Automated Metering Infrastructure (AMI) Installation Project – Phase 2

WaterSMART: Water and Energy Efficiency Grants for FY 2023
No. R23AS00008

Prepared For:
Bureau of Reclamation
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Table of Contents

The full application, including attachments, cannot exceed 100 pages. If the application exceeds 100 pages, only the first 100 pages will be considered in the evaluation.

Table of Figures

Tables

SECTION 1: TECHNICAL PROPOSAL AND EVALUATION CRITERIA

THIS SECTION IS LIMITED TO 50 PAGES

Executive Summary

Date: 7/28/2022	**Applicant Name**: Desert Water Agency
City: Palm Springs	**Project Length of Time:** 24 Months
County: Riverside	**Estimated Completion Date:** July 2025
State: California	**Located on a Federal Facility:** No

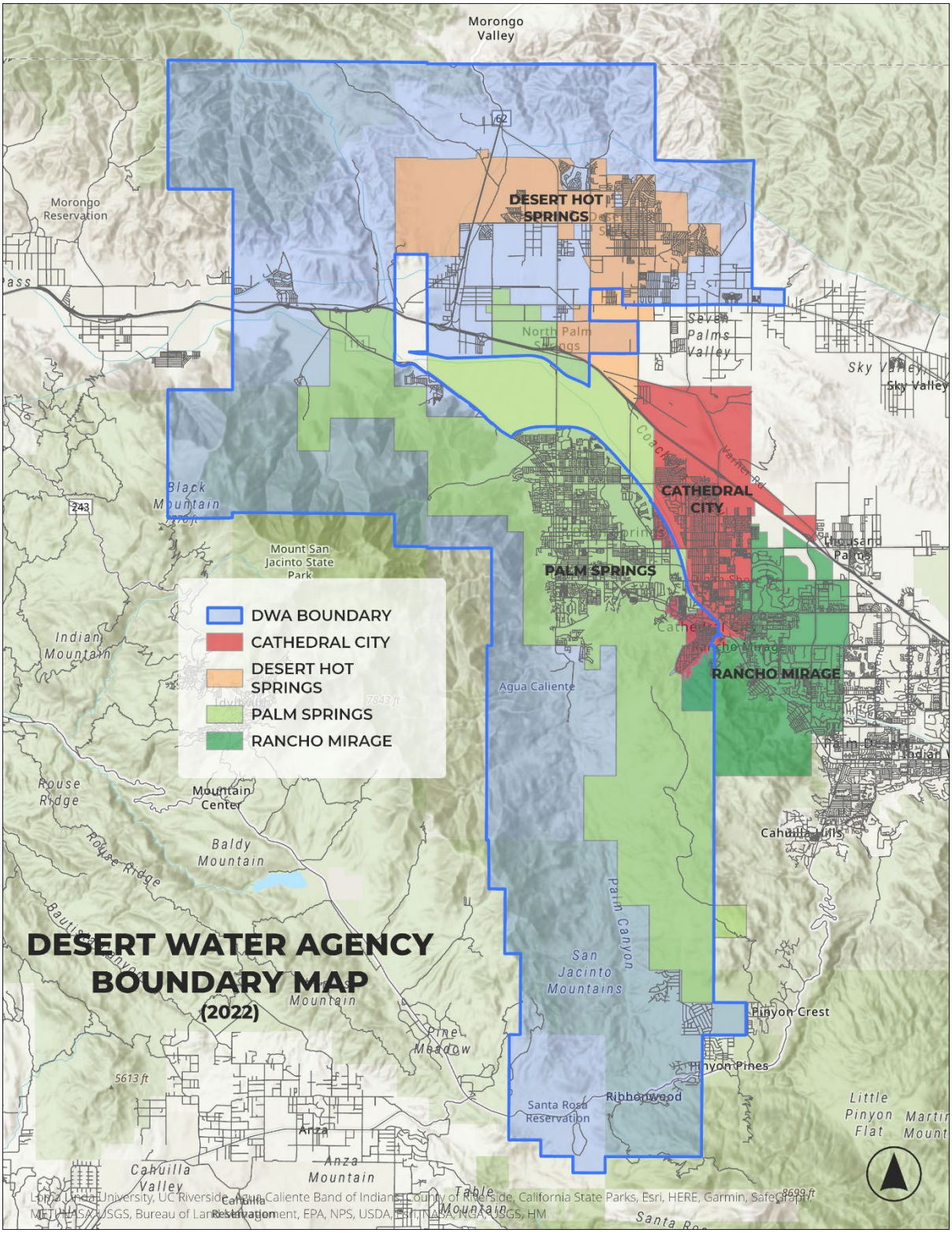
Desert Water Agency (DWA, the Agency) is a Category 'A' applicant. In its efforts to increase water reliability, support water conservation and work towards a sustainable water future, DWA is proposing to install an Advanced Metering Infrastructure (AMI) metering network. This grant application is asking for federal funding assistance for DWA's final phase of the AMI Project (Project). The Project will include equipping 4,463 manually or drive-by read meters with encoder receiver transmitters (ERTs) and establishing a network of antenna collectors which will connect to all ERTs installed in the Project and provide DWA with accurate consumption data for management and billing purposes. By equipping meters with ERTs and installing communication antenna, the meters will be able to be integrated into the agency's AMI system and be remotely read and to provide operational information for DWA and establish a leak detection system. DWA is also establishing a web-based customer engagement portal (CEP) in tandem to allow customers to view their near real-time water usage, which will ultimately increase water conservation. The Project will complete the conversion of all of DWA's 23,550 metered connections into AMI. Implementation of the Project will result in quantifiable water and energy savings, as well as support widespread water reliability benefits by providing the following:

- Estimated water savings of 561**acre-feet per year (AFY).**
- **Estimated energy savings of 425,996 kilowatt-hours (kWh) per year.**
- Reduced time, labor, cost, energy, and Greenhouse Gas (GHG) emissions compared to the existing metering system by reducing meter reading routes to zero.
- Immediate water leakage detection, which will reduce energy consumption and water waste.

Project Location

The Project will install ERTs throughout DWA's service area, including the 92262, 92264, 92282, 92263, and 92234 zip codes, located in Riverside County, California. DWA's service area includes the City of Palms Springs, the southwestern portion of Cathedral City and some unincorporated areas within Riverside County. DWA's service area is bordered by the Mojave Desert to the east, and the San Jacinto Mountains to the west. The Project will upgrade meters in a large area. The approximate latitude and longitude in the center of the project area are 33.816005 and -116.510843, respectively. See Figure 1 for a map of DWA's service area.

Figure 1. Project Location Map



Technical Project Description

DWA has carried out extensive planning and implementation efforts to position its service area to take optimal advantage of state-of-the-art technology in order to better manage scarce resources to conserve water. DWA initially upgraded 905 water meters on five routes to assess the different components of the AMI technology. This exercise showed the benefits of having the ability of datalogging from ERTs and time saved for meter reading and the added value in direct communication with customers. Completion of this pilot project, and phase 1 of the Project that included 8,711 meters paved the way for DWA to complete of the district-wide upgrade of the agency's meters.

To continue, DWA is requesting funding for its final phase that will include the installation of 4,463 Itron 100W ERTs placed on existing or newly developed housing water meters. The ERTs and antenna will allow DWA to completely upgrade to an automated fixed base network system that will collect and store meter readings to improve operational efficiency and conservation efforts. DWA is establishing the CEP in tandem (not requesting funding as part of this application) which means that DWA will be able to communicate daily trends with customers so they can explore issues causing increased water consumption and actions to resolve them. In addition, aging meters, boxes and lids will be replaced where necessary. Cost of these replacements have not been proposed in this project.

