GRANT APPLICATION

US Bureau of Reclamation
WaterSMART Grants Program:
Small-Scale Water Efficiency Projects for Fiscal Years 2024 and 2025
Notice of Funding Opportunity No. R24AS00059

PROJECT TITLE:
"San Lorenzo Valley Water District
AMI Water Meter Replacement Project"

Submitted by:

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APPENDICES

ACRONYMS

AFY	Acre-feet per year
AMA	Advanced metering analytics
AMI	Advanced metering infrastructure
AMR	Automated meter reading
CAS	Climate Action Strategy
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
GHG	Greenhouse gas
GSP	Groundwater Sustainability Plan
LHMP	Local Hazard Mitigation Plan
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NRCS	Natural Resources Conservation Service
SLVWD	San Lorenzo Valley Water District
SMGWA	Santa Margarita Groundwater Agency
SVWD	Scotts Valley Water District
SWEP	Small-Scale Water Efficiency Projects Grant
UWMP	Urban Water Management Plan

I. Technical Proposal and Evaluation Criteria

1. Executive Summary

The San Lorenzo Valley Water District (SLVWD, or District), located in Boulder Creek, Santa Cruz County, California is submitting this application to the Bureau of Reclamation for WaterSMART Small-Scale Water Efficiency Projects (SWEP) grant funds for the project, "San Lorenzo Valley Water District AMI Water Meter Replacement Project." The SLVWD is a Category A applicant. Date of submission is July 8, 2024.

SLVWD will replace 443 meters along four metering routes in the community of Ben Lomond, California with Badger advanced metering infrastructure (AMI) meters. This project is part of a larger system-wide effort to replace all 7,960 meters in the service area with AMI technology in order to reduce water leakage, increase water conservation, improve operational efficiency, and increase energy efficiencies. The District relies on local surface water and groundwater sources to meet customer demands. These sources are solely dependent upon rainfall within the San Lorenzo River Watershed, and are highly susceptible to drought. The proposed project will help the District meet its demand management goals, as described in the District's Urban Water Management Plan and the Santa Margarita Groundwater Basin Groundwater Sustainability Plan, in order to increase water supply reliability and improve resiliency to drought. The anticipated water savings will not only benefit the District but will benefit downstream water users, including the City of Santa Cruz (population 100,000), which relies upon the San Lorenzo River and its tributaries for about 69 percent of its water supply. Anticipated water savings from AMI replacement will also benefit federally endangered and threatened species, including coho salmon and Central California Coast steelhead, by leaving more water in the raw water system and improving stream flows for environmental uses. The project will also produce energy efficiencies due to reduced surface water diversions and groundwater pumping, reduced treatment, and reduced vehicle miles driven for meter reads, resulting in energy savings and greenhouse gas emission reductions.

The project duration is 20.5 months, with grant-funded activities beginning on July 15, 2025 and grant completion by March 31, 2027. The project is not located on a federal facility.

2. Project Location

The project will be located in the community of Ben Lomond within the San Lorenzo Valley Water District service area in Santa Cruz County, California, about 10 miles northwest of the City of Santa Cruz. The SLVWD service area encompasses approximately 98 square miles (62,749 acres). The latitude of the project is 37.038567; the longitude is -122.035999. Figure 1 below provides a vicinity map, showing the four proposed metering routes. Figure 2 shows the SLVWD service area in context with the surface waters of the San Lorenzo River watershed and Santa Margarita Groundwater Basin, from which the District draws its water supply.

Figure 1. SLVWD AMI Water Meter Replacement Project Vicinity Map

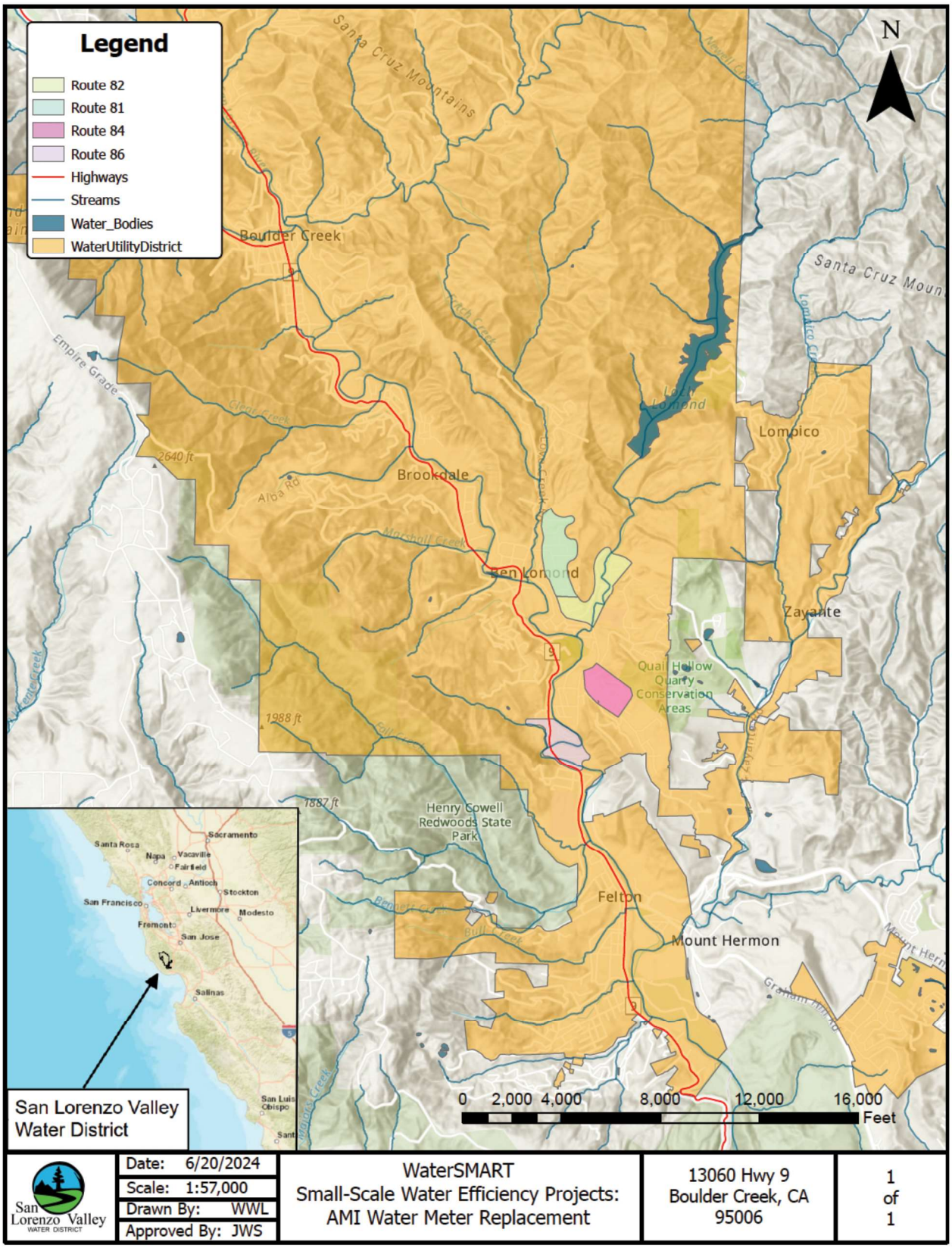
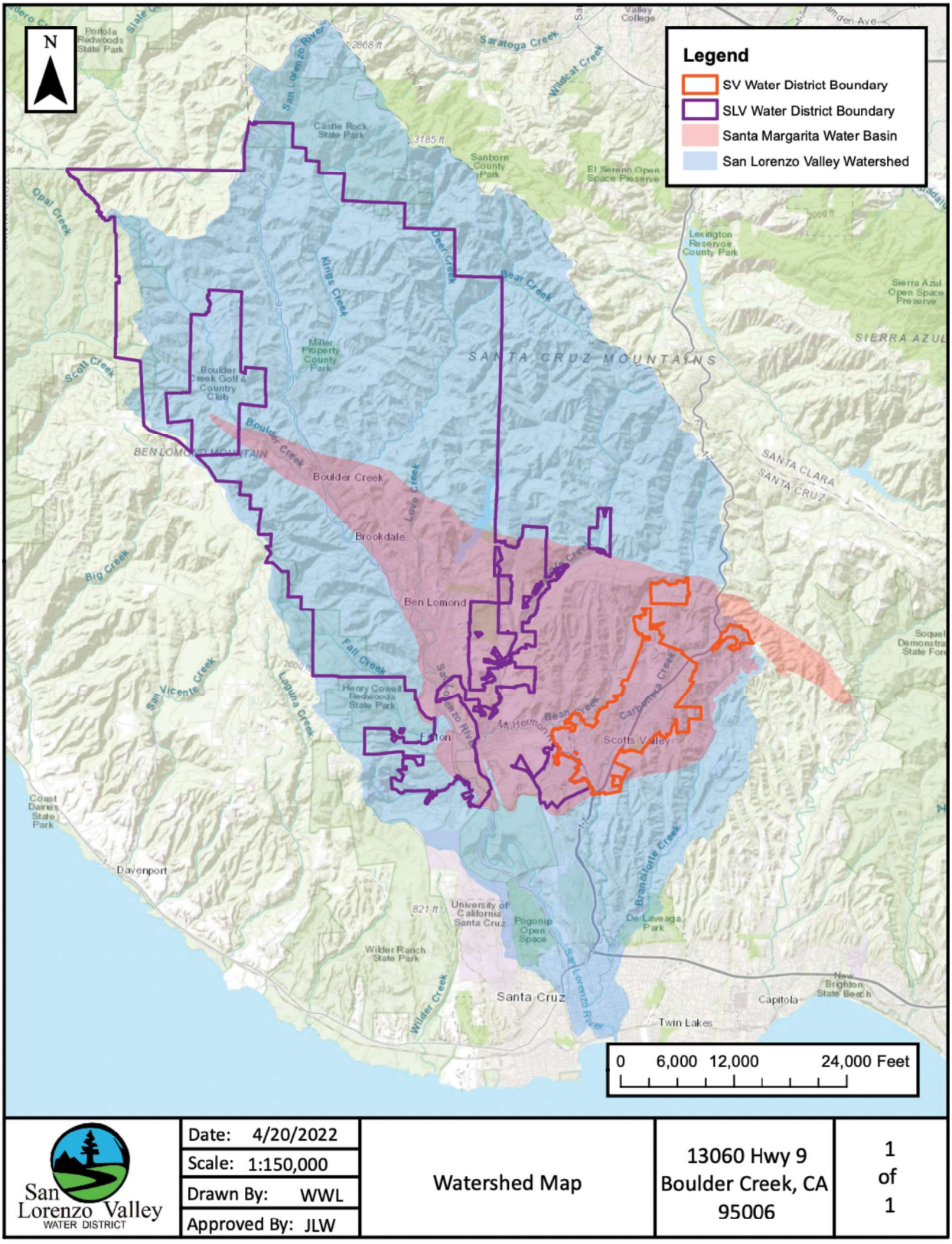


