation measures, and allow CVWD to modernize its existing water infrastructure through technology.

Esource was retained by CVWD to develop an AMI/MDM Assessment and Strategic Roadmap Report in 2018. Over time all 8,233 meters are expected to be replaced with new AMI smart meters and radio transceivers to transmit information. All meter box lids (concrete and steel), which are not compatible with AMI are also expected to be replaced with AMI-compatible composite materials with radio transceivers. In conjunction with the AMI system to be installed in the field, a Meter Data Management System (MDMS) platform will be implemented that could potentially provide information on the following items water quality, pH changes, pressure, and tampering devices might be implemented. The MDMS will be responsible for AMI data cleansing, calculating, providing data consistency, and disseminating metered consumption data. As a companion product to MDMS, the overall system will be connected to an interactive or customer engagement web portal to allow customers to view their water consumption, see if they have a leak on-site and provide information and recommendations to increase their water efficiency.

1.6.2 Project Effectiveness

Consumption trends and effectiveness of conservation programs can be verified using AMI/MDMS data. AMI will allow CVWD to proactively monitor water consumption activities and leaks and set thresholds to identify high users, which can be targeted for water audits. Customer portals also provide tools to help customers manage their monthly costs and provide alerts on increased demand and targeted messaging. A customer can set a specific budget and receive alerts when they are close to exceeding the limit.

The purpose of this project is to increase water conservation and household/businesses water efficiency through leak detection, education, and improved communication between CVWD and its 2-inch water meter customers. An interactive web portal for customers, detailing water consumption data and cost information, as well as implementation of economic incentives to meet targeted consumption rates, will provide the medium sized water meters customers with the necessary tools to effective water conservation behavior.

With the implementation of AMI, CVWD's Water Operations Department can gain real-time insight into where water is flowing in the water distribution system during a certain period such as during morning hours before people head to work or school. The installation of AMI meters represents the first time that CVWD can observe how the demands in the distribution system compared to the volumetric treated water in real-time. Engineering design and capital improvement budgets as well as energy consumption can be planned more accurately as a result of this new dataset. In addition to the enhanced distribution system monitoring, the Water Operations Department can implement system alerts for backflow detection and prevention.

1.7 Potential Shortfalls/Challenges in Water Supply

At present, CVWD is faced with several water supply challenges. With 40-60 percent of its water coming from the Colorado River and State Water Project, CVWD has seen a 12% increase in cost over the last five year. CVWD is susceptible to the current drought situation of California.

Over the last five years CVWD has had water restrictions in place to regulate demand to deal with a decline in supplies. Sources of imported supply, the Colorado River and State Water Project have been severely limited. In 2024, the State Water Project allocation was only 40 percent. The Colorado River supply continues to suffer from drought and supplies are expected to be historically low.

Not only is the CVWD's imported water supply affected by these conditions, but so are local groundwater supplies (making up the remaining 40 percent of supply), which are greatly reduced as a result of recent drought conditions. Since 2011, CVWD has actually decreased use of groundwater in response to the declining groundwater elevations. Groundwater levels are at an all time low compared to historic averages.

These environmental factors and reduced supply from the State Water Project have forced Metropolitan Water District to tap into reserves in order to maintain deliveries to the CVWD via Foothill Municipal Water District and the rest of its 26-member agencies. CVWD is now under more pressure than ever to encourage the public to save water, and to implement water-conservation infrastructure.

1.8 Anticipated Water Savings

Based on water loss audit reports for the four-year period from 2019 – 2022, the average water loss is 352 AFY and ranges from a 227 AFY loss in 2022 to a 401 AFY loss in 2019. This amount represents an approximate 8% loss of water entering the distribution system. Implementation of this project will help to alleviate this water loss. A large portion of these estimated water losses are considered to be a result of undetected leaks and meter inaccuracies. The proposed AMI meters can provide notification to both District staff and customers of major and minor leaks and atypical patters of use with high accuracy, thereby helping to reduce water losses. In addition, general water use efficiency can also be improved through heightened customer awareness with user-friendly web portals and billing statements, allowing customers to more easily track their use as well and view a comparison to other customers. This project further reduces 11.5 AFY of water loss via water use efficiency by replacing and upgrading their existing older medium size water meters (2-inch meters) with new "Smart Meters", which will improve water system resilience. The project will save approximately 173 AFY of water during the 15-year life cycle of the medium size water meter upgrades to "Smart Meters", which is a 10.0% water savings per meter on an annual basis. The anticipated water savings was calculated as shown in the following table.

Meter Type	# accounts	2020 Water Use (AFY)	No. of AMI Meters to be Replaced	Percent (%) of Accounts	Demand by Account Type for New Meters (AFY)	Water Savings (assumes 10%) (AFY)
Single-Family Residential	6,955	2,490	0	0.0%	0	0.0
Multi-Family Residential	688	836	60	8.7%	72.9	7.3
Commercial/Institutional	413	279	20	4.8%	13.5	1.4
Landscape Irrigation	81	234	10	12.3%	28.9	2.9
Fire	107	376	0	0.0%	0.0	0.0
Total	8,244	4,215	90	1.1%	46.0	**11.5**
Notes					Total for 15 Years	**173**
Assume 1 account = 1 meter						
Data from 2020 UWMP.						

1.9 Water Delivery Supply System

The approximate length of CVWD distribution lines is 95.3 miles. CVWD had 17 steel and concrete reservoirs with a combined capacity of 17.5 million gallons. CVWD operates 14 pump stations and 34 booster pump stations with a combined average capacity of 3,000 gallons per minute for each pressure zone. CVWD has 8,233 active service connections. CVWD pumps groundwater via 12 active groundwater wells and has a water supply system that contains up 11 different pressures zones.