Currently, DWA collects metering data through an Advanced Metering Reading (AMR) System for the remaining meters that have not been upgraded, which is completed by driving past the water meters each month. Additionally, some meters are still read by visual inspection. Prior to ERT installation, DWA personnel had to complete 115 routes monthly. By installing the final phase of ERT equipment on the meters and installation of antenna, driving routes for DWA meter readers will be reduced to none, which would conserve energy and help reduce GHG emissions. These ERTs will be installed by DWA in-house personnel.

Project Tasks:

Task 1 - Project Management: Activities include coordination of all Project activities including budget, schedule, materials, procurement, communication, safety, site supervision, and grant and cost-share administration.

DWA staff will provide administrative oversight of the project to be in full compliance with the Bureau of Reclamation's (Reclamation) grant requirement consisting of providing any required information for executing the grant agreement, holding kick-off and progress meetings as needed, preparing federal financial reports semi-annually and the final report upon completion of the Project, submittal of reimbursement forms, coordinating any audit requests for examination of records by Reclamation or independent auditors, and maintaining all records as needed.

Task 2 - Design: The Project is ready for implementation. Upon grant approval, DWA will be ready to start procurement of equipment and start the installation of the new equipment. DWA has completed its research and identified of suitable equipment to operate in the arid climate of the region and meet the operational specifications required for meter reading and billing interface. This equipment was used in Phase 1 of the project.

Task 3 - Environmental Documentation: The components of the Project will not have any impact on the environment and is expected to be exempt from California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) review. DWA will file a Categorical Exclusion and a Notice of Exemption for the Project upon notice of award for this grant application.

Task 4 – Installation: The Project involves the installation of 4,463 Itron 50/60W ERTs and the installation of collection antenna. DWA will also replace meters, boxes and lids where required. DWA will be using in-house personnel for the installation of the equipment for the project. Antenna will be installed by DWA personnel or a third-party vendor depending on the timing and staffing levels.

Evaluation Criteria

Evaluation Criterion A-Quantifiable Water Savings (28 points)

Up to 28 points may be awarded for this criterion. This criterion prioritizes projects that will conserve water and improve water use efficiency, supporting the goals of E.O. 14008. Points will be allocated based on the quantifiable water savings expected as a result of the project. Points will be allocated to give greater consideration to projects that are expected to result in more significant water savings.

1. *Describe the amount of estimated water savings: For projects that conserve water, please state the estimated amount of water expected to be conserved (in acre-feet per year) as a direct result of this project. (Please include a specific quantifiable water savings estimate, do not include a range of potential water savings)*

As a direct result of updating DWA existing water meters to be AMI compatible and installing collection antenna, DWA is anticipated to conserve **561 AFY** of water that is otherwise lost due to undetected leaks, inaccuracies in production and consumption meters and unauthorized connections. The water savings were calculated using the theorem from an Environmental Protection Agency (EPA) water loss report that up to 75% of water loss in systems is recoverable. Additionally, the City of Santa Maria, California performed a study on the implementation of AMI and found that AMI was able to reduce its non-revenue water loss by two-thirds; from 6% down to 2%. The recoverable water savings ratio of 2/3 was applied to the water loss measured by Desert Water Agency's 2020 Water Audit, which resulted in a water savings of 259 AFY directly linked to AMI conversion.

Additional water savings is observed with the implementation of interactive web portals for customers to observe their water use and compare it to neighborhood averages. East Bay Municipal Utilities District (EBMUD) released the results of an independent study conducted in 2014 which indicated that providing information to help households compare their water use to neighborhood averages reduces residential water use by 5%. DWA based its assumptions on this study that customer access to and utilization of the web portal would result in water savings of 5%, which is applied to the entirety of DWA's customers/services that will be connected to the customer web portal. The water savings from customers being able to view their water usage is estimated at 302 AFY. Adding the water savings from recoverable water losses (259 AFY) and from the customer web portal (302 AFY) totals to an annual water savings of **561 AFY**. **Table 1** below shows the step-by-step process for this calculation.

2. *Describe current losses: Please explain where the water that will be conserved is currently going and how it is being used. Consider the following.*
   a. *Explain where current losses are going (eg., back to the stream, spilled at the end of the ditch, seeping into the ground)?*

   The majority of DWA water losses typically are from system leaks. However, unauthorized connections, customer metering inaccuracies, and systematic data handling errors also contribute to substantial water losses from DWA's water system. Over the last 3 years, DWA experienced an average annual water loss of 2,080 AF.

   Significant water loss can occur before leaks are detected with the current manual read and AMR meters within the system. This water is not returned into the system for future use, rather it is lost through seepage into the ground or is contaminated by urban runoff from impervious surfaces and diverted to the storm drain system.

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

   As previously mentioned, the majority of water loss from DWA's water system is from system leaks. A majority of this water is not returned into the system for future recoverable use, rather it is lost through seepage into the ground or is contaminated by urban runoff from impervious surfaces and diverted to the storm drain system. However, it is assumed that a small percentage of water losses will return to the aquifer to be pumped for future use.

   c. *Are there any known benefits associated with where the current losses are going? For example, is seepage water providing additional habitat for fish or animal species?*
3. As previously mentioned, the majority of DWA's water losses become unusable and therefore have no benefits. However, with the assumption that a small fraction of water losses returns to the underlying aquifer, the losses will contribute to aquifer recharge that will later be pumped back into DWA's water system. *Describe the support/documentation of*

estimated water savings: Please provide sufficient detail supporting how the estimate was determined, including all supporting calculations. Note: projects that do not provide sufficient supporting detail/calculations may not receive credit under this section. Please be sure to consider the questions associated with your project type (listed below) when determining the estimated water savings, along with the necessary support needed for a full review of your proposal. In addition, please note that the use of visual observations alone to calculate water savings without additional documentation/data are not sufficient to receive credit under this section. Further, the water savings must be the result of reducing or eliminating a current, ongoing loss, not the result of an expected future loss.

The Project will produce water savings by allowing DWA to monitor water consumption resulting in better management of its water resources. The Project will also allow DWA to notify customers with high use and leak alerts. The Project also sets the groundwork for customers to be able to view their water consumption in near real-time, which would further increase conservation.

The Project will produce water savings in three separate ways:

1. Timely identification and correction of leaks
2. Improved monitoring of water consumption and respective improvement in management of DWA's water resources
3. Changes in customer's water consumption behavior in response to the availability of near-real time consumption data provided through the customer web portal.

WaterSMART (EPA, 2013) and Smart Water Energy (Godwin, 2011) have documented water reductions ranging from 4-7% when AMI technology is implemented. The water savings estimates resulting from reductions in water loss is based on an EPA report on water loss control for public water systems. The EPA report states that up to 75% of water loss in systems is recoverable (EPA, 2013). The City of Santa Maria, California performed a case study on the implementation of AMI and found that AMI was able to reduce its non-revenue water loss by two-thirds, from 6% down to 2% (Godwin, 2011). In our water savings analysis, we estimated that two-thirds of DWA's non-revenue water losses were recoverable due to implementation of the AMI system. Therefore, of DWA's 5.5% of water losses, 3.7% is estimated to be recovered and therefore provide additional water savings.