Figure 2. San Lorenzo Valley (SLV) Water District and Scotts Valley (SV) Water District Service Areas in Context with San Lorenzo River Watershed and Santa Margarita Groundwater Basin



3. Technical Project Description

Since 2016, the San Lorenzo Valley Water District has been working to upgrade all of the meters in its service area with AMI technology. The District has been replacing the existing automated meter reading (AMR) customer meters with Badger AMI meters and ORION cellular endpoints, with data analytical support through the Badger BEACON Advanced Metering Analytics (AMA) cloud-based software. With system-wide AMI replacement the District seeks to achieve water savings, improve operational efficiency, reduce energy use, and upgrade old and failing meters.

To date, about 44 percent of the meters (3,521 out of 7,960 meters) have been replaced with Badger AMI. Progress had been stalled for several years due to the impacts of a major wildfire that took place in the Santa Cruz mountains in August 2020. The CZU Lightning Complex fire burned 80 percent of SLVWD-owned properties and destroyed or damaged 50 percent of the critical water infrastructure, resulting in interrupted supply of water to customers and substantial repair costs. SLVWD was very grateful to receive FY 2022 WaterSMART SWEP grant funds, which allowed the District to resume the AMI meter replacement effort. SLVWD is requesting FY 2024 funds to enable expansion of AMI into a new sector of the district.

The proposed Scope of Work is as follows:

Task 1. Grant Administration: This task includes all activities related to grant administration, including quarterly invoicing, reporting (including financial reports, semi-annual Interim Performance Report, and the Final Performance Report), and other requirements as outlined in the grant agreement.

Task 2. AMI Meter installation: Grant funds will support the replacement of 443 meters: 427 5/8” meters, eight (8) 3/4" meters, seven (7) 1” meters, and one (1) 2” Badger AMI meters, with ORION cellular endpoints. SLVWD field staff will replace all of the existing meter lids with Fibrelite® lids. AMI meter installation will occur along four established meter routes in the community of Ben Lomond. The meter routes are located in the District’s North System, which is part of the San Lorenzo Valley System. SLVWD is prioritizing these routes and meters because of the age of the meters and larger parcel sizes, equating to higher than average water use. In addition, leaks in this area are often more difficult to detect because of sandy soils.

The AMI installation work will be performed by existing SLVWD staff, including three field service workers under the general supervision of SLVWD Director of Operations James Furtado. Since SLVWD staff are well experienced with AMI installation, no special training will be required, and no new administrative procedures will be needed outside of the staff’s regular work responsibilities.

4. Evaluation Criteria

A. Evaluation Criterion A – Project Benefits

1. Benefits to the Category A Applicant's Water Delivery System

a. Clearly explain the anticipated water management benefits to the Category A applicant's water supply delivery system and water customers.

The expected water management benefits to SLVWD's water supply system and customers include water savings, improved operational efficiencies, and reduced operational costs.

SLVWD is working to replace all of its existing AMR customer meters with Badger AMI meters and ORION cellular endpoints, with data analytical support through the BEACON AMA cloud-based software. Water savings are expected to result from reduced leakage on the customer side of the meter and from increased water conservation on the part of customers.

With AMR meters, it can take SLVWD staff up to 45 days to identify leaks on customer property, and even longer to notify the customers of the leaks. AMI technology provides nearly real-time water usage data to both SLVWD staff and customers, allowing for more rapid leak detection and response. The AMA software not only alerts SLVWD staff to high water usage activity but flags the slow, persistent leaks that may otherwise go undetected. Studies show that AMI can result in significant water savings. For example, a 2014 AMI pilot study conducted by East Bay Municipal Utility District found water savings following AMI installation to be 15 percent on average among residential customers.[1]

The proposed AMI replacement project is also expected to increase water conservation. SLVWD customers will have access to Badger BEACON EyeOnWater® web portal, which provides easy access to personal water consumption data in 15-minute, hourly, daily, monthly and yearly intervals. Daily use information feedback encourages customers to be more proactive about water conservation. Tools such as EyeOnWater® have been shown to reduce water usage by 10 percent or more.[2] SLVWD provides customers with information about the EyeOnWater® web tool when AMI meters are installed.

The water savings that result from reduced leakage and increased conservation will extend the availability of water for both residential and environmental needs during dry periods and drought. The additional water will remain in the District's raw water system, available for residential use as needed and to enhance stream flows for fisheries and other aquatic species. Improved stream flows will also help maintain cooler water temperatures for fisheries. The

[1] East Bay Municipal Utility District. "Advanced Metering Infrastructure (AMI) Pilot Studies Update." November 25, 2014.

[2] Atkinson, W. 2016. AMR or AMI: Which makes more sense? Waterworld. January 7, 2016 article published online: https://www.waterworld.com/home/article/14070020/amr-or-ami-which-makes-more-sense.

additional water supply will enable SLVWD to reduce diversions and to offset groundwater pumping in summer months and during multiple dry years.

The AMI replacement project will improve SLVWD operational efficiencies. SLVWD staff spend countless hours every month reading AMR meters. The SLVWD service area is located in a rural, mountainous region; relatively short distances can take a long time to drive, particularly during inclement weather. Replacing AMR meters with AMI will substantially reduce staff time spent on meter reading and allow them to focus on more urgent water management concerns. Likewise, the improved data analytics offered by AMA will reduce the amount of time staff spend analyzing customer usage data for potential leaks. The AMA analytic capabilities also allow staff to detect more subtle leaks, which may otherwise go undetected. AMA makes the billing process more efficient and generally improves customer interface via the portal. All of these improvements help the SLVWD office and operations run more efficiently and effectively.

Finally, with improved operational efficiency comes reduced operational costs. Eliminating the need to manually read AMR meters will substantially reduce truck rolls, saving fuel and maintenance costs along with staff time. Improved, granular water usage data may also reduce billing disputes, saving associated staff time and costs. For SLVWD – a small water district with limited staff and financial resources – these operational efficiencies and cost savings are extremely significant, enabling the District to manage its water system more effectively.

b. Explain the significance of the anticipated water management benefits for the Category A applicant's water delivery system and customers. Consider:
   - Are customers not getting their full water right at certain times of year?
   - Does this project have the potential to prevent lawsuits or water calls?
   - What are the consequences of not making the improvement?
   - Are customer water restrictions currently required?
   - Other significant concerns that support the need for the project.

The anticipated water management benefits of the proposed AMI meter replacement project are significant for the District's water system and customers. All of SLVWD's water supply is derived from local surface water and groundwater, which are fed entirely by precipitation. Droughts occur with some regularity in the Santa Cruz region. In recent history, Santa Cruz County experienced five major drought periods – 1976-77, 1986-1992, 2007-09, 2011-17, 2020-22. During the most recent drought SLVWD implemented Stage 2 Water Shortage Contingency Plan restrictions, which have since been lifted.