1.10 Evaluation Criteria

1.10.1 Evaluation Criterion A – Project Benefits

Water Savings, Water Conservation and Water Efficiency

As a direct result of updating existing medium size water meters to AMI, CVWD is requesting funding to expand and enhance its existing Advanced Metering Infrastructure (AMI) in order to further reduce 11.5 AFY of water loss via water use efficiency by replacing and upgrading their existing older medium size water meters (2-inch meters) with new "Smart Meters", which will improve water system resilience. The project will save approximately 173 AFY of water during the 15-year life cycle of the medium size water meter upgrades to "Smart Meters", which is an 10.0% water savings per meter on an annual basis. This estimate is based on the US Environmental Protection Agency (EPA) WaterSense web site. The site (https://www.epa.gov/watersense/advanced-metering-infrastructure) contains a link to an AMI Guidebook by the American Water Works Association (AWWA, 2022) . CVWD's assumption is that leaks on the customer's plumbing will now be addressed almost immediately due to the real- time notification at the District and customer level. The water savings numbers are conservative as we have not considered the behavioral changes that will occur at the residential level due to new information being immediately available to customers who may overuse water. The challenges that CVWD faces are long-term as the amount of water available from local sources and FWMD varies from year to year. While there is sufficient groundwater to weather short-term droughts, it will not sustain the current population indefinitely due to the limited quantities of natural recharge. Continued water conservation is necessary to meet current and future water demands. Advanced metering infrastructure improves water management through real time data measurement. The proposed project will **better manage** approximately 8 percent of the District's annual water supply (of meters to be replaced) for residences and businesses.

Are customers not currently getting their full water right at certain times of year?

There are restrictions on water practices within the service area, such as limits on days when irrigation can occur. Water waste, such hosing off sideways and driveways, use of hoses without automatic shutoff nozzles, and watering ornamental turf, is prohibited.

Does this project have the potential to prevent lawsuits?

No, there are no concerns about implementing a meter replacement program within the District.

What are the consequences of not making the improvement?

The District will continue to provide its customers with water to meet their needs. The consequence of not making the improvements is to ignore the real impacts of climate change and demand increases.

Are customer water restrictions currently required?

The District operated with mandatory water use restrictions, consistent with Stage 4 of its Water Shortage Contingency Plan in water year 2021 and 2022 and implemented actions such as limiting outdoor watering to 1 day a week, limiting use of use of fountains and pool, and limiting vehicle washing to reduce demand by 30 percent from normal. After heavy precipitation in late 2022 and early 2023 the imported water supply outlook improved and CVWD moved to Stage 2 of its Water Shortage Contingency Plan. In Stage 2 the District is working to reduce water demands 20% below normal. Water use restrictions still apply in Stage 2, such as limiting outdoor watering days, limiting water for construction purposes, only serving water in restaurants upon request, and requiring use of water conserving equipment in commercial settings. The initial allocation for imported water from the State Water Project is only 5 percent, meaning that CVWD anticipates reenacting severe restrictions before summer 2025.

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

Yes, as mentioned above, the challenges that CVWD faces are long-term as the amount of water available from local sources and FWMD varies from year to year. While there is sufficient groundwater to weather short-term droughts, it will not sustain the current population indefinitely due to the limited quantities of natural recharge. Continued water conservation is necessary to meet current and future water demands.

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

Yes. CVWD actively collaborates with water resources management projects and shares information with other water managers in the region include the Cities of Glendale and La Canada Flintridge, Los Angeles County, Crescenta Valley Town Council, FMWD, MWD and Upper Los Angeles River Area Watermaster. Each of these partner organizations or agencies has an interest in solving the problem of high water-use and water loss. CVWD will share data from this project with other water managers throughout the region to inform them.

CVWD will use the 2-inch Water Meter Enhancement AMI Project to educate its customers on the importance of water conservation and water efficiency including residential and commercial customers about how to be proactive in their water usage by taking advantage of the computerized interface and educational tools CVWD's AMI system will provide. The District will develop educational materials and training around the new AMI system and will reach out to residents through the customer portal and its website to actively engage them in taking part in water conservation strategies such as monitoring water usage, leak detection, reporting, and more: this will occur via a customer portal, information posted to the website and bill stuffers.

As part of the 2-inch Water Meter Enhancement AMI Project, the District will conduct public outreach to apartment and condominium complexes, senior living apartments, and irrigation customers for which the 90 meters are associated. This will include an explanation of the AMI upgrade activity along with the benefits of the new "Smart Meter", and how customers will be able to access their water usage online through a customer portal. Communication materials will include e-mails, informational mailings, door-to-door direct communication, telephone outreach, public meetings, social media, website, and flyers in both English and Spanish.

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

Please see responses above.

Will the project benefit species?

There are no known species listed as a Federal threatened or endangered in the project area.

Will the proposed project positively impacts/benefit various sectors and economies within the applicable geographic area?

Preserving water supply and reducing greenhouse gas emissions is a general benefit to all CVWD customers and does not positively or negatively impact any particular sector.

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

No, the NRCS is not a partner or contributor to the proposed project.

1.10.2 Evaluation Criterion B – Planning Efforts Supporting the Project

Project Need

AMI is a transformational technology. This technology will provide CVWD with an excellent data collection platform, a bi-directional control network, automate a very expensive and at times challenging business function and providing a better platform for customer interaction. The deployment of the 2-inch Meter Enhancement AMI project will open the door to a wealth of water usage data and community trends previously unavailable to CVWD and its customers. In this proposed project, 90 of CVWD's existing water meters will be replaced with "Smart meters" that will be compatible with the existing AMI backhaul communication system, which was installed in 2021-2022. The AMI system, which will provide real-time data, as well as allow meters to be read remotely from a central location through a radio-frequency- based fixed communications network. For more information please see Section 1.6.1.

Planning Efforts to Substantiate the Project

CVWD developed an AMI/Meter Development Management (MDM) Assessment and Strategic Roadmap Report in 2018 and this demonstrates the feasibility and efficacy of using AMI meters. In addition, other planning done by CVWD and the State of California demonstrate the need and feasibility of the project.