Additional water savings are observed with the implementation of interactive web portals for customers to observe their water use and compare it to neighborhood averages. East Bay Municipal Utilities District (EBMUD) released the results of an independent study conducted in 2014, which indicated that providing information to help households compare their water use to neighborhood averages reduces residential water use by 5%. DWA based its assumptions on this study that customer access to and utilization of the CEP would result in water savings of 5%, which is applied to the entirety of DWA's customers/services that will be connected to the customer web portal as a result of full AMI Project build out.

Table 1. Project Water Conservation Estimate

Water Savings Calculation Variable	Value	Unit	Calculation	Source
Total Number of Active Service Connections	24,006	Meters		DWA
ERTs installed as part of the Project	4,463	Meters		
Percentage of total smart meters connected to AMI through the Project	18.60%		4,463/24,006	
Total Water Supplied by DWA in 2020	32,440	AFY		2020 Water Loss Audit
Estimated Volume of Water Supplies by AMI fitted smart meters within Project	6,034	AFY	18.6% x 32,440	
Percentage of System Water Losses in 2020	6.40%			Average of last 3 FY Water Audits
Percentage of Recoverable Losses	4.30%		2/3* 6.4%	1) Goodwin,2011, 2) EPA, 2013
Annual Recoverable Water Losses	**259**	**AFY**	**4.3% x 6,034**	
Water Savings from Reduced Water Loss (20-years)	**5,180**	**AFL**	**259 x 20**	
% Water Savings from Customer Web Portal (29.7% of all meters/customers-formula assumes equal % consumption by each meter)	0.93%		5% x 18.6%	EBMUD, 2014
Annual Water Savings from Customer Web Portal	**302**	**AFY**	**0.93% x 32,440**	
Total Water Savings from Customer Web Portal (assumed 5-year life)	**1,510**	**AFY**	**302 x 5**	
Total Annual Water Savings	**561**	**AFY**	**259 + 302**	
Total Project Lifetime Water Savngs	**6,690**	**AFL**	**5,180 + 1,510**	

4. *Please address the following questions according to the type of infrastructure improvement you are proposing for funding.*

Municipal Metering: Municipal metering projects can provide water savings when individual user meters are installed where none exist to allow for unit or tired pricing and when existing individual user meters are replaced with advanced metering infrastructure (AMI) meters. To receive credit for water savings for a municipal metering project, an applicant must provide a detailed description of the method used to estimate savings, including references to documented savings from similar previously implemented projects. Applicants proposing municipal metering projects should address the following.

a. *How has the estimated average annual water savings that will result form the project be determined? Please provide all relevant calculations, assumptions, and supporting data.*

The annual water savings provided by the Project were calculated by direct water system savings from AMI conversion and estimated water savings influenced by the customer water portal. It has been proven that if customers have access to a platform that shows and describes their water use, they will aim to reduce water use whether it be for financial or

environmental benefits. Please see Table 1 for a step-by-step process on how both water savings were calculated and applicable data sources.

b. How have current system losses and/or the potential for reductions in water use by individual users been determined?

As previously noted, DWA prepares an American Water Works Association (AWWA) Water Audit every fiscal year. This water audit provides DWA with specifics on system water loss volumes and causes. Using the data provided by the 2018-2020 Water Audit, industry guidelines established by EPA and other reputable sources were interpolated to calculate the water usage based on the number of meters proposed in this project to estimate water savings.

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

DWA maintains numerous planning documents addressing water shortages and conservation alternatives, including:

- Coachella Valley Regional Urban Water Management Plan (RUWMP) – 2020
- DWR California Single-Family Water Use Efficiency
- Indio Subbasin Water Management Plan- 2022 Update
- Alternative Plan Update for Mission Creek Subbasin- 2021
- San Gorgonio Pass Groundwater Sustainability Plan-2022
- Coachella Valley Integrated Regional Water Management Plan-2018
- Water Shortage Contingency Plan (Sections 6.7 and 6.8 of RUWMP)

The above-mentioned planning documents all cite conservation as the simplest, most cost-effective way to remedy water resource management issues. This project is the beneficiary of many years of work DWA has done to deliver precious water in the semi-arid supplies have motivated DWA to construct and operate one of the most efficient water delivery systems in California. The installation of smart meters furthers this effort. This proposed project conserves water through education, timely feedback to residential water users, and financial incentives.

d. What types (manufacturer and model) of device will be installed and what quantity of each?

The Project will install the following equipment:

1. 4,463 Itron 50 and 60W ERT water communication modules.
2. Nine Itron CCU 100, Internal GPS/WAN antennas.
3. 14 Itron Repeater 100, Internal GPS antennas.

4. One Itron collector and repeater access radio.
5. Two Itron Mobile Radio 2 w/USB cable and charger.

e. How will actual water savings be verified upon completion of the project?

Actual water savings will be verified upon project completion by comparing historical water usage data prior to implementation of the AMI system, with water usage data after implementation.

Additionally, DWA has already installed more than 5,000 ERTs throughout its system during prior phases of DWA's AMI Project. Water losses prior to the installation of these ERTs was 2,716.4 AFY (DWA 2018 Water Audit). As of 2020, DWA's water losses have been reduced to 1,770.1 AFY, even with population growth, which confirms the water conservation benefits of AMI.

It is anticipated that the final phase (the Project) will have the same results as the prior phase. However, monitoring following implementation will still occur to verify water savings.

Evaluation Criterion B-Renewable Energy (20 points)

Subcriterion No. B.1: Implementing Renewable Energy Projects Related to Water Management and Delivery

This subcriterion is not applicable to the proposed Project as it will not install renewable energy infrastructure.

Subcriterion No. B.2: Increasing Energy Efficiency in Water Management

Up to 10 points may be awarded for projects that address energy demands and reduce greenhouse gas emissions by retrofitting equipment to increase energy efficiency and/or through water conservation improvements that result in reduced pumping or diversions.

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

- *If quantifiable energy savings is expected to result from the project, please provide sufficient details and supporting calculations. If quantifying energy savings, please state the estimated amount in kilowatt hours per year.*

Currently, DWA collects metering data for these meters by driving to each manual read meter location on a monthly basis. By installing 4,463 ERTs on existing meters, DWA will no longer have to complete the monthly driving routes associated with these meters. This will not only result in substantial water savings, but also reduce the vehicle miles driven, conserve energy and help reduce greenhouse gas (GHG)emissions. As demonstrated below, the total energy savings resulting from the Project is 425,996**kWh per year**.

Energy Savings by Reducing Desert Water Agency's Water System Electrical Usage:

Taking DWA's average monthly energy consumption in all of its facilities and dividing the average it by the total system flow results in an average energy consumption of 693.7 kWh used per AF of water. The annual energy savings for DWA system energy usage as a result of the Project water savings is 364,193 kWh per year as shown in Table 2.

Table 2. Electric Energy Consumption Reduction Calculations from Water Savings

Energy Savings	Value	Unit	Calculation	Source
Annual Water Conserved	561	AFY	From Table 1	Project Application
Energy Used per Water Unit Produce	693.7	kWh / AF	Total Energy Consumed in DOU System 20,496,848 kWh divided by Total Water Delivered of 29,456 AF	Coachella Valley Regional 2020 UWMP
Total Energy Savings per Year	**389,165.70**	**kWH per Year**	**Annual Water Conserved (525 AFY) multiplied by Unit Energy Consumption (693.7 kWh)**	

Energy Savings from Reduced Vehicle Miles Driven:

The Project will create an additional energy savings through reducing fossil fuel consumption. By equipping meters with ERTs, DWA staff will no longer need to drive to the 4,463 meter locations to record water usage data. It is conservatively assumed that 0.367 miles is driven for each meter. The energy savings results from the reduced vehicle miles driven is 36,830 kWh per year as shown in Table 3.