It is expected that the effects of climate change will result in more severe droughts of longer duration.[3] Stream flow is inadequate to meet demands during a drought, and all major groundwater basins in Santa Cruz County are in some level of overdraft.[4] Given that the District

[3] Ibid., p. 99.
[4] County of Santa Cruz Local Hazard Mitigation Plan 2021-2026, July 2021, p. 97.

has limited storage and no supplemental water sources such as recycled or desalinated water, demand reduction measures are absolutely critical for increasing the District's water supply resiliency to drought and other water shortage conditions.

Climate change is also expected to worsen the impacts of wildfire events in the Santa Cruz mountains, like the 2020 CZU Lightning Complex fire. The proposed project, as part of the District's larger AMI replacement effort, will enable the District to leave more water in the raw water system that will improve water supply reliability not only in times of drought but as needed for firefighting purposes.

The consequences of not making the proposed meter improvements would be lost opportunity to achieve water savings for drought and wildfire resiliency, increase energy efficiency, and improve operational efficiency. WaterSMART SWEP grant funds will provide much-needed funds for this small, under-resourced district to help meet the goal of system-wide AMI replacement.

While this AMI metering project would have no direct impact on water rights, by contributing to improved water supplies the project may help mitigate any potential conflicts over water use in the groundwater basin during times of shortage. On an operational level, the project may also reduce conflicts that may arise over billing questions. The Badger BEACON AMA provides accessible water usage data with easy-to-understand graphics, which may help reduce the likelihood of disputes.

2. Broader Benefits

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

Yes, the project will provide broader water supply reliability at the sub-basin scale. The proposed AMI replacement project, with an objective of replacing 443 meters, is a relatively small project but is an important piece in SLVWD's larger effort to achieve water savings through AMI replacement district-wide. SLVWD's AMI replacement effort will provide a significant contribution to the combined efforts of major water purveyors throughout Santa Cruz County to achieve improved water supply sustainability for the broader region. Like SLVWD, all of other major water purveyors in Santa Cruz County depend on local surface water and groundwater for their water supplies and do not receive any imported water.

SLVWD is situated at the top of the San Lorenzo River watershed. The District relies on surface water from the San Lorenzo River and its tributaries for 54 percent of its water supply. The anticipated water savings from the proposed project will not only benefit the District but will benefit downstream surface water users, in particular the City of Santa Cruz which relies upon the San Lorenzo River and its tributaries for about 69 percent of the water it provides its 100,000 customers. Water savings in the upper watershed directly contributes to water availability and water supply reliability in the lower watershed.

SLVWD pulls the remaining 46 percent of its water supply from groundwater sources, almost all of which comes from the Santa Margarita Groundwater Basin. The Santa Margarita Groundwater Basin aquifers are closely connected with the San Lorenzo River and its tributaries. Figure 2 (on p. 3) shows the Santa Margarita Groundwater Basin in context with the San Lorenzo River watershed and the SLVWD service area boundaries. An estimated 40 to 50 percent of dry season flow of the San Lorenzo River comes from the Santa Margarita Basin. Conversely, streamflow is an indirect source of recharge to the groundwater basin.

The Santa Margarita Groundwater Basin water supply is shared by two other water districts along with local businesses and residents using private wells. For SLVWD, groundwater is the primary source of drinking water for residents from June through October when surface water flow is low. The other water districts – Scotts Valley Water District (SVWD) and Mount Hermon Association – rely entirely on groundwater year-round for their potable water supplies. Water savings from SLVWD's AMI replacement project will positively impact water supplies in the Santa Margarita Groundwater Basin, providing improved water supply reliability for all water users who depend on that resource. And given the close inter-connectedness of surface water and groundwater in the San Lorenzo River watershed, any water savings achieved will improve water supply sustainability at both the groundwater basin and watershed basin scale.

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

The proposed project will support collaboration and information sharing among water managers in the region. SLVWD participates in the Water Conservation Coalition, a partnership between all of the major water agencies in Santa Cruz County plus the County Environmental Health Department and several nonprofit organizations. The goal of the Coalition is to combine efforts and share resources to provide a common message about water conservation issues to residents throughout Santa Cruz County. AMI infrastructure provides a powerful informational tool that can be used collectively by water managers to encourage water conservation.

Most districts in the region have deployed, or are in the process of deploying, AMI infrastructure. Scotts Valley Water District began a system-wide deployment of AMI for its 4,300 meters in 2016 and achieved 100 percent completion in Spring 2021. The City of Santa Cruz also recently upgraded all of its 24,500 customer meters with AMI technology. The proposed project will enable SLVWD to make positive progress toward system-wide AMI deployment. Advanced metering throughout the region can improve data gathering, help water managers understand regional water usage trends, and allow them to develop more effective water conservation programs and messaging for residents in Santa Cruz County.

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

The District area experiences drought conditions on a fairly regular basis, with the most recent severe drought period occurring 2020 - 2022. Drought causes significant impacts on the water system since the District relies entirely on local water sources for its water supply. The proposed AMI replacement project will help mitigate drought conditions on both a watershed and groundwater basin scale, as described in the foregoing sections. The anticipated water savings will be left in the raw water system (creeks and groundwater basin), contributing to increased regional water supply and improved water supply resiliency to drought.

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

By leaving more water in the raw water system for environmental uses, water savings achieved from AMI replacement will provide benefits for federally threatened and endangered species. The San Lorenzo River has been listed by the National Marine Fisheries Service (NMFS) as critical habitat for the recovery of Central California Coast steelhead (*Oncorhynchus mykiss*), which is federally listed as threatened, and for coho salmon (*Oncorhynchus kisutch*), federally listed as endangered. Impacts to coho salmon are of particular concern because coho populations south of the Golden Gate Bridge are on the brink of extirpation. The project will contribute to improved instream flow conditions for these special status aquatic species.

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

The proposed project will primarily benefit residential customers. One important sector that the project will also benefit – as part of SLVWD's broader AMI replacement effort – is the environment, including threatened and endangered species (noted above). Ecosystems are perhaps the water use sector hardest hit by droughts. More water left in the surface water system, as a result of reduced diversions and ground basin pumping, will provide benefits to species that depend on flowing surface waters in the San Lorenzo River system and will contribute to healthier riparian habitat.

f. 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.

The SLVWD is a mostly residential area with very little agriculture. There are currently no known NRCS projects being implemented in the SLVWD service area.

B. Evaluation Criterion B – Planning Efforts Supporting the Project

The AMI Water Meter Replacement Project is supported through several local and regional planning efforts, described below.

2020 Urban Water Management Plan (UWMP): The proposed AMI Water Meter Replacement Project is supported by the District's UWMP, which is a joint planning document developed by SLVWD and neighboring Scotts Valley Water District (SVWD). The 2020 UWMP was prepared in accordance with the California Urban Water Management Planning Act, which requires an urban water supplier, providing water for municipal purposes to more than 3,000 customers or serving more than 3,000 acre-feet per year (AFY), to adopt an UWMP every five years demonstrating water supply reliability under normal as well as drought conditions. The Districts engaged neighboring water suppliers and public agencies, including the City of Scotts Valley and County of Santa Cruz, as well as the public in the planning process in order to strengthen the ability to assess and plan for the region's water future.

The AMI replacement project is identified as one of seven required demand management measures in Section 15.1.2 of the UWMP (p. 15-2), with specific reference to SLVWD's effort to replace existing AMR meters with AMI technology (note, the UWMP does not rank/prioritize demand management measures). AMI is also referenced in the Water Shortage Contingency Plan (Section 13.4.5 Shortage Response Action Effectiveness, p. 13-13) as an important measure to provide the Districts with additional data and opportunities to effectively monitor and coordinate with customers in near real-time. The project addresses the need to achieve water savings in order to mitigate for water shortage.

Santa Margarita Groundwater Basin Groundwater Sustainability Plan (GSP, 2021): The proposed AMI Water Meter Replacement Project is supported as a project in the Santa Margarita Groundwater Basin GSP. In June 2017 SLVWD, SVWD, and the County of Santa Cruz formed the Santa Margarita Groundwater Agency (SMGWA) for the purpose of collaboratively and sustainably managing the Santa Margarita Groundwater Basin for all beneficial uses and users. The SMGWA is governed by a Board of Directors comprising two representatives from each member agency, single representatives from the City of Scotts Valley, City of Santa Cruz, and Mount Hermon Association, and two private well owners.

The GSP was developed in compliance with the California Sustainability Groundwater Management Act's statutory and regulatory requirements, as a collaborative effort among the SMGWA's cooperating agencies and technical consultants. Decisions shaping policy were informed by input from resource management agencies, community members, and interested stakeholders through an extensive outreach and engagement process.

The GSP includes AMI metering as a recommended project to increase efficiencies within SLVWD's and SVWD's distribution systems. Chapter 4.3 includes AMI metering as part of the project "SLVWD, SVWD, and Santa Cruz County Additional Water Use Efficiency" (Section 4.3.1.1, p. 4-11): "Both SLWVD and SVWD will look to continue to increase efficiencies within their respective distribution systems through improvements to the metering infrastructure…." Note, the GSP does not rank/prioritize projects.