CVWD is a member of the California Water Efficiency Partnership and it is through this partnership that CVWD meets the goals and reporting required by California's various water efficiency regulations. CVWD's Best Management Practice (BMP) reports to CalWEP for retail units was approved on September 24, 2018; the proposed project is in alignment with BMPs for metering in association with water conservation and water management. Further, the AMI project is in direct alignment with the following plans:

- **2020 CVWD Urban Water Management Plan (UWMP)** - Water reliability is one of the main objectives outlined in the region's 2020 UWMP. The proposed AMI project will assist the District and the region in reducing reliance on imported water.
- **2020 CVWD Water Shortage Contingency Plan (WSCP)** - Recent water supply challenges throughout the American Southwest and the State of California have resulted in the development of a number of policy actions that water agencies would implement in the event of a water shortage. In Southern California, the development of such policies has occurred at both the wholesale and retail level. This section addresses elements related to the urban water supplier's Water Shortage Contingency Plan (WSCP) describing new and existing policies that Metropolitan MWD, FMWD, and CVWD have in place to respond to water supply shortages, including a catastrophic interruption and greater than a 50 percent reduction in water supply.
- **2020 CVWD Strategic Plan** – The CVWD 2020 Strategic Plan utilized the effective utility (EUM) management framework created by the United States Environmental Protection Agency (USEPA) and the American Water Works Association (AWWA) for bench marking mission-efficacy for water utilities. The AMI project is a critical component of Strategic Plan Goal #3 - *Efficiency through Technology*.
- **2015 Upper Los Angeles River Enhanced Watershed Management Program** - Reducing demand and improving operational efficiency are the top two adaptation strategies in the study that will be addressed by the AMI project.
- **State of California 20 x 2020 Water Conservation Plan** - The water conservation strategies inherent in the project will assist CVWD in doing its part to help the State of California reach its goal of reducing per capita water consumption.

1.10.3 Evaluation Criterion C – Implementation and Results

Project Implementation

This is an existing CVWD program, which is seeking grant funding to supplement the cost of accelerating and expanding CVWD's AMI program. CVWD has already implemented the Meter Data Management System. The project supports converting 90 more connections to AMI meters. The 2-inch Water Meter Enhancement AMI Project includes the following work:

Task 1: Project Management, Administration and Reporting
Project management will be provided by District staff for successful project implementation. Activities will include administrative project oversight, securing equipment, and conducting progress meetings to verify appropriate progress and completion within budget and on schedule. Upon receipt of the grant award, and for the duration of the grant agreement, grant administration will be performed including activities to execute the grant agreement, ensure compliance with grant requirements, preparation and submittal of regular invoices and progress report materials, and regular coordination with the grant manager.

Task 2: Environmental Documentation/Permitting
The District will prepare environmental documentation to comply with the California Environmental Quality Act (CEQA). The District anticipates preparing a CEQA Notice of Exemption for the Project. NEPA will be completed per Reclamation standards. This task also includes acquisition of necessary permits for implementation of the project. Permitting is anticipated to be minimal. Potential permits that may be required are outlined in Section 4.

Task 3: Design and Engineering
The District has completed design that is needed to verify field conditions and to develop a site-specific location map.

Task 4: Procurement
The District will acquire the required meter lids, meters, and radios.

Task 5: Construction
The labor to install the material and supplies listed above as equipment including the medium size AMI meters to be replaced (90), lid replacements (90) and endpoints to be installed (90) along with other equipment are included in this item.

Construction is expected be completed by June 2027. Construction costs are included in this proposal in Section 2.3. See schedule below.

A detailed project budget is provided in Section 2 of this application.

Describe any permits and agency approvals that will be required along with the process and timeframe for obtaining such permits or approvals.

The District does not anticipate needing any permits for installation of AMI meters. Depending on the orientation of a given meter box, it may be necessary to obtain a street use permit from the City of Glendale or an encroachment permit from the City of Los Angeles or County of Los Angeles to place equipment and personnel to access the meter box.

Task	Duration	Milestone	Start Date	Completion Date
Task 1: Project Management, Administration and Reporting	16 months	• Kickoff Meeting • Customer Outreach • Grant Reporting & Invoicing • Monitor Water Savings	Feb 2026	Jun 2027
Task 2: Environmental Documentation/Permitting	1 month	• Notice of Exemption	Feb 2026	Mar 2026
Task 3: Design and Engineering	0 months	None - Already Completed	NA	NA
Task 4: Procurement	4 month	Equipment procurement	Apr 2026	Jul 2026
Task 5: Construction	10 months	• Installation of AMI meters & supporting equipment • Test smart meters • Test radio receivers • Project completion verification	Aug 2026	Jun 2027

Identify and describe any engineering or design work performed specifically in support of the proposed project. What level of engineering design is the project currently?

The previously completed AMI/MDM Assessment and Strategic Roadmap Report is the extent of the needed engineering and design work for this project.

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

Yes, the District has access to the parcels in which the meters will be installed. There is no need to obtain any easements to implement the project. Depending on the orientation of a given meter box, it may be necessary to obtain a street use permit from the City of Glendale or an encroachment permit from the City of Los Angeles or County of Los Angeles to place equipment and personnel to access the meter box.

Identify whether the applicant has contacted the local Reclamation office to discuss environmental and cultural resource compliance requirements and the associated costs.

The project has been evaluated for both CEQA and NEPA compliance and it has been determined that the project is exempt for CEQA and a categorical exclusion is anticipated for NEPA compliance. A Notice of Exemption will be filed for this project as it falls under the categorical exemptions identified by the State Resources Agency as defined in the CEQA Guidelines (14 CCR Section 15300-15331). The District will work with Reclamation to prepare the necessary categorical exclusion documentation upon Reclamation's review of the project. The District is prepared to handle these documents in house and has budgeted 4 hours of staff time for this effort. The District has not contacted Reclamation to discuss this particular proposal because it is very similar to the last AMI proposal the District submitted in 2022 for Reclamation funding, and that which was successfully awarded. The District maintains relations with Reclamation to administer that grant application and anticipates furthering the relationship should this proposal be awarded.

1.10.4 Evaluation Criterion D – Nexus to Reclamation

Does the applicant have a water service, repayment, or O&M contract with Reclamation?