Table 3. Electric Energy Consumption Reduction Calculations from Reduced Driving

Energy Savings	Value	Unit	Calculation	Source
Annual Mileage	19,655	miles/year	4,463 meters x 0.367 miles/meter x 12 meter reads/year	
Annual Gallons	1,006	gallons/year	19,655 miles/year / 21.5 miles/gallon *1.10	EPA- average MPG + 10% for stop-and-go conditions
Energy Saved	36,830	kWh/year	1,006 gallons/year* 1.25 therms/gallon * 29.3 kWh/ therm	EPA

- *How will the energy efficiency improvement combat/offset the impacts of climate change, including an expected reduction in greenhouse gas emissions.*

  The Project will reduce energy use through reduced water deliveries due to timely leak detection and reduced water use from improved customer consumption patterns. The Project will also eliminate the need for monthly meter reading routes.

  DWA's water delivery system is still largely dependent on fossil fuels as its source of energy. It is estimated that 693.7 kWh are consumed per AF of water from its point source to deliver, which means that any reduction in water delivered will equate to a direct reduction in fossil fuel consumption and respective GHG emissions.

Additionally, the vehicles used by DWA to do the monthly manual reading of the meters require fuel. It is estimated that 0.367 miles are driven per meter and that the vehicles used have an average miles per gallon (mpg) of 21.5. Eliminating these monthly routes will eliminate the GHG emissions associated with the automobile use.

GHG emissions are the preeminent human-influenced contributor of climate change. These gases warm the Earth's surface by trapping heat in the atmosphere. According to the Center for Climate and Energy Solutions, **transportation is now the largest source of carbon emissions in the United States** and automobiles are the single greatest polluters that rely heavily on petroleum (GHG). Burning one gallon of gasoline produces approximately 20 pounds of carbon dioxide (CO2)- which means the average vehicle creates roughly 6 to 9 tons of CO2 each year.

- *If the project will result in reduced pumping, please describe the current pumping requirements and the types of pumps (size) currently being used. How would the proposed project impact the current pumping requirements and energy usage?*

DWA receives its water supplies from a variety of sources which, includes purchased imported water, locally pumped groundwater, surface water, and recycled water. However, DWA relies primarily on pumped groundwater from its 29 active groundwater wells throughout the Coachella Valley Groundwater Basin (CVGB) and respective subbasins. As of 2020, these wells currently operate at a pumping capacity of 28.4 MGD (31,812 AFY).

The Project will conserve 561 AFY of water that would otherwise be lost from the system due to poorly detected leaks and poorly tracked individual use, which results in reduced diversion and pumping of the same amount. Therefore, the Project will influence the reduction of energy associated with both water diversion and groundwater pumping in order to meet water demands, which is 693.7 kWh per AF of water.

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

DWA's water system energy intensity is 693.7 kWh per AF of water. This calculation is based on the energy consumed from points of pumping or diversion, up to delivery to its retail customers.

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

The agency uses energy for groundwater production from wells, pumping at booster stations from lower pressure zones to higher pressure zones, and treatment processes, so treatment is included in the energy intensity calculation of 693.7 kWh per AF.

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

Currently, DWA has several manually read meters in its service area. Prior to DWA's AMI Project, these meters required **115** routes per month to collect water use data. The Project will eliminate monthly routes completely. Vehicles are a primary contributor to atmospheric GHG emissions and reduction in monthly monitoring routes will directly reduce DWA's automobile emissions.

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

  Not applicable.

Evaluation Criterion C-Sustainability l Benefits (20 points)

Up to 20 points may be awarded under this criterion. This criterion prioritizes projects that address a specific water and/or energy sustainability concern(s), including enhancing drought resilience, addressing current and future impacts of climate change, and resolving water related conflicts in the region. In addition, this criterion is focused on the benefits associated with the project, including benefits to Tribes, ecosystem benefits, and other benefits to water and/or energy supply sustainability.

Enhancing drought resiliency: In addition to the separate WaterSMART Environmental Water Resources Projects NOFO, this NOFO places a priority on projects that enhance drought resiliency, through this section and other sections above, consistent with the SECURE Water Act. Please provide information regarding how the project will enhance drought resilience by benefiting the water supply and ecosystem, including the following:

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

  DWA relies primarily on pumping groundwater from the CVGB. Historically, the basin has been in some state of overdraft. However, DWA collaborated and partnered with other member agencies and implemented multiple projects and strategies that work towards the long-term sustainability of the basin. Through these partnerships and extensive joint efforts, the basin is not operating with overdraft. But, a large portion of the recharge of the basin is reliant on imported water from the State Water Project (SWP). This means mean that the basin's status is vulnerable due to SWP volatility.

  The extreme impacts of climate change on water availability have become clear in recent years. All scientific research, as well as actual current drought patterns, indicate the frequency, severity and duration of droughts are increasing. SWP water originates in the Sierra-Nevada Mountains in Northern California. The last drought ended in 2017 and was followed closely by the current drought, which began in late 2019. Snowfall, which is the primary source of SWP water, has been at historical low levels. However, as of 2022, the State is entering its third year of persistent drought. In fact, conditions in January, February, and March 2022 are the driest that have been reported in over a century. These warm and arid months overshadowed any gains in precipitation for the State and snowpack melted

significantly faster than normal, with snowpack being only 38% of average by April 1. This is California's second extreme drought in 10 years, making further reductions in imported water allocations inevitable. Therefore, reliance on water from the SWP must be reduced.

Water from the SWP is diverted from the Sacramento-San Joaquin Delta, which is a confluence of various rivers and streams. The Delta is California's most crucial water and ecological resource. It is the largest freshwater tidal estuary of its kind on the west coast of the Americas, providing important habitat for birds on the Pacific Flyway and for fish that live in or pass through the Delta. Therefore, preserving every drop of water and allowing to remain in the Delta is critical for the sustainability of its sensitive ecology.

The Project is a great demonstration of the mix of strategies that water agencies must take on to reduce dependence on the SWP. The 561AFY water savings resulting from Project implementation will allow the same amount to remain in the CVGB, thereby offsetting the need to recharge the basin by the same amount.

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

  As described above, the Delta is ecologically sensitive habitat, which is home to various species listed under the Federal and State Endangered Species Acts and where species of flora and fauna rely on water to flourish. These species require specific water temperatures and levels for survival which will be supported through the Project benefits. The Project will conserve 561 AFY of water supplies potentially allowing DWA to reduce its allocation of imported water supplies, allowing the conserved amount to remain in the Delta.

- *Will the project benefit species (e.g., federally threatened or endangered, a federally recognized candidate species, a state listed species, or a species of a particular recreational, or economic importance)? Please describe the relationship of the species to the water supply, and whether the species is adversely affected by a Reclamation project or is subject to a recovery plan or conservation plan under the Endangered Species Act (ESA).*

  The water from the SWP originates in the Delta, which is a complex network of channels and reclaimed islands at the confluence of the Sacramento and San Joaquin Rivers and home to various species listed under the Federal and State Endangered Species Acts. Some of the endangered species in the Delta include the Delta Smelt, Chinook Salmon and Sacramento Splittail. The Project contributes to likelihood of reducing the amount of water diverted from the Delta.