County of Santa Cruz Local Hazard Mitigation Plan (LHMP, 2021-2026): The County of Santa Cruz LHMP covers unincorporated portions of Santa Cruz County. Being located within unincorporated Santa Cruz County, the SLVWD service district is covered by the County LHMP. The County of Santa Cruz prepared the LHMP to meet the statutory requirements of the California Disaster Mitigation Act, enacted October 30, 2000, and Title 44 of the Code of Federal Regulations CFR Part 201–Mitigation Planning, Interim Final Rule, published February 26, 2002. The LHMP planning process was led by the County Planning Department with contributions from Public Works, Environmental Health, Emergency Services, General Services, Geographic Information Systems, Health Services, and the Santa Cruz County Emergency Management Council. The LHMP was adopted by the Board of Supervisors on November 9, 2021.

The LHMP represents the County's commitment to reduce risks from natural and other hazards and serves as a guide for decision-makers as they commit resources to reducing the effects of potential hazards. The County of Santa Cruz LHMP provides support for the proposed AMI replacement project under Chapter 7 Drought, Section 7.2.1 Mitigation Goals. While advanced metering is not referenced specifically, the project addresses Drought Goals, specifically Drought 1 - Reduce near-term drought shortages through water conservation and water supply projects (p. 103).

County of Santa Cruz Climate Action Strategy (CAS, 2013): The County of Santa Cruz CAS was prepared by the County of Santa Cruz Planning Department and approved by the Board of Supervisors on February 26, 2013. The CAS planning process included community meetings and outreach to local community and non-governmental agencies that are working to mitigate and respond to climate change, including agriculture and the business community. The CAS proposes targets for greenhouse gas (GHG) emissions reduction, outlines strategies and implementing actions to achieve the targets, and focuses on vulnerability assessment and strategies for adapting to the types of impacts that are likely to occur in Santa Cruz County. While AMI replacement is not mentioned specifically in the CAS, the proposed AMI Water Meter Replace Project supports Strategy E-8: Reduce energy use for water supply through water conservation strategies (Table 3-1: Strategies for the Reduction of Greenhouse Gases from Energy Use, p. 22).

C. Evaluation Criterion C – Implementation and Results

1. Implementation Plan

The proposed project will have an anticipated start date of July 15, 2025 and end date of March 31, 2027, with AMI installation expected to occur more or less evenly over a period of 12 months. The implementation plan is as follows:

Task 1. Grant Administration: We expect to have the Grant Agreement signed by July 15, 2025 and to have National Environmental Policy Act (NEPA) clearance by that date as well. Three months have been added to the schedule for final reporting, invoicing, and grant close out following completion of AMI installation. Milestones include:

- Executed Grant Agreement by July 15, 2025
- NEPA clearance by July 15, 2025
- Quarterly invoices to Reclamation
- Semi-annual SF-425 Federal Financial Report and Interim Performance Reports submitted by January 31, 2026, July 31, 2026, and January 31, 2027
- Final Performance Report and SF-425 Federal Financial Report submitted by March 31, 2027

Task 2. AMI Meter Installation: SLVWD staff will place the first order for Badger AMI meters and endpoints and Fibrelite® meter lids as soon as the grant award is announced, assuming December 2024. Based on previous experience, AMI supplies are expected to arrive within 2-3 months of order.

AMI installation will begin following execution of the grant agreement and NEPA clearance, with an expected start date of July 15, 2025. Installation along the four metering routes will occur more or less evenly over the course of about 12 months (July 15, 2025 – June 30, 2026) as the work schedule allows. Though we fully expect the installation to be completed by June 30, 2026, an additional six months have been added to the schedule as buffer. Purchasing of supplies will be staggered over the course of the project in order to accommodate the District's limited storage capacity. All installation activities will be completed no later than December 31, 2026. Milestones include:

- First order of AMI supplies procured by April 1, 2025
- Installation begins July 15, 2025
- Installation completed by June 30, 2026, or no later than December 31, 2026

Table 1 displays the project schedule as described above. It is likely that the entire project, including final reporting, could be completed by June 30, 2026, but additional time for both installation and final reporting has been included as a buffer.

Table 1. Project Schedule

	Q4 2024	Q3 2025			Q4 2025			Q1 2026			Q2 2026			Q3 2026			Q4 2026			Q1 2027		
	Dec	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Task 1. Grant Admin	Award notification Dec 2024	Executed Agreement and NEPA completed July 15, 2025						Semi-annual Reports						Semi-annual Reports						Semi-annual Reports		Final Reports March 31
Task 2. AMI Meter Installation		AMI Installation begins July 15, 2025									AMI Installation completed by June 30, 2026						Buffer: AMI Installation completed no later than Dec. 31, 2026					

Permits: No additional permits or approvals are required for this project.

Engineering and Design: Engineering and design are not required for this project.

Land Access: SLVWD has legal access to the project area. A property owner who agrees to receive water or wastewater service from SLVWD must comply with the District's Rules and Regulations. Section 3.09 of the Rules and Regulations states that "All facilities installed between the main and meter outlet, including the service connection and meter, shall be and shall remain the property of the District and may be accessed, maintained, repaired or replaced by the water District without the consent or interference of the owner or occupant of the property."

Environmental and Cultural Resource Compliance: SLVWD staff have not been in contact with the local Reclamation office with regard to environmental and cultural resource compliance for the proposed project. SLVWD received WaterSMART SWEP grant funding in 2022 and in 2023 completed installation of 522 AMI meters in the City of Scotts Valley. The NEPA process for that project was very straightforward, and would presumably be even more straightforward a second time with the template now created (i.e., for the same type of project in a different, but similar, residential area). A line item has not been included in the budget for costs associated with NEPA compliance since, based on previous experience, the staff time required is expected to be minimal and these costs are considered part of normal operations for SLVWD. A contractor will not be needed for this work.

Note that SLVWD has completed California Environmental Quality Act (CEQA) requirements for this project. The District filed a Notice of Exemption with the Santa Cruz County Clerk in April 2022. The Project meets exemptions under 14 California Code of Regulations (CCR) Sections 15302 and 15301. The Project consists of "replacement or reconstruction of existing structures and facilities where the new structure will be located on the same site as the structure replaced and will have substantially the same purpose and capacity as the structure replaced" (Section 15302), and of "the operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features, involving negligible or no expansion of existing or former use" (Section 15301).

D. Evaluation Criterion D – Nexus to Reclamation

As already noted, SLVWD was awarded a WaterSMART SWEP grant in 2022. That grant enabled the District to install 522 AMI meters in the City of Scotts Valley, which is located about seven miles southeast of the project area proposed in this application. If awarded, the project will enable SLVWD to build on the previous Reclamation-funded work and extend AMI installation into a new sector, providing the critical assistance needed to help the District attain its goal of system-wide AMI metering.

E. Evaluation Criterion E – Presidential and Department of the Interior Priorities

Sub-criterion No. E1. Climate Change

The proposed AMI Water Meter Replacement Project will address climate change in several ways, including: 1) improving water system resiliency to drought and other impacts of climate change, 2) reducing greenhouse gas emissions, and 3) improving stream flows to enhance habitat for federally endangered and threatened salmonids and riparian habitat.

The project will improve water system resiliency to drought by achieving water savings through reduced leakage on the customer side of the meter, and through increased water conservation by customers. Since the proposed project is "small-scale" (443 meters), the actual water savings may seem limited; however, as part of the system-wide AMI replacement effort (7,960 meters), the water savings are meaningful and significant.

In addition to improving drought resiliency, the water savings that result from the project will help reduce risk from wildfires. According to the County of Santa Cruz LHMP 2021-2026, climate change is expected to increase the already high risk of wildfires in terms of fire frequency, size, and severity beyond the historic range of natural wildfire variability due to increasing length of the fire season, drier fuels, and decreasing forest health (p. 154). The AMI replacement project will provide resiliency to climate change impacts by enabling more water to be stored in the Santa Margarita Groundwater Basin for both potable and firefighting purposes.

The project will also contribute to energy savings. Energy uses in the SLVWD water system include:

- Energy is used to operate equipment at diversion facilities and wells
- Energy is used at booster and pump stations to convey raw water
- Energy is used at surface water and groundwater treatment facilities
- Energy is used at pump stations to convey treated water and at reservoir/tank sites within the distribution system

The reduced water use that will result from AMI metering will enable SLVWD to reduce surface water diversions and groundwater pumping, reduce treatment, and reduce vehicle miles driven for meter reads each year. These energy efficiencies will result in significant energy savings and greenhouse gas emission reductions.

Finally, water savings that result from AMI metering will contribute toward improving stream flows in the San Lorenzo River and its tributaries, which will enhance habitat for federally endangered and threatened salmonids and riparian habitat. As noted previously, the San Lorenzo River has been listed by NMFS as critical habitat for the recovery of Central California Coast steelhead and coho salmon. Leaving more water in the surface water system for environmental uses will improve ecosystem resiliency to drought and to other impacts of climate change.

Sub-criterion No. E2. Disadvantaged or Underserved Communities

The neighborhoods that will be served by this project in the community of Ben Lomond are not located within an economically disadvantaged or underserved community.