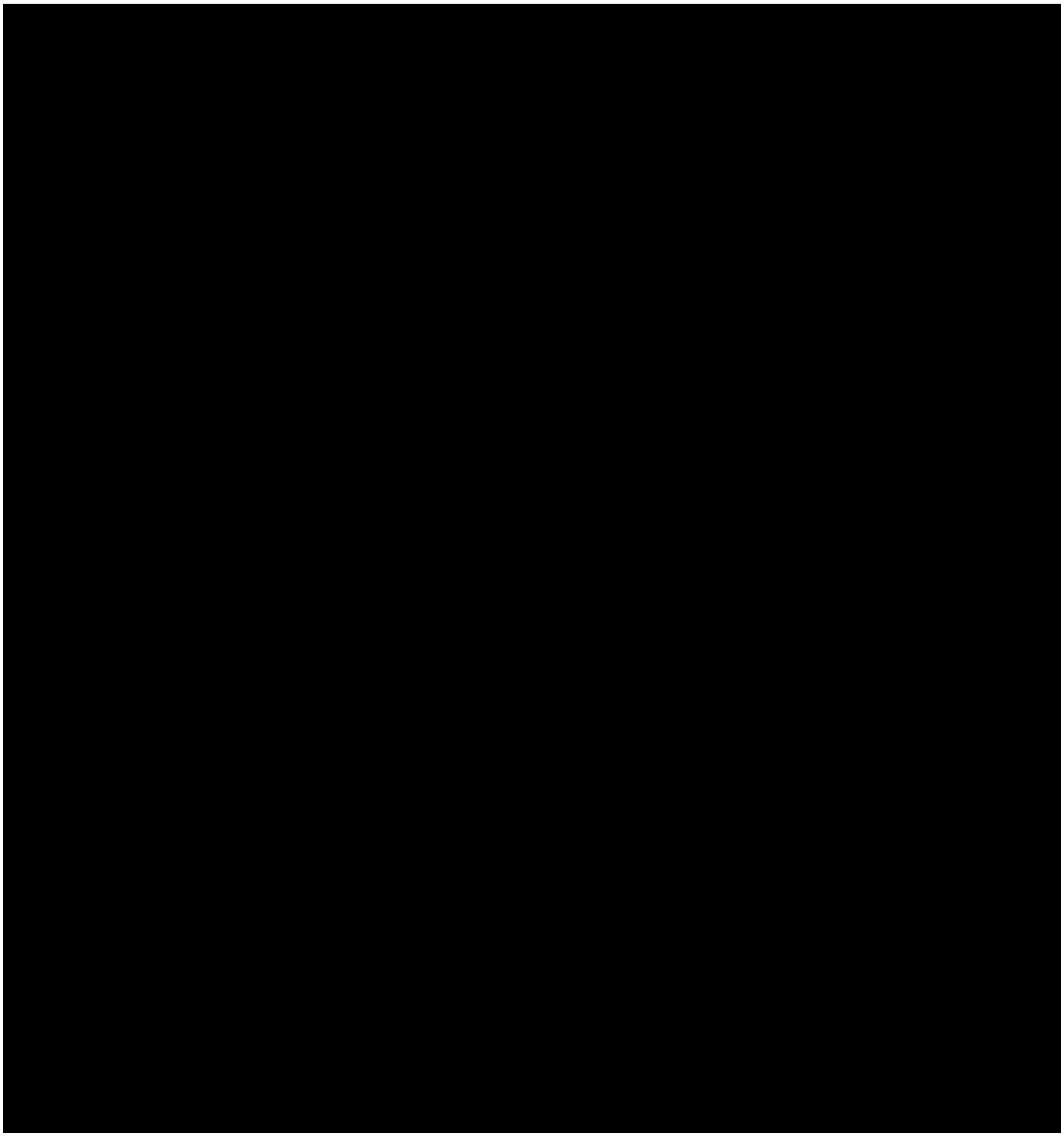
The District does not have a direct water service, repayment, or operations contract with Reclamation. The District receives water from the Foothill Water Management District which receives wholesale water from MWD. The water from MWD is a mix of Colorado River Water (hence a portion is received through Reclamation) as well as groundwater.

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

Yes. The District is receives water from the Foothill Water Management District which receives wholesale water from MWD. The water from MWD is a mix of Colorado River Water (hence a portion is received through Reclamation) as well as groundwater.

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

Reclamation's WaterSMART Program focuses in part on the uses of technology to balance future water supply and demand needs throughout California and the western United States. The proposed Project demonstrates the opportunities for significant water and energy conservation through satellite imaging, state-of-the-art software, and systems integration. Water conserved is directly related to the CALFED Bay-Delta Program which is a major ongoing Reclamation activity. CVWD has and continues to have a close working relationship with the Lower Colorado Regional and Southern California offices. The 2-inch Water Meter Enhancement AMI Project focuses on municipal water delivery and distribution and does not directly involve Reclamation project lands or facilities. There are no current Reclamation project or activities within the Verdugo Groundwater Basin.



Section 2: Project Budget

2.1 Funding Plan and Letters of Commitment

The total project cost is estimated at $216,723 for FY2025-2026 (July 1, 2025 through June 30, 2026) and FY 2026-2027 (July 1, 2026 through June 30, 2027). The WaterSMART Small-Scale Water Efficiency Project Grant request is for $100,000.00. CVWD has authorized financing for the remaining $116,723 needed to complete this project.

CVWD will finance all Project costs not funded by Reclamation. The funding plan anticipates that WaterSMART Small-Scale Water Efficiency Project Grant will be used to install the equipment as outlined below in Table 3. The majority of CVWD's commitment to funding is through purchase of 90 medium size AMI meters as well as labor for the installation of the meter sets.

Non-Reclamation funding will be provided solely by CVWD and therefore letters of commitment from third parties are not required.

2.2 Budget Proposal

Table 3 Total Project Cost Table

SOURCE (a)(b)(c)(d)(e)	AMOUNT
Costs to be reimbursed with the requested Federal funding	$100,000
Costs to be paid by the applicant	$116,723
Value of third-party contributions	$0
TOTAL PROJECT COST	**$216,723**

a) It is the intention of CVWD to fund the deployment of AMI for the 90 2-inch size water meters which are located throughout the service area by using existing water fund reserves or through debt financing. The annual debt service will be paid for through the CVWD water funds, which are supported through rate revenue. This project is included in the CVWD annual water capital improvement project (CIP) budget.
b) No costs incurred before the anticipated Project start date are included in the Project budget.
c) There are no funding partners associated with the proposed Project.
d) There are no funding requests from other Federal partners. All local funds will come from rate payers. No other Federal or State funds will be used.
e) CVWD has numerous funding requests working at various levels for operations & maintenance of CVWD's water system. Those requests are independent of the proposed Project and will not affect or influence Reclamation's commitment to this Project should it receive funding.

2.3 Detailed Project Budget

The budget includes costs associated with the implementation of the proposed Project and fall within the contractual and construction categories. There are no pre-award requests included in this proposal. This budget is associated with Task 5 identified in Section 1.3 and only includes construction costs that will be incurred after award and environmental compliance activities are complete. The budget is summarized in Table 4, below, and described in more detail in the narrative that follows.

Cost estimates are outlined in Section 2.3 with documentation provided in Appendix C.