  The impact to the environment due to recent drought conditions has been tremendous. According to the Pacific Institute, many of the State's environmental flows went unmet during the drought period, affecting aquatic ecosystems and decreased protections for endangered species. The drought has caused losses or destruction of fish and wildlife

habitat, loss of wetlands, more wildfires and lower water levels in reservoirs, lakes, and ponds. Dry creeks and rivers led 18 fish species to diminish to near extinction.

Although the amount of water is small, any savings are crucial to sustaining sensitive and listed habitat, especially in the current dire conditions of water bodies in California. Supporting projects such as this project, which provide local sustainable water and reduce diverting water away from sensitive water bodies will, in aggregate and over time, result in substantial benefits to the survival and recovery of endangered species. Many of the endangered species need higher volumes of water and lower temperatures to survive. Any incremental increase of water helps provide these necessary conditions for the endangered species.

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

  Climate change has induced many hazardous natural phenomena other than droughts. One of the most extreme hazards California suffers from annually is wildfires. Wildfires require massive amounts of water to fight and control. By repairing system leaks in a timely manner and providing a customer consumption platform, the Project provides a source of approximately 561 AFY of water for its customers and to meet the service area's fire flow requirements. Having this additional water in DWA's system will allow the area with the firefighting capabilities it needs to put out wildfires in a timely manner to reduce damage to California's ecosystems as best as possible.

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

  Yes, the primary goal of the Project is to increase water use efficiency and improve water management by reducing water losses associated with leaks, breaks, and inefficient water use at the agency and customer levels. Upgrading the existing meters to be AMI will allow DWA to detect water leaks and repair them in a timely manner so that less water is lost from the water system. The Project, when completed, will also encourage customers to reduce their water consumption through the customer web portal that will provide them with their water usage which will further improves water supply management. This will provide DWA with increased operational flexibility, particularly in times of drought.

Addressing a specific water and/or energy sustainability concern(s): *Will the project address a specific sustainability concern? Please address the following:*

- *Explain and provide detail of the specific issue(s) in the area that is impacting water sustainability, such as shortages due to drought and/or climate change, increased demand, or reduced deliveries.*

In recent years, the extreme impacts of climate change induced droughts on water supply availability and reliability have become very evident. The latest Statewide extreme drought lasted five years from 2012 to 2017. However, California is now entering its third year of drought conditions with January, February, and March 2022 being the driest conditions recorded in over 100 years. All scientific research and recent drought patterns indicate that the frequency, intensity, and duration of droughts are increasing. For many years the SWP and the Colorado River have been a substantial water source for many agencies throughout California. The water supplied from the SWP originates as snowpack in the Sierra Nevada Mountains, which gradually melts in the spring and summer flows down rivers, aqueducts, lakes, and reservoirs around the state where the water gets treated for human use. The Northern California Sierra Nevada Mountains were once a reliable source of consistent rain and snow fall. However, this region has been suffering from persistent droughts. The Sierra Nevada Region is currently designated as Category D4 – Exceptional Drought Area status and Category D3 – Extreme Drought Area status (U.S. Drought Monitor). The majority of Riverside County, where DWA service area is located is currently experiencing a Category D3 – Extreme Drought according to the U.S. Drought Monitor. Figure 2 is the current map from the U.S. Drought Monitor.

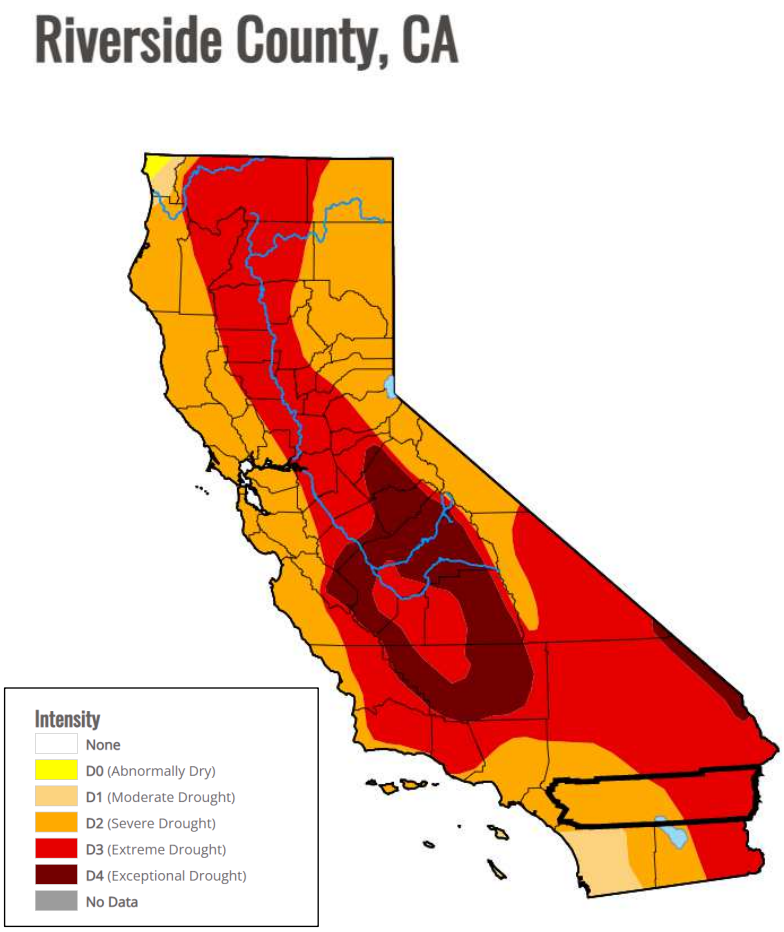
The extreme droughts and dire rainfall and snowfall conditions are making water from the SWP an increasingly unreliable and unpredictable water resource. The California Department of Water Resources (DWR), who manages the SWP issues a biennial report to assist SWP contractors and local planners in assessing the availability of supplies from the SWP. DWR issued its most recent update, the 2019 DWR State Water Project Delivery Capability Report (DCR), in August 2020. In this update, DWR provides SWP supply estimates for SWP contractors to use in their planning efforts, including the 2020 UWMPs. The 2019 DCR includes DWR's estimates of SWP water supply availability under both existing (2020) and future (2040) conditions. The long-term average allocations reported are 58 percent for existing conditions through 2039, and 52 percent for future conditions beginning in 2040. However, the modeled single dry year SWP water supply allocation is 7% under the existing conditions. In fact, the historically lowest SWP allocations were at 5% in 2014 and initial allocations in 2021.

The Colorado River, which originates in the Colorado Rocky Mountains, has been a consistent water source that seven Western US states and Mexico rely on. However, there has been a prolonged 21 year warming and drying trend that is pushing one of the nation's largest water supplies to record lows. In response to the historic lows, the Federal Government has declared a Tier 1 water shortage in the Colorado River for the first time ever in August 2021. This declaration has reduced water allocations from the River for Arizona, Nevada, and Mexico.

The persistent droughts of progressive duration, intensity, and frequency is making evident the impacts on California's water supply and water purveyors are having to adapt

accordingly. Drought resilience is an absolutely necessary task for all water agencies given the current and future statewide conditions.

Figure 2. U.S. Drought Monitor Map



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

  The same climatic conditions that have caused the Statewide persistence of drought has also led to increased frequency of wildfires due to the drying of vegetation from increased temperatures and reduction of water supplies as drought response measures. Due to severe property and ecosystem damages caused by wildfires, energy providers, such as Southern California Edison, have been implementing public safety power shutoffs (PSPS) within its service areas during extremely dry and windy events. These shutoffs occur within DWA's service area and can affect DWA's ability to supply water during PSPS events.