Sub-criterion No. E3. Tribal Benefits

The proposed project does not directly serve a Tribe. However, the project is consistent with the conservation goals and ethic of the Amah Mutsun Tribal Band of the Ohlone/Costanoan Native Americans, who live in the Santa Cruz County region. The Amah Mutsun are working to restore Indigenous stewardship and support sustainable practices in the territories of their ancestors, which include lands within the San Lorenzo River watershed. The water savings anticipated to result from the AMI replacement project will be stored in the raw water system, including the Santa Margarita Groundwater Basin and the San Lorenzo River system. By contributing to improved stream flow in the San Lorenzo River and its tributaries, the project will enhance aquatic habitat and support the conservation objectives and guiding values of the Amah Mutsun Tribal Band.

II. Environmental and Cultural Resources Compliance

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

The proposed meter replacement project replaces existing infrastructure in a built environment. The project is not likely to cause any impacts to the surrounding environment. However, four federally threatened species were identified as potentially occurring in the project area during the NEPA process for the FY 2022 SWEP grant, as described in the response below. It is likely that, since the project proposed for FY 2024-25 SWEP grant funds will also take place in the Santa Cruz Mountains, special protection measures will need to be taken for these same four listed species.

2. 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?

During the NEPA process for the FY 2022 SWEP grant, four federally threatened species were identified as potentially occurring in the upland habitat type of the project area: California tiger salamander (*Ambystoma californiense*), California red-legged frog (Rana draytonii), Mount Hermon June beetle (*Polyphylla barbata*), and Zayante band-winged grasshopper (*Trimerotropis infantilis*). It is unlikely that meter installation activities will impact these species, but for the FY

2022 SWEP grant SLVWD staff were provided special training on how to mitigate impacts, which included (among other things): scanning the walking path to the meter box for the presence of listed species; and scanning the ground immediately surrounding the meter box. If a listed species individual was observed and if the activity of installing the meter could potentially harm or disturb that individual, work was to be delayed until the individual had volitionally vacated the area. If no listed species were observed, the lid of the meter box was to be opened slowly and carefully to avoid disturbing or adversely affecting a listed species potentially residing in the box, and the meter box visually scanned to ensure no listed species were present.

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

There are no wetlands or other surface waters within the footprint of project activities (in the vicinity of where meters will be replaced). There will be no impacts to Waters of the United States.

4. When was the water delivery system constructed?

The San Lorenzo Valley Water District was established in 1941 as an independent special district. SLVWD serves a combined area of approximately 98 square miles (62,749 acres) within the 136 square-mile San Lorenzo River watershed. The District provides service to approximately 7,900 residential, commercial, and institutional connections, serving a population of about 26,000. On SLVWD-owned lands, there are five municipal buildings, 55 water tanks, nine water intakes, seven wells, 32 pumping stations, over 190 miles of pipeline, and a variety of miscellaneous water supplying structures.

The District relies on both surface water and groundwater resources, including nine currently active stream diversions, one groundwater spring, and eight active groundwater wells. The District owns, operates, and maintains two independent water systems supplied by separate water sources – the North/South System (or San Lorenzo Valley System) and the Felton System. These sources are derived solely from rainfall within the San Lorenzo River watershed.

The North/South System service area includes the unincorporated communities of Boulder Creek, Brookdale, Ben Lomond, Mañana Woods, Lompico, and portions of the City of Scotts Valley and adjacent unincorporated neighborhoods.

The Felton System includes the town of Felton and adjacent unincorporated areas. Since 1889, private water companies have provided water service in Felton. In 1962, the stock of the Felton Water Company was acquired by Citizens Utilities of California (Citizens). Citizens operated the Felton system until January 2002, when all its assets were purchased by California American Water (CalAm). The Felton System was acquired by SLVWD from CalAm in September 2008.

5. 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 or effects to individual features of an irrigation system.

6. Are any buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places?

There are no buildings, structures, or features in the project area listed or eligible for listing on the National Register of Historic Places.

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

There are no known archaeological sites in the proposed project area.

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

The proposed project will not have a disproportionately high or adverse effect on low-income or minority populations.

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

The proposed project will not limit access to, or ceremonial use of, Indian sacred sites or result in other impacts on Tribal lands.

10. 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 proposed project will not contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species.

III. Required Permits or Approvals

No permits or approvals are required for this project.

IV. Overlap or Duplication of Effort Statement

The San Lorenzo Valley Water District certifies that there is no existing overlap between the proposed project and any other active or anticipated proposals or projects in terms of activities, costs, or commitment of key personnel. In addition, the proposal does not in any way duplicate any proposal or project that has been or will be submitted for funding consideration to any other potential funding source, whether it be Federal or non-Federal. Note that the proposed project in no way duplicates the AMI meter installation work that was performed with FY 2022 WaterSMART SWEP grant funding. The proposed work will continue progress where the former SWEP project left off.

V. Conflict of Interest Disclosure

The San Lorenzo Valley Water District certifies that no actual or potential conflict of interest exists at the time of submission of this grant application.

VI. Uniform Audit Reporting Statement

The San Lorenzo Valley Water District was not required to submit a Single Audit report for the most recently closed fiscal year.

VII. Letters of Support

Letters of support for the proposed project are attached from the following agencies, organizations, and elected officials in Appendix A:

1. U.S. Representative Jimmy Panetta, 19th Congressional District, California
2. County of Santa Cruz: Supervisor Bruce McPherson, County of Santa Cruz Board of Supervisors, Fifth District, and Sierra Ryan, Water Resources Manager, County of Santa Cruz Environmental Health Division
3. Heidi Luckenbach, Water Director, City of Santa Cruz
4. David McNair, General Manager, Scotts Valley Water District
5. Mark Bingham, Fire Chief, Boulder Creek Fire Protection District
6. James F. Mosher, Friends of San Lorenzo Valley Water
7. Nancy B. Macy, Chair, Valley Woman's Club of San Lorenzo Valley

VIII. Official Resolution

Submittal of this grant application for WaterSMART SWEP grant funds was approved by resolution of the San Lorenzo Valley Water District Board of Directors, Resolution No. 16 (23-24), adopted on June 6, 2024. The resolution is shown on the following page.

SAN LORENZO VALLEY WATER DISTRICT
RESOLUTION NO. 16 (23-24)

RESOLUTION OF THE BOARD OF DIRECTORS OF THE SAN LORENZO VALLEY WATER DISTRICT OF SANTA CRUZ COUNTY, STATE OF CALIFORNIA

WHEREAS, the United States Bureau of Reclamation ("Reclamation") has a funding program entitled "WaterSMART: Small-Scale Water Efficiency Projects", and pursuant to this program, Reclamation makes funds available for small-scale water
efficiency projects; and

WHEREAS, the San Lorenzo Valley Water District (the "District") has an approved and budgeted project titled "AMI Water Meter Replacement"; and

WHEREAS, the District is seeking funding assistance from the Small-Scale Water Efficiency Projects grant program to cover a portion of the cost of the AMI Water Meter Replacement Project; and

WHEREAS, Reclamation has directed applicants to include in its application an official resolution adopted by the applicant's board of directors or governing body verifying 1) the identity of the official with legal authority to enter into an agreement, 2) the board of directors, governing body, or appropriate official who has reviewed and supports the application submitted, 3) the capability of the applicant to provide the amount of funding and/or in-kind contributions specified in the funding plan, and 4) that the applicant will work with Reclamation to meet established deadlines for entering into a grant or cooperative agreement.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the San Lorenzo Valley Water District:

1. Approves the filing of an application for the United States Bureau of Reclamation's WaterSMART: Small-Scale Water Efficiency Projects Grant Program; and
2. Certifies that the San Lorenzo Valley Water District is fully capable of providing the cost share funding specified in the funding plan; and
3. Authorizes and directs the Interim General Manager, General Manager, or designee to serve as the District's point of contact and signatory for the WaterSMART: Small-Scale Water Efficiency Projects grant application, agreements, and any related documents, to work with Reclamation to meet established deadlines for entering into a grant or cooperative agreement, and to conduct all negotiations and execute and submit all documents that may be necessary for the completion of the aforementioned project.