Table Budget Summary

Budget Object Category	Total Cost	Federal Estimated Amount	Non-Federal Estimated Amount
a. Personnel	**$5,910**		
Director of Finance and Administration, 37.8 hours @ $89.77/hr	*$3,393*		
Water Resources and External Affairs Specialist, 49.5 hrs @$50.85	*$2,517*		
b. Fringe Benefits (10% de minimis rate)	**$1,682**		
c. Travel	**$0**		
d. Equipment	**$198,226**		
90 2-inch Meters	*$170,767*		
90 Radios	*$14,589*		
90 Lids	*$12,870*		
e. Supplies	**$0**		
f. Contractual	**$0**		
g. Construction	**$10,701**		
Operations And Maintenance I, 135 hrs@$29.57/hr	*$2,992*		
Operations and Maintenance II, 135 hrs@$40.10/hr	*$5,414*		
Meter Reader, 45 hrs@$28.90 hrs	*$1,296*		
h. Other Direct Costs	**$203**		
Water Resources and External Affairs Specialist, 4 hrs @$50.85	*$203*		
i. Total Direct Costs	**$216,723**		
i. Indirect Charges	**$0**		
Total Costs	**$216,723**	**$100,000**	**$116,723**
Cost Share Percentage		**46%**	**54%**

Note: Details are provided in the narrative below and documentation is included in Appendix C.

2.4 Budget Narrative

2.4.1 Personnel

Personnel from the District will provide project management and oversight. It is estimated that over the 16 months of the project, District personnel will provide approximately 87 hours of labor towards project management. Other District personnel area accounted for in the budget for Construction and Other.

2.4.2 Fringe Benefits

CVWD is requesting the de minimis rate of 10% for fringe benefits for staff labor.

2.4.3 Travel

Travel is accounted for in contractual/construction labor during installation.

2.4.4 Equipment

Equipment costs include the purchase and installation of the medium 2-inch AMI meters to be replaced (90), lid replacements (90), and single point radios (90) along with other equipment are included in this item. The cost for the materials is based on quotes from Aquametric and includes sales tax. The total estimated cost for equipment is $198,226.

2.4.5 Supplies and Materials

No materials or supplies are anticipated to be directly purchased for this Project.

2.4.6 Contractual/Construction

Based on past District experience, it is assumed that each AMI meter assembly will take approximately 90 minutes, meaning a two-man crew will need 270 man hours to install the AMI equipment. Lid installation is assumed to take a meter reader approximately 30 minutes, or about 45 hours for 90 meters. District staff will be used for the installation.

2.4.7 Other Direct Costs

The Project is categorically exempt from the provisions of CEQA. A Notice of Exemption will be filed with the County of Los Angeles. CVWD has budgeted 4 hours of staff time to prepare the minor paperwork.

2.4.8 Indirect Costs

No indirect costs are included in the proposed budget.

Section 3: Environmental and Cultural Resources Compliance

The project has been evaluated for both CEQA and NEPA compliance and it has been determined that the project is exempt for CEQA and a categorical exclusion is anticipated for NEPA compliance. A Notice of Exemption will be filed for this project as it falls under the categorical exemptions identified by the State Resources Agency as defined in the CEQA Guidelines (14 CCR Section 15300-15331). The District will work with Reclamation to prepare the necessary categorical exclusion documentation upon Reclamation's review of the project.

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 is not expected to involve earth-disturbing work or otherwise affect the surrounding environment as there will not be any excavation, only replacement of existing meters, meter boxes and meter vault covers.

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

There are no known species listed as a Federal threatened or endangered species in the project area.

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

Yes, within the CVWD service area, the Verdugo Wash flows through portions of the CVWD services (Los Angeles River). However, this project only involves meter replacement and will not have any impacts on wetlands or surface water bodies. In fact, this project will allow CVWD to detect system leaks and monitor water consumption data, which can then be used to support water quality efforts.

When was the water delivery system constructed?

CVWD was founded in 1950 as a combination of two water companies, Crescenta Mutual Water Company and Mountain Water Company. CVWD has been diligently upgrading potable water infrastructure in order to provide safe and reliable potable water to CVWD's customers for the last 71 years.

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.

The proposed project will not result in any modification of individual features of an irrigation system such as headgates, canals, or flumes. Only residential and business customer water meters within the service area, and the project will replace those meters with AMI and smart meter technologies.

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 buildings, structures, or features within the vicinity of the project are listed on the National Register of Historic Places (National Park Service, 2020).

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

There are no known archaeological sites within the project area.

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

No. In fact, the proposed project will have a highly positive effect on all customers of CVWD. The project will aid in water conservation measures and thereby decrease dependence on water imported from the State Water Project and Colorado Aqueduct at a cost higher than local water source. This strategy can help limit water rate increases during shortages.

Additionally, the Project would have a long-term benefit of increasing the resiliency of the local water distribution system and improving regional water supply reliability. These benefits would serve all residents in the project area regardless of race, ethnicity, or income level.

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

No, the project will not have any impacts on sacred sites or tribal lands as there are not sacred sites or tribal lands within the service area of CVWD.

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?

The Project is not anticipated to contribute to the introduction, continued existence, or spread of, noxious weeds or non-native invasive species.

Section 4: Required Permits and Approvals and Letters of Support

Required Permits and Approvals

The District does not anticipate needing any permits for installation of AMI meters. Depending on the orientation of a given meter box, it may be necessary to obtain a street use permit from the City of Glendale or an encroachment permit from the City of Los Angeles or County of Los Angeles to place equipment and personnel to access the meter box.

Letters of Support

The following important letters of support for the project have been provided:

California Senator, 25th State District, Anthony J. Portantino – Expanding the AMI system will help the District achieve its State of California SB7x7 water conservation goal of reducing urban per capita water consumption by 20 percent by 2020. State Senator Portantino was the sponsor of SB 1126 allowed Arroyo Seco and Flint Wash to be a part of the Upper Los Angeles River and Tributaries Working Group revitalization plan and sponsored SB 1133 allowing the Los Angeles Regional Water Quality Control Board to accept certain funds from the Los Angeles County Flood Control District and spend them to prepare a major revision to the Basin Plan for the Los Angeles Region.