- *Please describe how the project will directly address the concern(s) stated above. For example, if experiencing shortages due to drought or climate change, how will the project directly address and confront the shortages?*

  The Project will conserve approximately 561 AFY by implementing ERTs to 4,463 meters throughout DWA's service area. This will allow DWA to more accurately detect leaks in the water system to address those leaks prompting to minimize water loss. In addition, the installation of smart meter registers, the collection infrastructure, and online customer web portal will allow DWA customers to track their daily water use which would encourage DWA customers to be more conscious of and ultimately reduce their water consumption. Over the Project lifetime, it is anticipated that 6,690 AF will be conserved as a result of implementing the Project. Please refer to Table 1 for these calculations and the inputs for each calculation.

  The water saved by the Project directly addresses the concerns stated above by reducing pumping from the CVGB. It also potentially reduces the need to purchase water from the SWP for recharge purposes.

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

  As previously mentioned, DWA obtains most of its potable water supply from local groundwater. Since DWA relies so heavily on local groundwater supplies, DWA prioritizes recharging its groundwater basin. DWA does so by purchasing imported water from SWP. The 561 AFY of conserved water provided by the Project will remain in the CVGB so that DWA can reduce groundwater pumping.

- *Provide a description of the mechanism that will be used, if necessary, to put the conserved water to the intended use.*

  No mechanism is required to put the conserved water to the intended use. The conserved water would be from reduced system leaks and efficient customer use, and therefore originate and stay within the existing water system.

- *Indicate the quantity of conserved water that will be used for the intended purpose(s).*

  561 AFY of water will be conserved and stay within DWA's water system to reach water demands and reduce reliance on imported and groundwater.

Other project benefits: Please provide a detailed explanation of the project benefits and their significance. These benefits may include, but are not limited to, the following:

(1) Combating the Climate Crisis: E.O. 14008: "Tackling the Climate Crisis at Home and Abroad", focuses on increasing resilience to climate change and supporting climate-resilient development. Please describe how the project will address climate change, including:

- *Please provide specific details and examples on how the project will address the impacts of climate change and help combat the climate crisis.*

The climate crisis is a multi-front issue that is threating all aspects of our world. The main effect on DWA is drought and the availability of water supplies. The Project will address the impacts of the climate crisis through two mechanisms. The first is water savings which is realized through early leak detection and increased customer water consumption transparency through access to the online portal. The online portal will provide real time water usage information to DWA customers, which has historically resulted in lower water use. Through conserving 561 AFY of water resources, DWA will have more operational flexibility during times of drought, which will allow DWA to better respond when water supplies dwindle. Additionally, the water savings will allow DWA to reduce local groundwater pumping or purchases of additional imported water from the SWP. This will thereby increase the flexibility for all SWP contractors during times of drought.

The second mechanism is energy savings realized through reducing the amount of water delivered due to leaks and by reducing the vehicle miles traveled since AMI meters will not require physically recording each meter every month unlike the existing manual read meters. The energy savings from these activities is expected to conserve 425,996 kWh of electricity per year, thereby reducing DWA's GHG emissions. As noted above, GHG reduction is considered the single most effective mitigation to slow the progression of climate change.

- *Does the proposed project strengthen water supply sustainability to increase resilience to climate change?*

DWA's water supply resiliency has been severely affected by prolonged droughts and the subsequent variability in its annual SWP allocations and local ground and surface water supply. Considering one of DWA's primary water supplies to implement groundwater recharge for climate change resiliency is provided through the SWP and the increasing variability of annual SWP allocations, DWA has been emphasizing water conservation to ensure every drop of its water resources is being put to use. This Project will allow DWA to mitigate for the reduced reliability and reduce reliance of on SWP as a direct source of water. As mentioned before, the Project will implement AMI meters, information transmission technology, and a customer engagement portal which will result in 561 AFY of water savings and 425,996 kWh of energy savings. The conserved water will enable DWA to reduce production from local groundwater aquifers and the need for additional imported

water purchase transfers in dry years, thereby providing water supply sustainability and operational flexibility for DWA and all SWP contractors.

- *Will the proposed project establish and utilize a renewable energy source?*
- The Project does not establish a new renewable energy source, however DWA utilizes solar power at many of its well sites where antenna for the collection system of the Project will be located at. Additionally, the DWA headquarters, where AMI reads and outreach to customers for leaks takes place, hosts two solar arrays that are used to offset electricity use.

Will the project result in lower greenhouse gas emissions?

Yes, the Project will eliminate GHG emissions associated with the monthly routes DWA has to take to read the existing manually read meters. The Project will conserve water which will proportionally reduce the amount of water pumped or diverted to meet demands, therefore reducing GHG emissions associated with the energy it takes to deliver water from its point source.

(2) Disadvantaged or Underserved Communities: E.O. 14008 and E.O. 13885 support environmental and economic justice by investing in underserved and disadvantaged communities and addressing the climate-related impacts to these communities, including impacts to public health, safety, and economic opportunities. Please describe how the project supports these Executive Orders, including:

- *Does the proposed project directly serve and/or benefit a disadvantaged or historically underserved community? Benefits can include, but are not limited to: public health and safety through water quality improvements, new water supplies, new renewable energy sources, or economic growth opportunities.*

Yes, the Project will benefit the entire DWA service area which consists of several disadvantaged communities (DACs) and severely disadvantaged communities (SDACs) by providing quantifiable water savings of approximately 561 AFY. These water savings will support reliability of water supplies, which will minimize needs to increase water rates for all customers, including economically disadvantaged communities, when drought-induced water shortages occur.

- *If the proposed project is providing benefits to a disadvantaged community, provide sufficient information to demonstrate that the community meets the disadvantaged community definition in Section 1015 of the Cooperative Watershed Act, which is defined as a community with an annual median household income that is less than 100% of the statewide annual median household income for the State, or the applicable state criteria for determining disadvantaged status.*

Based on the Census American Community Survey (ACS) 2014-2018, the statewide Median Household Income (MHI) for California was $71,228. To be deemed as a disadvantaged community, the MHI of the community must be less than or equal to 80% of the State MHI;

$56,982 in 2018 dollars and $42,737 for SDACs. DWA serves 5 census tracts, which is approximately **25% of the year-round retail water service area**, that are below the 80% MHI threshold, which classifies these communities as **disadvantaged**. Additionally, DWA serves 6 census tracts, approximately **41% of the service area**, that have a MHI less than or equal to 60% of the threshold, which makes these communities **severely disadvantaged**. This results in **66%** of DWA's service area being disadvantaged. The MHI for these disadvantaged census tracts in 2018 dollars are summarized in Table 4.