* * * * * * * * * * * *

PASSED AND ADOPTED by the Board of Directors of the San Lorenzo Valley Water District, County of Santa Cruz, State of California, on the 6th day of June 2024, by the following vote of the members thereof:

AYES: Hill, Ackemann, Fultz, Smolley
NOES:
ABSTAIN:
ABSENT:

DocuSigned by:
Jen Torres
Jennifer Torres, District Secretary

Appendix A

Letters of Support

Letters of support for the project, "San Lorenzo Valley Water District AMI Water Meter Replacement Project," are attached from the following agencies, organizations, and elected officials:

1. U.S. Representative Jimmy Panetta, 19th Congressional District, California
2. County of Santa Cruz: Supervisor Bruce McPherson, County of Santa Cruz Board of Supervisors, Fifth District, and Sierra Ryan, Water Resources Manager, County of Santa Cruz Environmental Health Division
3. Heidi Luckenbach, Water Director, City of Santa Cruz
4. David McNair, General Manager, Scotts Valley Water District
5. Mark Bingham, Fire Chief, Boulder Creek Fire Protection District
6. James F. Mosher, Friends of San Lorenzo Valley Water
7. Nancy B. Macy, Chair, Valley Woman's Club of San Lorenzo Valley

JIMMY PANETTA
19TH DISTRICT, CALIFORNIA

COMMITTEE ON WAYS AND MEANS
COMMITTEE ON ARMED SERVICES
COMMITTEE ON BUDGET
CHIEF DEPUTY WHIP

304 CANNON HOUSE OFFICE BUILDING

1200 AGUAJITO ROAD, SUITE 003
MONTEREY, CA 93940

701 OCEAN STREET, ROOM 318C
SANTA CRUZ, CA 95060

841 BLOSSOM HILL ROAD, SUITE 209
SAN JOSE, CA 95123

800 PINE STREET
PASO ROBLES, CA 93446

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

July 3, 2024

Camille Calimlim Touton
Commissioner
Bureau of Reclamation
1849 C Street NW
Washington DC 20240-0001

Dear Commissioner Touton,

I write in support of the San Lorenzo Valley Water District's application to the WaterSMART Small-Scale Water Efficiency Projects program. If awarded funding, the San Lorenzo Valley Water District's AMI Water Meter Replacement Project will reduce demand as part of its strategy to improve water efficiency and develop sustainable drinking water supplies by implementing advanced metering infrastructure.

The San Lorenzo Valley Water District (District) supplies water to approximately 26,000 customers in the Santa Cruz Mountains. The District relies entirely on local supplies from surface water and groundwater sources. These water sources are derived solely from rainfall within the San Lorenzo River watershed and are highly susceptible to impacts of drought.

The District has been actively pursuing demand management measures to improve water supply reliability and to increase drought resiliency. Advanced metering is an important step to achieving its demand management goals. The proposed AMI Water Meter Replacement Project will enable the District to upgrade approximately 443 customer meters, resulting in significant water savings by reducing property-side water leakage and motivating customers to improve their water conservation efforts.

The project will increase water system efficiency by reducing water treatment needs and will help reduce impacts of climate change through energy savings in water production and distribution, as well as reduced carbon emissions resulting from fewer truck rolls required for meter reads.

Additionally, the watershed's aquifers and surface water sources are vulnerable to drought due to the reliance on rainfall for recharge and flows. The AMI Water Meter Replacement Project will support groundwater sustainability as well as efforts to achieve improved water supply sustainability for the Santa Cruz County region.

This project is an opportunity to improve local water supply reliability and increase resiliency against the effects of climate change. Please give this application your highest consideration for funding and do not hesitate to contact me about any questions on this matter.

Sincerely,

Jimmy Panetta
U.S. Representative
19th Congressional District, California

County of Santa Cruz

BOARD OF SUPERVISORS

701 OCEAN STREET, SUITE 500, SANTA CRUZ, CA 95060-4069
(831) 454-2200 FAX: (831) 454-3262 TDD/TTY - Call 711

MANU KOENIG	ZACH FRIEND	JUSTIN CUMMINGS	FELIPE HERNANDEZ	BRUCE MCPHERSON
FIRST DISTRICT	SECOND DISTRICT	THIRD DISTRICT	FOURTH DISTRICT	FIFTH DISTRICT

June 28, 2024

WaterSMART Small-Scale Water Efficiency Projects Grant Program
United States Bureau of Reclamation

Re: Support for San Lorenzo Valley Water District WaterSMART Small-Scale Water Efficiency Projects Grant Application: AMI Water Meter Replacement Project

To Whom It May Concern:

This letter is to express support for the San Lorenzo Valley Water District's Small-Scale Water Efficiency Projects grant application to reduce demand as part of their strategy to improve water efficiency and develop sustainable drinking water supplies by implementing advanced metering infrastructure.

The San Lorenzo Valley Water District (District) supplies water to approximately 26,000 customers in the Santa Cruz Mountains. The District relies entirely on local supplies from surface water and groundwater sources. These sources are derived solely from rainfall within the San Lorenzo River watershed, and are therefore highly susceptible to impacts of drought.

The District has been actively pursuing demand management measures to improve water supply reliability and to increase drought resiliency. Advanced metering is an important step to achieving its demand management goals. The proposed AMI Water Meter Replacement Project will enable the District to upgrade approximately 433 customer meters. The project will result in significant water savings by reducing property-side water leakage and by motivating customers to improve their water conservation efforts. Additionally, the project will increase water system efficiency by reducing water treatment needs and will help reduce impacts of climate change through energy savings in water production and distribution as well as reduced carbon emissions resulting from fewer truck rolls required for meter reads.

The County of Santa Cruz, along with the San Lorenzo Valley Water District and Scotts Valley Water District, is a participating member of the Groundwater Sustainability Agency for the Santa Margarita Groundwater Basin.

The Basin is an important source of drinking water for the Scotts Valley and San Lorenzo Valley Water Districts as well as domestic wells. Additionally, the groundwater table influences the surface water in the San Lorenzo River, a primary drinking water source for the city of Santa Cruz and a home to endangered species. The Basin aquifers and surface water sources are vulnerable to drought due to the reliance on rainfall for recharge and flows. The proposed AMI Water Meter Replacement Project will support groundwater sustainability as well as efforts to achieve improved water supply sustainability for the Santa Cruz County region.

The County of Santa Cruz strongly supports the District’s WaterSMART Small-Scale Water Efficiency Projects grant application to improve local water supply reliability.

Sincerely,

BRUCE MCPHERSON
Fifth District Supervisor

SIERRA RYAN
Water Resources Program Manager

CITY OF SANTA CRUZ

WATER DEPARTMENT

212 Locust Street, Suite A, Santa Cruz, CA 95060 • 831-420-5200 • www.cityofsantacruz.com

June 24, 2024

WaterSMART Small-Scale Water Efficiency Projects Grant Program
United States Bureau of Reclamation

Re: Support for San Lorenzo Valley Water District WaterSMART Small-Scale Water Efficiency Projects Grant Application: AMI Water Meter Replacement Project

To Whom It May Concern:

This letter is to express support for the San Lorenzo Valley Water District's Small-Scale Water Efficiency Projects grant application to reduce demand as part of their strategy to improve water efficiency and develop sustainable drinking water supplies by implementing advanced metering infrastructure.

The San Lorenzo Valley Water District (District) supplies water to approximately 26,000 customers in the Santa Cruz mountains. The District relies entirely on local supplies from surface water and groundwater sources. These sources are derived solely from rainfall within the San Lorenzo River watershed, and are therefore highly susceptible to impacts of drought.

The District has been actively pursuing demand management measures to improve water supply reliability and to increase drought resiliency. Advanced metering is an important step to achieving its demand management goals. The proposed AMI Water Meter Replacement Project will enable the District to upgrade approximately 443 customer meters. The project will result in significant water savings by reducing property-side water leakage and by motivating customers to improve their water conservation efforts. The project will increase water system efficiency by reducing water treatment needs, and will help reduce impacts of climate change through energy savings in water production and distribution as well as reduced carbon emissions resulting from fewer truck rolls required for meter reads.

The City of Santa Cruz is a stakeholder and active participant in Groundwater Sustainability Agency for the Santa Margarita Groundwater Basin. The Basin is an important source of drinking water for the Scotts Valley and San Lorenzo Valley Water Districts, and supports the San Lorenzo River watershed. The groundwater table influences the surface water in the San Lorenzo River, a primary drinking water source for the City of Santa Cruz and a home to endangered species. The Basin aquifers and surface water sources are vulnerable to drought due to the reliance on rainfall for recharge and flows. The proposed AMI Water Meter Replacement Project will support groundwater sustainability as well as efforts to achieve improved water supply sustainability for the Santa Cruz County region.

SCOTTS VALLEY
WATER DISTRICT

June 24, 2024

WaterSMART Small-Scale Water Efficiency Projects Grant Program

United States Bureau of Reclamation

Re: Support for San Lorenzo Valley Water District WaterSMART Small-Scale Water Efficiency Projects Grant Application: AMI Water Meter Replacement Project

To Whom It May Concern:

This letter is to express support for the San Lorenzo Valley Water District's Small-Scale Water Efficiency Projects grant application to reduce demand as part of their strategy to improve water efficiency and develop sustainable drinking water supplies by implementing advanced metering infrastructure.

The San Lorenzo Valley Water District (District) supplies water to approximately 26,000 customers in the Santa Cruz mountains. The District relies entirely on local supplies from surface water and groundwater sources. These sources are derived solely from rainfall within the San Lorenzo River watershed and are highly susceptible to impacts of drought.

The District has been actively pursuing demand management measures to improve water supply reliability and to increase drought resiliency. Advanced metering is an important step to achieving its demand management goals. The proposed AMI Water Meter Replacement Project will enable the District to upgrade approximately 443 customer meters. The project will result in significant water savings by reducing property-side water leakage and by motivating customers to improve their water conservation efforts. The project will increase water system efficiency by reducing water treatment needs and help reduce impacts of climate change through energy savings in water production and distribution as well as reduced carbon emissions resulting from fewer truck rolls required for meter reads.