California Assemblymember, Assembly District 44, Laura Friedman – The District's AMI Project is an extremely crucial effort to assist the District in order to not just increase water use efficiency and reduce water loss through the purchase and installation of new water meters for its service area, but to help plan and organize for water resiliency within the District for years to come. A sizeable part of Assembly District 44 receives its water from two main sources, the Verdugo Groundwater Basin, and imported water from Metropolitan Water District of Southern California through the Foothill Municipal Water District. This allows the District to provide potable drinking water to its customers via 12 local groundwater wells, and imported water supply through 3 MWD connections and an emergency inter-tie system with the City of Glendale. One of the main goals of the District is to manage its resources as efficiently as possible given increases in population and demand, and the effects of climate change which impacts all of the District's resources. This AMI program allows my constituents to be more sustainable while also increasing the quality of water and service they are receiving. It is crucial that we look out for the future generation of Assembly District 44 by ensuring that there is clean water being provided in efficient ways.

California Congressman, Adam Schiff – The Crescenta Valley Water District manages its resources as efficiently as possible given the many challenges it faces such as the effects of climate change, decreasing groundwater levels as well as increases in population and demand. The AMI project will further efforts to increase water use efficiency and reduce water loss and build resiliency within the District's infrastructure for years to come.

Section 5: Other

5.1 Overlap or Duplication of Efforts Statement

There are no overlaps with this application, or duplication of efforts. The District received in 2022 funding from Reclamation for the first phase of this AMI program. None of the efforts outlined in that application duplicate what is being requested with this application.

5.2 Conflict of Interest Disclosure Statement

There are no actual or potential conflicts of interests at the time of submission.

5.3 Uniform Audit Reporting Statement

The District was required to submit a Single Audit Report for fiscal year ending June 30, 2023, in accordance with 2 CFR §200 subpart F.

5.4 SF-LLL: Disclosure of Lobbying Activity

A fully completed and signed SF-LLL: Disclosure of Lobbying Activities form has been uploaded to grants.gov.

5.5 Official Resolution

A resolution from the District's Board of Directors to submit this grant application, commit to the financial and legal obligations, and negotiate and execute the grant agreement is provided in Appendix D.

5.6 Unique Entity Identifier and System for Award Management

Section 6: References

AWWA, 2022. AMI Guidebook. https://www.awwa.org/Portals/0/AWWA/ETS/Resources/Technical%20Reports/ami_guidebook_feb_2022.pdf)

California Department of Water Resources (2023). DWR Announces Initial State Water Project Allocation of 10 Percent for 2024. https://water.ca.gov/News/News-Releases/2023/Dec-23/DWR-Announces-Initial-State-Water-Project-Allocation-of-10-Percent-for-2024

CVWD, 2020. 2020 Urban Water Management Plan.

Godwin, A. 2011. Advanced Metering Infrastructure: Drivers and Benefits in the Water Industry. http://www.waterworld.com/articles/print/volume-27/issue-8/editorial-features/special-section-advanced-metering-infrastructure/advanced-metering-infrastructure-drivers-and-benefits-in-the-water-industry.html

Metropolitan Water District of Southern California (2023). The Colorado River – A Balanced Approach for Reducing Water Use. https://www.mwdh2o.com/planning-for-tomorrow/securing-our-imported-supplies/colorado-river/

Metropolitan Water District of Southern California (2021). 2020 Urban Water Management Plan.

National Park Service (2020). National Register of Historic Places. https://www.nps.gov/maps/full.html?mapId=7ad17cc9-b808-4ff8-a2f9-a99909164466

State of California (2018). Fourth Climate Change Assessment.

State of California (2022). California's Water Supply Strategy: Adapting to a Hotter, Drier Future.

US EPA, 2024. WasterSense Web Site. Accessed June 2024. https://www.epa.gov/watersense/advanced-metering-infrastructure

Appendix A: Letters of Support

STATE CAPITOL
SACRAMENTO, CA 95814
(916) 651-4025

California State Senate

SENATOR
ANTHONY J. PORTANTINO
TWENTY-FIFTH SENATE DISTRICT

June 26, 2024

Bureau of Reclamation
Financial Assistance Support Section
Attn: Ms. Christina Munoz

RE: Support for the Crescenta Valley Water District Regional AMI Project

To Whom It May Concern:

I am pleased to express my strong support for the Crescenta Valley Water District's (District) Advanced Metering Infrastructure (AMI) Project, and the application for funding through the Bureau of Reclamation's FY2024 and 2025 WaterSMART Small-Scale Water Efficiency Projects R24AS00059.

This AMI Project is a critical effort to assist the District in order to not just increase water use efficiency and reduce water loss through the purchase and installation of new water meters for its service area, but to help plan and organize for water resilience within the District for years to come. The ratepayers in the District's Crescenta Valley service area receive their water from two main sources, the Verdugo Groundwater Basin and imported water from Metropolitan Water District of Southern California through the Foothill Municipal Water District. This allows the District to provide potable drinking water to its customers via 12 local groundwater wells and imported water supply through 3 MWD connections and an emergency inter-tie system with the City of Glendale. One of the main goals of the District is to manage its resources as efficiently as possible given increases in population and demand as well as the effects of climate change impacting all of the District's resources.

Specifically, the District is accelerating the implementation of its AMI program which includes the purchase and installation of 90 new water meters for large residential and commercial users. The purpose of the AMI program is to increase water conservation and water use efficiency by providing real-time water consumption data to the District and its customers. This new meter system will improve the agencies' ability to detect leaks, audit water usage, and accurately meter usage at each connection. This AMI initiative is crucial as the Crescenta Valley looks to make water conservation a way of life locally and support regional, state, and national water sustainability goals.

As the State Senator who has represented the Crescenta Valley for eight years, I know the importance of this project for our regional and statewide efforts to save water. With unpredictable

rainfall and a year-round wildfire season, it is more important than ever that water conservation be made a priority. This project will provide more information to residents and businesses and give them a personal stake in our community's efforts to ensure the long-term sustainability of our water supply.

I am proud to support the Crescenta Valley Water District's project to help our community conserve water and energy and thank you for your positive consideration. Please contact my District Director, Talin Mangioglu, at (818) 409-0400 with any questions.