Table 4. Disadvantaged Communities

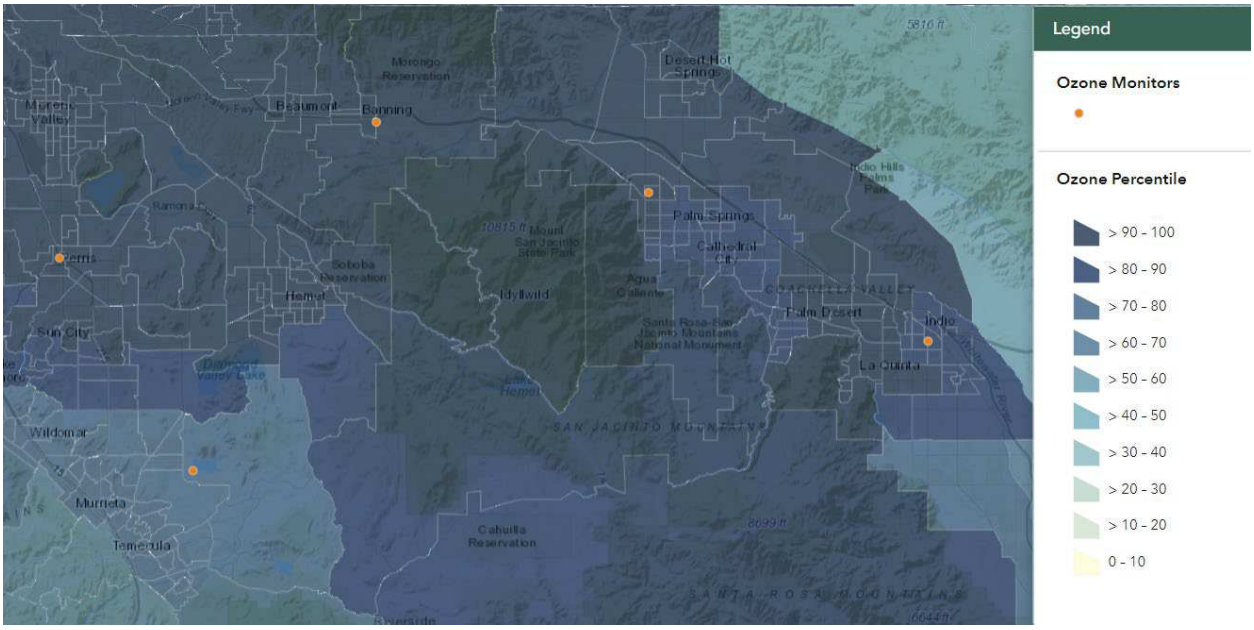
Census Tract	***MHI***	***Population***
6065044606	$52,292	2,713
6065044605	$40,536	5,816
6065044604	$52,234	4,225
6065044602	$42,395	3,332
6065941400	$42,521	3,853
6065044806	$36,944	2,225
6065044701	$40,412	3,935
6065940700	$56,250	2,676
6065044804	$42,823	2,784
6065941000	$40,988	3,720
6065044807	$49,554	1,517
	Total DAC Population	36,796
	DWA Year Round Population	56,272
	% DAC	**25**
	% SDAC	**41**

- *If the proposed project is providing benefits to an underserved community, provide sufficient information to demonstrate that the community meets the underserved definition in E.O. 13985, which includes populations sharing a particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life.*

  Not only are these census tracts financially disadvantaged, but they suffer from disproportionate environmental stressors which are demonstrated through the California Office of Environmental Health Hazard Assessment's online mapping tool; CalEnviroScreen 4.0. This mapping tool can be used to analyze various economic, social, and environmental factors for any disadvantaged census tract, including atmospheric ozone concentrations. Ozone is produced from emissions from trucks, cars, planes, trains, factories, farms, construction, and dry cleaners. These emissions react with sunlight at ground level and can cause irritation and inflammation to the lungs and make existing illnesses worse, even at

low levels of exposure. Children, the elderly, and people who spend the majority of their time outdoors are specifically sensitive to the effects of ozone. Ozone concentrations are directly proportional to temperature, so as global temperature rises, so does atmospheric ozone concentrations. According to CalEnviroScreen 4.0 the entire DWA area is in the 85-94th percentile meaning that this area suffers from ozone concentrations that are up to 94% higher than the rest of California. In fact, all of the census tracts served by DWA are above the 80th percentile, which classifies these areas as environmentally disadvantaged. Ozone concentrations for DWA and surrounding areas can be seen in Figure 3.

Figure 3. Residents' Level of Exposure



*(3) **Tribal Benefits:** The Department of the Interior is committed to strengthening tribal sovereignty and the fulfillment of Federal Tribal trust responsibilities. The President's memorandum "Tribal Consultation and Strengthening Nation-to-nation Relationships" asserts the importance of honoring the Federal government's commitments to Tribal Nations. Please address the following, if applicable:*

- *Does the proposed project directly serve and/or benefit a Tribe? Will the project increase water supply sustainability for an Indian Tribe? Will the project provide renewable energy for an Indian Tribe?*

The Agua Caliente Band of Cahuilla Indian reservation underlies much of DWA's service area. There are multiple Tribes within Riverside County, who rely on CVGB. The water saved through the implementation of the Project will reduce DWA's imports from the SWP and groundwater extracts from the CVGB, both of which provide water resources to tribes and rural communities. Creating more operational flexibility for the SWP and CVGB systems will indirectly benefit tribes and rural communities.

- *Does the proposed project directly support Tribal resilience to climate change and drought impacts or provide other Tribal benefits such as improved public health and safety through water quality improvements, new water supplies, or economic growth opportunities?*

  The Project will provide a water savings of approximately 561 AFY, which will result in a reduction in imported water resources and pump groundwater of the same amount. Water conservation is an important factor in climate change resilience, which will be provided by the Project to the DWA service area and surrounding region, including Tribes.

(4) Other Benefits: Will the project address water and/or energy sustainability in other wats not described above? For example:

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

  No, the Project will not help in complying with any interstate compacts.

- *Will the project benefit multiple sectors and/or users (e.g., agriculture, municipal and industrial, environmental, recreation, or others)?*

  DWA serves single-family residential, multi-family residential, commercial, industrial, institutional, governmental, and landscape water use sectors. The Project will benefit all sectors within DWA's service area through DWA's ability to reduce water waste and better manage its water supplies. This Project in particular will install ERTs on 4,463 meters with are composed of 3,691 residential, 333 commercial, 374 commercial fire services, 62 institutional and 1 industrial fire connections.

  DWA has a complex mix of commercial customers ranging from business offices to golf courses. DWA also serves their industrial sector, primarily centered on light manufacturing. The Agency's 2020 RUWMP reports that projected water deliveries will increase by more than 8,000 AF by 2045. Implementation of the AMI system and the availability of the communication network system will complement ongoing and future conservation efforts by giving customers access to near real-time consumption data. Implementation of this Project will give new residents and businesses water conservation tools from the start with anticipation of reducing the projected 8,000 AFY of increased water demand.

  In addition, reducing water demands from SWP will promote healthy ecosystems and fisheries that in turn have economic benefits. For example, the Delta provides a variety of recreational opportunities including fishing, hunting, boating, camping, picnics, and viewing nature, which amount to approximately $809M in income and economic value added per year.

Water conservation at the end source will benefit all of the water recipients and suppliers up the chain of delivery, because decreased water demand from the DWA service area means a larger water supply for the rest of Delta and SWP water recipients.

- *Will the project benefit a larger initiative to address sustainability?*

DWA is seeking to implement the Project in order to address the goal of conservation as outlined in the 2020 RUWMP and as such, water conservation is one of several high-priority policies actively implemented within DWA, and programs such as water audits for large-volume water users, residential water audits, landscape water audits, and water-efficient landscape gardens are encouraged and well received.

DWA participates in planning and preparing the Coachella Valley Integrated Regional Water Management (IRWM) Plan, which is in collaboration with CVWD, Mission Springs Water District (MSWD), Indio Water Authority (IWA), and the Coachella Water Authority (CWA), Valley Sanitary District (VSD) and was created to address water management issues. The Coachella Valley Water Management Plan update in 2018 discusses the actions both DWA and CVWD must take to prevent the continuing decline in groundwater levels and water quality degradation for the region. Actions such as source substitution for irrigation, conservation programs, are among those outlined within the updated plan.