The Scotts Valley Water District, along with the San Lorenzo Valley Water District and the County of Santa Cruz, is a participating member of the Groundwater Sustainability Agency for the Santa Margarita Groundwater Basin. The Basin is an important source of drinking water for the Scotts Valley and San Lorenzo Valley Water Districts. Additionally, the groundwater table influences the surface water in the San Lorenzo River, a primary drinking water source for the city of Santa Cruz and a home to endangered species. The Basin aquifers and surface water sources are vulnerable to drought due to the reliance on rainfall for recharge and flows. The proposed AMI Water Meter Replacement Project will support groundwater sustainability as well as efforts to achieve improved water supply sustainability for the Santa Cruz County region.

2 Civic Center Drive • Scotts Valley, CA 95066 • 831.438.2363
contact@svwd.org • www.svwd.org

BOULDER CREEK FIRE PROTECTION DISTRICT

13230 Central Avenue, Boulder Creek CA 95006 · Office: (831) 338-7222 · Fax: (831) 338-7226

6/25/24

WaterSMART Small-Scale Water Efficiency Projects Grant Program
United States Bureau of Reclamation

Re: Support for San Lorenzo Valley Water District WaterSMART Small-Scale Water Efficiency Projects Grant Application: AMI Water Meter Replacement Project

To Whom It May Concern:

This letter is to express support for the San Lorenzo Valley Water District's Small-Scale Water Efficiency Projects grant application to reduce demand as part of their strategy to improve water efficiency and develop sustainable drinking water supplies by implementing advanced metering infrastructure.

The San Lorenzo Valley Water District (District) supplies water to approximately 26,000 customers in the Santa Cruz mountains. The District relies entirely on local supplies from surface water and groundwater sources. These sources are derived solely from rainfall within the San Lorenzo River watershed, and are therefore highly susceptible to impacts of drought.

The District has been actively pursuing demand management measures to improve water supply reliability and to increase drought resiliency. Advanced metering is an important step to achieving its demand management goals. The proposed AMI Water Meter Replacement Project will enable the District to upgrade approximately 443 customer meters. The project will result in significant water savings by reducing property-side water leakage and by motivating customers to improve their water conservation efforts. The project will increase water system efficiency by reducing water treatment needs, and will help reduce impacts of climate change through energy savings in water production and distribution as well as reduced carbon emissions resulting from fewer truck rolls required for meter reads.

The Basin aquifers and surface water sources are vulnerable to drought due to the reliance on rainfall for recharge and flows. The proposed AMI Water Meter Replacement Project will support groundwater sustainability as well as efforts to achieve improved water supply sustainability for the Santa Cruz County region.

The Boulder Creek Fire Protection District strongly supports the District's WaterSMART Small-Scale Water Efficiency Projects grant application to improve local water supply reliability. Conserving our valuable water resources will hopefully ensure water is available for wildfire and structure suppression efforts when needed which could prevent large scale devastation to the watershed.

Sincerely,

Mark Bingham
Fire Chief

FRIENDS OF SAN LORENZO VALLEY WATER

friendsofsanlorenzovalley@gmail.com
www.friendsofsanlorenzovalley.org

June 26, 2024

Re: Support for San Lorenzo Valley Water District WaterSMART Small-Scale Water Efficiency Projects Grant Application: AMI Water Meter Replacement Project

To Whom It May Concern:

This letter is to express enthusiastic support for the San Lorenzo Valley Water District's Small-Scale Water Efficiency Projects grant application to reduce demand as part of their strategy to improve water efficiency and develop sustainable drinking water supplies by implementing advanced metering infrastructure.

The San Lorenzo Valley Water District (District) supplies water to approximately 26,000 customers in the Santa Cruz mountains. The District relies entirely on local supplies from surface water and groundwater sources. These sources are derived solely from rainfall within the San Lorenzo River watershed, and are therefore highly susceptible to impacts of drought.
The District has been actively pursuing demand management measures to improve water supply reliability and to increase drought resiliency. Advanced metering is an important step to achieving its demand management goals. The proposed AMI Water Meter Replacement Project will enable the District to upgrade approximately 443 customer meters. The project will result in significant water savings by reducing property-side water leakage and by motivating customers to improve their water conservation efforts. The project will increase water system efficiency by reducing water treatment needs, and will help reduce impacts of climate change through energy savings in water production and distribution as well as reduced carbon emissions resulting from fewer truck rolls required for meter reads.

The Basin aquifers and surface water sources are vulnerable to drought due to the reliance on rainfall for recharge and flows. The proposed AMI Water Meter Replacement Project will support groundwater sustainability as well as efforts to achieve improved water supply sustainability for the Santa Cruz County region.

The Friends of San Lorenzo Valley Water is an all-volunteer group of San Lorenzo Valley citizens with a deep concern for our local community and for continued reliable access to safe and affordable water. We strongly support the District's WaterSMART Small-Scale Water Efficiency Projects grant application to improve local water supply reliability and will work collaboratively with SLVWD to assist in its implementation.

Sincerely,

James F Mosher

James F. Mosher on behalf of Friends of San Lorenzo Valley Water

Environmental Committee
VALLEY WOMEN'S CLUB of San Lorenzo Valley
PO Box 574, Ben Lomond, CA 95005
831/338-6578
www.valleywomensclub.org

July 4, 2024

WaterSMART Small-Scale Water Efficiency Projects Grant Program
United States Bureau of Reclamation

Re: Support for San Lorenzo Valley Water District WaterSMART Small-Scale Water Efficiency Projects Grant Application: AMI Water Meter Replacement Project

To Whom It May Concern:

This letter is to express our strong support for the San Lorenzo Valley Water District's Small-Scale Water Efficiency Projects grant application to reduce demand as part of their strategy to improve water efficiency and develop sustainable drinking water supplies by implementing advanced metering infrastructure.

The San Lorenzo Valley Water District (District) supplies water to approximately 26,000 customers in the Santa Cruz mountains. The District relies entirely on local supplies from surface water and groundwater sources. These sources are derived solely from rainfall within the San Lorenzo River watershed, and are therefore highly susceptible to impacts of drought.

The District has been actively pursuing demand management measures to improve water supply reliability and to increase drought resiliency. The community supports these actions and is eager to see the needed improvements made.

Advanced metering is an important step to achieving its demand management goals. The proposed AMI Water Meter Replacement Project will enable the District to upgrade approximately 443 customer meters. The project will result in significant water savings by reducing property-side water leakage that might otherwise go unnoticed or unrepaired, and by motivating customers to improve their water conservation efforts. The project will increase water system efficiency by reducing water treatment needs, and will help reduce impacts of

climate change through energy savings in water production and distribution as well as reduced carbon emissions resulting from fewer truck rolls required for meter reads.

A major focus of the Valley Women's Club is the health and resilience of our beautiful and fragile watershed. The Basin aquifers and surface water sources are vulnerable to drought due to the reliance on rainfall for recharge and flows. The proposed AMI Water Meter Replacement Project will support groundwater sustainability as well as efforts to achieve improved water supply sustainability for the Santa Cruz County region.

The Valley Woman's Club of San Lorenzo Valley (a 45-years active non-profit community organization) strongly supports the District's WaterSMART Small-Scale Water Efficiency Projects grant application to improve local water supply reliability.

Sincerely,

Nancy B. Macy, Chair

ATTACHMENT A
BUDGET DETAIL AND NARRATIVE
SAN LORENZO VALLEY WATER DISTRICT

Summary			
6. Budget Object Category	Total Cost	Federal Estimated Amount	Non-Federal Estimated Amount
a. Personnel	$42,670		
b. Fringe Benefits	$25,901		
c. Travel	$0		
d. Equipment	$0		
e. Supplies	$153,136		
f. Contractual	$0		
g. Construction	$0		
h. Other Direct Costs	$0		
i. Total Direct Costs	$221,707		
i. Indirect Charges	$3,293		
Total Costs	$225,000	$100,000	$125,000
	Cost Share Percentage	44%	56%

ATTACHMENT A
BUDGET DETAIL AND NARRATIVE
SAN LORENZO VALLEY WATER DISTRICT

6a. Personnel

This category includes salaries and wages of employees of the applicant organization that will be working directly on the project. Generally, salaries of administrative and/or clerical personnel are classified as indirect or overhead costs in your organization's accounting system included as a portion of the stated indirect costs. If these salaries can be adequately documented as direct costs, they can be included in this section; however, a justification must be included in the narrative. Recommend reviewing **§ 200.430** ***Compensation - personal services*** for more information on the specific requirements regarding compensation costs, including the ***Standards for Documentation of Personnel Expenses*** **at §200.430(i).**

Narrative: For key personnel such as the project manager or principal investigator, identify the name individual and position/title. Other personnel should be identified by position only. For all positions, identify the project tasks that will be performed. Compensation rates can be expressed as hourly rates and number of hours or annual salary and percentage effort that will be contributed to each task, but must be consistent with your organization's accounting and timekeeping policies. Include estimated hours for compliance with reporting requirements, including the final project report and evaluation. For multi-year projects, identify the level of effort anticipated for each budget year and any estimates increases in compensation rates. Within the budget narrative, provide a certification that the labor rates included in the budget proposal represent the actual labor rates of the identified personnel/positions and are consistently applied to Federal and non-Federal activities. *Note: The annual/hourly labor rate must not include fringe benefits.*

Links: § 200.430 Compensation - personal services.