Respectfully,

Hon. Anthony J. Portantino
Senator, 25th District

STATE CAPITOL
P.O. BOX 942849
SACRAMENTO, CA 94249-0044
(916) 319-2044
FAX (916) 319-2144

DISTRICT OFFICE
300 EAST MAGNOLIA BOULEVARD, SUITE 504
BURBANK, CA 91502
(818) 558-3043
FAX (818) 558-3042

E-MAIL
Assemblymember.Friedman@assembly.ca.gov

Assembly
California Legislature

LAURA FRIEDMAN
ASSEMBLYMEMBER, FORTY-FOURTH DISTRICT

COMMITTEES
AGING AND LONG-TERM CARE
NATURAL RESOURCES
RULES
UTILITIES AND ENERGY

SELECT COMMITTEES
CHAIR, BIODIVERSITY

JOINT LEGISLATIVE COMMITTEE ON
CLIMATE CHANGE POLICIES
JOINT COMMITTEE ON RULES

June 26, 2024

Bureau of Reclamation
Financial Assistance Support Section
Attn: Ms. Christina Munoz

RE: Support for the Crescenta Valley Water District Regional AMI Project

To Whom It May Concern:

I am writing in strong support for the Crescenta Valley Water District's (District) Advanced Metering Infrastructure (AMI) Project, and the application for funding through the Bureau of Reclamation's FY2024 and 2025 WaterSMART Small-Scale Water Efficiency Projects R24AS00059.

The District's AMI Project is an extremely crucial effort to assist the District in order to not just increase water use efficiency and reduce water loss through the purchase and installation of new water meters for its service area, but to help plan and organize for water resiliency within the District for years to come. A sizeable part of Assembly District 44 receives its water from two main sources, the Verdugo Groundwater Basin, and imported water from Metropolitan Water District of Southern California through the Foothill Municipal Water District. This allows the District to provide potable drinking water to its customers via 12 local groundwater wells, and imported water supply through 3 MWD connections and an emergency inter-tie system with the City of Glendale. One of the main goals of the District is to manage its resources as efficiently as possible given increases in population and demand, and the effects of climate change which impacts all of the District's resources.

The purpose of the AMI program is to increase water conservation and water use efficiency by providing real-time water consumption data to the District and its customers. This new meter system will improve the agencies' ability to detect leaks, audit water usage, and accurately meter usage at each connection. This AMI initiative is crucial as Crescenta Valley looks to make water conservation a way of life locally and support regional, state and national water sustainability goals.

This AMI program allows my constituents to be more sustainable while also increasing the quality of water and service they are receiving. It is crucial that we look out for the future generation of Assembly District 44 by ensuring that there is clean water being provided in efficient ways. The AMI program also allows constituents to have a greater understanding of their water usage and will teach the importance of water conservation.

STATE CAPITOL
P.O. BOX 942849
SACRAMENTO, CA 94249-0044
(916) 319-2044
FAX (916) 319-2144

DISTRICT OFFICE
300 EAST MAGNOLIA BOULEVARD, SUITE 504
BURBANK, CA 91502
(818) 558-3043
FAX (818) 558-3042

E-MAIL
Assemblymember.Friedman@assembly.ca.gov

Assembly
California Legislature

LAURA FRIEDMAN
ASSEMBLYMEMBER, FORTY-FOURTH DISTRICT

COMMITTEES
AGING AND LONG-TERM CARE
NATURAL RESOURCES
RULES
UTILITIES AND ENERGY

SELECT COMMITTEES
CHAIR, BIODIVERSITY

JOINT LEGISLATIVE COMMITTEE ON CLIMATE CHANGE POLICIES
JOINT COMMITTEE ON RULES

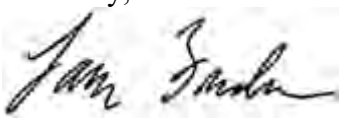
Project Benefits
Specific benefits of the Project include the following:

- Water conservation will be improved by increasing customer understanding of their water uses compared to neighbors, leak detection enabled by real-time water consumption data, and public education through water audits.

- The project addresses the water-energy nexus through reduced water use through conservation which provides a linear reduction in energy use associated with source production, conveyance, and treatment requirements.

My office is pleased to participate with the District in this effort. Thank you for the opportunity to express my support for the District's AMI Project. I strongly urge your thoughtful consideration of the Project. If you have any questions about our support, please do not hesitate to contact my Chief of Staff, Allison Ruff-Schuurman at (916) 319-2044

Sincerely,



LAURA FRIEDMAN
Assemblymember, Assembly District 44

COMMITTEE ON THE JUDICIARY

APPROPRIATIONS COMMITTEE
EX-OFFICIO MEMBER

WEB ADDRESS AT:
www.house.gov/schiff

FACEBOOK:
www.facebook.com/repadamschiff

ADAM B. SCHIFF
MEMBER OF CONGRESS

WASHINGTON OFFICE:
☐ 2309 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, DC 20515
(202) 225-4176
FAX: (202) 225-5828

☑ DISTRICT OFFICE:
245 EAST OLIVE AVENUE
SUITE 200
BURBANK, CA 91502
(818) 450-2900
FAX: (818) 450-2928
Email: Schiff.constituent@mail.house.gov

☐ DISTRICT OFFICE:
5500 HOLLYWOOD BOULEVARD
LOS ANGELES, CA 90028
(323) 315-5555
(BY APPOINTMENT ONLY)

July 3, 2024

Commissioner Camille Calimlim Touton
Bureau of Reclamation
Financial Assistance Support Section
Attn: Ms. Christina Munoz
1849 C Street NW
Washington DC 20240-0001
Email: bor-sha-fafoa@usbr.gov

Subject: Support for the Crescenta Valley Water District Regional AMI Project

Dear Commissioner Touton:

I write to express my support for the Crescenta Valley Water District's (District) application for funding for their Advanced Metering Infrastructure (AMI) Project, through the Bureau of Reclamation's FY2024 and 2025 WaterSMART Small-Scale Water Efficiency Projects R24AS00059.

The Crescenta Valley Water District provides potable drinking water to its 32,000 customers in the California 30th Congressional District through a blend of local groundwater wells and imported water supply. The District manages its resources as efficiently as possible given the many challenges it faces such as the effects of climate change, decreasing groundwater levels as well as increases in population and demand. The AMI Project will further efforts to increase water use efficiency and reduce water loss and build resiliency within the District's infrastructure for years to come.

The AMI program includes the purchase and installation of 90 new water meters for large residential and commercial users within the District's service territory. The new meter system will increase water conservation and water use efficiency by providing real-time water consumption data to the District and its customers. This new meter system will improve the agencies' ability to accurately monitor usage at each connection, detect leaks, and audit water usage. This AMI initiative is crucial as Crescenta Valley looks to make water conservation a way of life locally and support regional, state and national water sustainability goals.

I urge your full and fair consideration of the Crescenta Valley Water District's AMI Project.

Sincerely,

ADAM B. SCHIFF
Member of Congress

ABS/co

FOOTHILL MUNICIPAL WATER DISTRICT

Altadena - La Cañada Flintridge - La Crescenta

June 27, 2024

Bureau of Reclamation
Financial Assistance Support Section
Attn: Ms. Christina Munoz
Email: bor-sha-fafoa@usbr.gov

Subject: Support for the Crescenta Valley Water District Regional AMI Project

To Whom It May Concern:

I am pleased to express my strong support for the Crescenta Valley Water District's (District) Advanced Metering Infrastructure (AMI) Project, and the application for funding through the Bureau of Reclamation's FY 2024 and 2025 WaterSMART Small-Scale Water Efficiency Projects R24AS00059.

The District's AMI Project is a very important effort to assist the District in increasing water use efficiency and reducing water loss through the purchase and installation of new water meters for its service area. The project also helps plan and organize for water resiliency within the District for years to come. The District receives its water from two main sources, the Verdugo Groundwater Basin, and imported water from Metropolitan Water District of Southern California (MWD) through the Foothill Municipal Water District. This allows the District to provide potable drinking water to its customers via 12 local groundwater wells and imported water supply through 3 MWD connections and an emergency inter-tie system with the City of Glendale. One of the main goals of the District is to manage its resources as efficiently as possible given increases in population and demand, and the effects of climate change which impacts all of the District's resources, and ultimately, the collective resources of the region.

Specifically, the District is accelerating the implementation of its AMI program which includes the purchase and installation of 90 new water meters for large residential and commercial users. The purpose of the AMI program is to increase water conservation and water use efficiency by providing real-time water consumption data to the District and its customers. This new meter system will improve the agency's ability to detect leaks, audit water usage, and accurately meter usage at each connection. This AMI initiative is crucial as Crescenta Valley looks to make water conservation a way of life locally and support regional, state and national water sustainability goals.

CVWD's AMI Project enables the District to drive conservation through mass data analytics. This conservation helps Foothill by reducing the need for imported water, which in a normal year, is about 75% from the Colorado River. Conservation not only helps with overall water resource management but also provides significant energy savings as it takes over 1,000 kWh of power per acre-foot to move water within Foothill's system to the District. If the pumping on the Colorado River Aqueduct is included, conservation will save about 3,000 kWh per acre-foot in power usage helping reduce the carbon footprint for the District, Foothill and Metropolitan Water District. There are also further savings with the water treatment

process and the pumping that the District must complete to lift water to homes to the higher elevations within its service area.

Project Benefits

Specific benefits of the Project include the following:

- Water conservation will be improved by increasing customer understanding of their water uses compared to neighbors, leak detection enabled by real-time water consumption data, and public education through water audits.

- The project addresses the water-energy nexus through reduced water use through conservation which provides a linear reduction in energy use associated with source production, conveyance, and treatment requirements.

Foothill Municipal Water District is pleased to participate with the District in this effort.

Thank you for the opportunity to express my support for the District's AMI project. I strongly urge your thoughtful consideration of the project.

Sincerely,

Nina Jazmadarian
General Manager

Appendix B: Cost Backup Documentation

Budget				
Vendor	**Item**	**Quantity**	**Unit Price**	**Extended Price**
AquaMetric	520M MXU Single Port Radio	90	$162.10	$14,589.00
AquaMetric	2-inch Omni C2w/TRPL 1000USG 5wheels	90	$1,897.41	$170,766.90
	Lid Coverings	90	$143.00	$12,870.00
			Subtotal	$198,225.90
			Sales Tax (9.5%)	$18,831.46
			Total	$217,057.36

Sales Quote

June 24, 2024

Aqua-Metric Sales Company
Hector Gutierrez-Account Manager
4050 Flat Rock Drive | Riverside, CA 92505
Phone: (951) 637-1400 | Facsimile: (951) 637-1500

Quote for: Crescenta Valley Water District
Attention: Arturo Montes-Interim Director of Finance and Adminstration
Address: 3730 Glenwood ave
City, State, ZIP: La Crescenta, Ca,
Phone: 818-236-4105
Email: AMontes@cvwd.com

0			
90	2'' Omni C2 w/TRPL 1000USG 5wheels	$1,897.41	$170,766.90
90	1.5'' Omni C2 w/TRPL 1000USG 5WHEELS	$1,644.42	$147,997.80
	*Please add your tax rate to the total, thank you		

Subtotal	$318,764.70
Shipping & Handling	
Sales Tax	$30,282.65
Total	**$349,047.35**

This quote for the product and services named above is subject to the following terms::

1. All quotes are subject to the Aqua-Metric Terms of Sale.
2. Quote is valid for thirty days.
3. Freight allowed on single orders exceeding $80,000.00.
4. Net Thirty Days to Pay
5. Returned product may be subject to a 25% restocking fee.
6. Sales Tax and/or Freight charges are approximated and may vary on final invoice.

Sales Quote

Aqua-Metric Sales Company
Hector Gutierrez-Account Manager
4050 Flat Rock Drive | Riverside, CA 92505
Phone: (951) 637-1400 | Facsimile: (951) 637-1500

March 11, 2024

Quote for: Crescenta Valley Water District
Attention: Darlene Telles- Operations and Maintenance manager
Address: 3730 Glenwood ave
City, State, ZIP: La Crescenta, Ca,
Phone: 818-445-1721
Email: dtelles@cvwd.com

Quantity	Description	Unit Price	Line Total
7525	520M MXU single port radio	$162.10	$1,219,802.50
0			

Subtotal	$1,219,802.50
Shipping & Handling	
Sales Tax	$115,881.23
Total	**$1,335,683.73**

This quote for the product and services named above is subject to the following terms::

1. All quotes are subject to the Aqua-Metric Terms of Sale.
2. Quote is valid for thirty days.
3. Freight allowed on single orders exceeding $20,000.00.
4. Net Thirty Days to Pay
5. Returned product may be subject to a 25% restocking fee.
6. Sales Tax and/or Freight charges are approximated and may vary on final invoice.