Personnel

Position Title	Time (Hrs or %)	Rate (Hr or Salary)	Total Cost	Rate Basis	**Comments** (as needed)
FIELD SERVICES WORKER I	340	$31.00	**$10,540**	Current Salary	SLVWD field staff position. Will conduct installation of AMI meters (Task 2): 340 hours Y1 x $31/hr = $10,540.
FIELD SERVICES WORKER II	340	$47.00	**$15,980**	Current Salary	SLVWD field staff position. Will conduct installation of AMI meters (Task 2): 340 hours Y1 x $47/hr = $15,980.
LEAD FIELD SERVICES WORKER	340	$47.50	**$16,150**	Current Salary	SLVWD field staff position. Will conduct installation of AMI meters (Task 2): 340 hours Y1 x $47.50/hr = $16,150.
		Total	**$42,670**		

Additional Narrative/Comments: We anticipate that all AMI installation will occur during Year 1 of the project (less than 12 months), though we are allowing additional time in the schedule as a buffer. Labor rates for staff listed above represent the actual labor rates of the identified personnel and are consistently applied to Federal and non-Federal activities.

ATTACHMENT A
BUDGET DETAIL AND NARRATIVE
SAN LORENZO VALLEY WATER DISTRICT

6b. Fringe Benefits

Fringe benefits are allowances and services provided by employers to their employees as compensation in addition to regular salaries and wages. Fringe benefits include, but are not limited to, the costs of leave (vacation, family-related, sick or military), employee insurance, pensions, and unemployment benefit plans. Fringe costs should also include employer contributions required by law such as payroll taxes such as FICA, unemployment, and workers compensation. Fringe does not include federal income taxes, employee portion FICA, or other such costs. Recommend reviewing ***§ 200.431 Compensation - fringe benefits*** for more information on the allowability and allocability of fringe benefits. *Note: Car allowances and cars furnished to employees for personal and work use are unallowable as a fringe benefit, regardless of whether the costs is reported as taxable income, and must be excluded from fringe benefit rates.*

Narrative: Fringe benefits can be expressed as an hourly rate or percentage of personnel costs, but must correspond to how the costs are documented in your organization's accounting system. In the narrative, identify the fringe benefit rates/amounts for each position. If the fringe benefit rate is less than 35% of the estimated employee compensation, no additional information is necessary. If the fringe benefit rate is more than 35%, provide a description and breakdown of the benefits. If the rate is established within a negotiated indirect cost rate agreement (NICRA), provide a copy of the agreement with the application. Do not combine the fringe benefit costs with direct salaries and wages in the personnel category.

Links: § 200.431 Compensation - fringe benefits

Fringe Benefits

Position Title	Compensation	Quantity	Total Cost	Comments (as needed)
FIELD SERVICES WORKER I	0.6070	$ 10,540.00	**$6,398**	See below
LEAD FIELD SERVICES WORKER II	0.6070	$ 15,980.00	**$9,700**	See below
LEAD FIELD SERVICES WORKER	0.6070	$ 16,150.00	**$9,803**	See below
		Total	**$25,901**	

Additional Narrative/Comments: SLVWD's fringe benefits costs are estimated at 60.7% of employee compensation costs and consist of: 5.4% OT premium/on call; 21% medical; 1.8% dental; 0.25% vision; 0.25% life ins; 0.30% long term disability; 2% workman's comp; 21% pers retirement; 6.4% fica; 1.5% medicare; and 0.80% uniform allowance . SLVWD does not have a federal NICRA.

ATTACHMENT A
BUDGET DETAIL AND NARRATIVE
SAN LORENZO VALLEY WATER DISTRICT

6e. Supplies

Supplies is defined in §200.1 as all tangible personal property other than those described in the definition of equipment. A computing device is a supply if the acquisition cost is less than the lesser of the capitalization level established by your organization for financial statement purposes or $5,000, regardless of the length of its useful life. Recommend reviewing ***§ 200.453 Materials and Supplies Costs, Including the Costs of Computing Devices*** , regarding the allowability of costs. Supply items must be direct costs to the project and not duplicative of supply costs in the indirect rate. For post-award requirements regarding supplies, recommend reviewing ***§ 200.314 Supplies*** . For financial management requirements related to supplies, recommend reviewing § 200.302(b)(4)

Narrative: List all expendable supplies noting their purpose in the project and the basis of cost (e.g. vendor quotes, catalogue prices, prior invoices, etc.) For each item, provide the estimated unit cost, quantity, and total cost. General categories may be used, but if a category is viewed as too general or the associated amount is too high, further itemization may be requested.

Links: §200.1 Definitions
§ 200.453 Materials and Supplies Costs, Including the Costs of Computing Devices
§ 200.314 Supplies (post award requirements)
§ 200.302(b)(4) (financial management requirements related to supplies)

Supplies

Supply Item	Quantity	Unit Cost	Total Cost	Basis of Cost	Purpose
5/8" METER	427	$143.00	**$61,061**	vendor quote (Badger Meter	Task 2: Needed to complete AMI meter installs.
3/4" METER	8	$173.50	**$1,388**	vendor quote (Badger Meter	Task 2: Needed to complete AMI meter installs.
1" METER	7	$245.50	**$1,719**	vendor quote (Badger Meter	Task 2: Needed to complete AMI meter installs.
2" Meter	1	$692.00	**$692**	vendor quote (Badger Meter	Task 2: Needed to complete AMI meter installs.
LTE-M ENDPOINT	443	$142.50	**$63,128**	vendor quote (Badger Meter	Task 2: Needed to complete AMI meter installs.
FIBRELITE LIDS B-9	443	$56.77	**$25,149**	vendor quote (Core and Main)	Task 2: Needed to complete AMI meter installs.
		Total	**$153,136**		

Additional Narrative/Comments:

ATTACHMENT A
BUDGET DETAIL AND NARRATIVE
SAN LORENZO VALLEY WATER DISTRICT

6 j. Indirect Costs

Option 1: Show the rate reflected in the most recent Federal indirect cost rate agreement, cost base, and proposed amount for allowable indirect costs. If your organization has a current Federal negotiated indirect cost rate agreement, it must be included with your application.

Option 2: If your organization has never received a Federal negotiated indirect cost rate, the budget may include a 10 % de minimis rate of modified total direct costs. Per ***§ 200.1 Definitions,*** Modified Total Direct Cost (MTDC) *means all direct salaries and wages, applicable fringe benefits, materials and supplies, services, travel, and up to the first $25,000 of each subaward (regardless of the period of performance of the subawards under the award). MTDC excludes equipment, capital expenditures, charges for patient care, rental costs, tuition remission, scholarships and fellowships, participant support costs and the portion of each subaward in excess of $25,000.* For further information on modified total direct costs, refer to ***§ 200.414 Indirect (F&A) costs*** .

Option 3: If your organization does not have a federally approved indirect cost rate agreement and is proposing a rate greater than the 10 % de minimis rate, include the computational basis for the indirect expense pool and corresponding allocation base for each rate. *Note: If this option is selected, you will be required to submit an indirect cost rate proposal to your cognizant Federal agency within 3 months after the date the award is issued.* Information on "Preparing and Submitting Indirect Cost Proposals" is available from Interior, the National Business Center, and Indirect Costs and Acquisition Audit Services at https://ibc.doi.gov/ICS/icrna.

Note: Construction costs are capital expenditures and must be excluded from the indirect cost base.

Links: § 200.1 Definitions
§ 200.414 Indirect (F&A) costs.
https://ibc.doi.gov/ICS/icrna

j. Indirect Costs

Rate Type	Current Federal NICRA	Base Description	Base Total	Rate	Total Cost

ATTACHMENT A
BUDGET DETAIL AND NARRATIVE
SAN LORENZO VALLEY WATER DISTRICT

De minimis	No	SLVWD does not have a federal NICRA. SLVWD is opting to apply indirect on <10% MTDC, based on personnel, fringe, and supplies. Indirect equals $3,293, approximately 1.5% of MTDC - to maintain a not-to-exceed total project cost of $225,000. Based on SLVWD's experience with the FY 2022 SWEP award, this indirect amount is deemed sufficient to enable SLVWD administrative staff to complete all Task 1 Grant Administration tasks. Federal funding will not be used to pay these costs. All indirect costs will be provided by the applicant	$221,707	<1.5%	**$3,293**
				Total	**$3,293**

Estimated amount of indirect costs to be paid with Federal funds	$0
Estimated amount of indirect costs to be paid with non-Federal funds	$3,293