Furthermore, California Governor Gavin Newsome issued EO Number N-10-19, which is an initiative to develop resiliency to droughts and better manage the State's water resources. To implement the Governor's Executive Order, the state issued the California Water Resiliency Portfolio in July 2020. The Portfolio establishes policies and objectives to prepare the state for a water sustainable future. The Project addresses the state wide initiative by aligning to the goal number four of the recently released California Water Resiliency Portfolio (CWRP) which is titled "Be prepared." By installing AMI technology that will provide real-time leak detection, DWA will conserve water which will ultimately protect DWAs water supply to combat future droughts.

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

As mentioned above and in the 2020 RUWMP, DWA has relied on Colorado River water exchanged for SWP water to replenish the CVGB. These sources of water have seen legal battles, at times contentious, over this precious resource. SWP water supplies are threatened by prolonged drought periods and other legal and climatic restrictions which makes DWA susceptible to the uncertainty of supply and delivery. DWA has a set allocation of SWP water of 55,570 AFY through 2035. However, if that volume of water is not available, they will be delivered a lesser amount and will have to pause groundwater recharge, reducing water service reliability. Implementing the Project will help avoid having to navigate through the legalities of obtaining water from the SWP or Colorado River, potentially increasing the chances for tensions and conflict over water.

Additionally, the UWMP refers to potential legal constraints with the Agua Caliente Band of Cahuilla Indians and other water agencies over sustainable groundwater management. If SWP water becomes insubstantial to exchange for Colorado River water for groundwater recharge, conflict with Tribes is likely.

By increasing water use transparency through AMI, DWA would be able to conserve the water previously wasted due to undetected leaks and decrease reliability on outside water sources to meet demands and for groundwater recharge.

Evaluation Criterion D-Complementing On-Farm Irrigation Improvements (10 points)
This criterion is not applicable to this Project.

Evaluation Criterion E-Planning and Implementation (8 points)
Up to 8 points may be awarded for these subcriteria.

Subcriterion E.1 Project Planning
Does the applicant have a Water Conservation Plan and/or System Optimization Review (SOR) in place? Does the project address an adaptation strategy identified in a completed WaterSMART Basin Study? Please self-certify or provide copies of these plans where appropriate to verify that such a plan is in place. Including a specific excerpt or link to the planning document may also be considered where appropriate.

DWA abides by numerous water conservation documents such as their 2020 UWMP, Water Shortage Contingency Plan which was established by Ordinance No. 72, and the 2018 Coachella Valley IRWM/SWR Plan. See links below for reference.

Provide the following information regarding project planning:

- *Identify any district-wide, or system-wide, planning that provides support for the proposed project. This could include a Water Conservation Plan, SOR, Drought Contingency Plan, or other planning efforts done to determine the priority of this project in relation to other potential projects.*

  DWA maintains numerous planning documents addressing water conservation goals, water shortages and management strategies, including the following:

  - 2020 Regional Urban Water Management Plan (UWMP)
  - Water Conservation Plan (Ordinance No. 65)
  - Water Shortage Contingency Plan (Sections 6.7 and 6.8 of RUWMP)
  - 2018 Coachella Valley IRWM/SWR Plan
  - 2022 Indio Subbasin Water Management Plan Update
  - Mission Creek Subbasin Groundwater Sustainability Alternative Plan – 2021 Update
  - 2022 San Gorgonio Pass Subbasin Groundwater Sustainability Plan

- *Describe how the project conforms to and meets the goals of any applicable planning efforts and identify any aspect of the project that implements a feature of an existing water plan(s).*

  DWA's 2020 RUWMP is designed to address current and future water conservation and augmentation goals. Through the installation of AMI, DWA will continue to strive towards the goals the UWMP strives to achieve. Through the provision of near real-time water use

data, the Project will promote water conservation within DWA thus promoting its water resiliency.

Additionally, the 2018 Coachella Valley IRWM/SWR Plan explains that “water is a limited resource and that water conservation and use efficiency should be actively pursued”. are specifically referenced in the IRWM Plan in “Region Description and Resource Management Strategies”.

The project contributes to IRWM Plan objectives in the following ways:

Objective A: Provide reliable water supply. This Project is implementing AMI technology which will increase conservation and reduce demands. AMI will enable DWA to monitor water usage in near real-time which will optimize management of water resources.

Objective B: Manage groundwater levels to reduce overdraft. By reducing overall water use, the Project will decrease the pumping of groundwater which will reduce the risk of overdraft.

Objective D: Maximize local supply opportunities including water conservation. This project prioritizes water conservation efforts as a source of local supply to reduce overall water use.

Objective E: Protect groundwater quality and improve where feasible. The water conserved by the Project will directly benefit the CVGB aquifer for all users.

2022 Indio Subbasin Water Management Plan Update includes Planning and Management Action 11.3 Water Conservation.

Mission Creek Subbasin Groundwater Sustainability Alternative Plan – 2021 Update includes four water conservation planning and management actions (WC-1, WC-2, WC-3, WC-4).

- *If applicable, provide a detailed description of how a project is addressing an adaptation strategy specifically identified in a completed WaterSMART Basin Study or Water Management Options Pilot (e.g., a strategy to mitigate the impacts of water shortages resulting from climate change, drought, increased demands, or other causes)*

The Project aligns with the goals of the Colorado River Basin Water Supply and Demand Study (the Study), which is the most comprehensive analysis of the Colorado River Basin ever completed. This Study was completed through cooperation with Reclamation, seven states that rely on water from the Colorado River, recognized Tribes, agricultural users, and water conservation groups. The Study was created to act as a model for watershed planning across the country that recognizes population growth and the impacts of climate change on water supply in the western United States.

As previously mentioned, DWA relies heavily on water from the Colorado River for groundwater recharge. However, the Colorado River has been ranked as the most endangered waterway in the nation due to the impacts of climate change and overuse.

An overall objective of the Study is to identify potential strategies and options to resolve Basin-wide water supply and demand imbalances including modifications to existing water conservation and management programs. The Project will provide a new water conservation method through AMI implementation which will allow 561 AFY to remain in DWA's water system. This water savings will allow DWA to reduce pumping by the same amount from the CVGB and therefore reduce the volume of Colorado River water needed for groundwater recharge. The Project will help balance the current water supply and demand imbalances the Colorado River is facing which is intended purpose of the basin study.

Subcriterion E.2 Readiness to Proceed

Points may be awarded based upon the extent to which the proposed project is capable of proceeding upon entering into a financial assistance agreement. Please note, if your project is selected, response provided in this section will be used to develop the scope of work that will be included in the financial agreement.

Applications that included a detailed project implementation plan (e.g., estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates) will receive the most points under this criterion.

- *Identify and provide a summary description of the major tasks necessary to complete the project. Note: please do not repeat the more detailed technical description. This section should focus on a summary of the major tasks to be accomplished as a part of the project.*

  The Project is ready for implementation. Upon grant approval, DWA will be ready to start procurement of the equipment and start the installation of the Project. DWA has completed its research for identification of suitable equipment to operate in the arid climate of the region and meet the operational specification required for meter reading and billing interface.

  DWA is in process of implementing the 8,711 AMI meters of the Phase I by in house staff. DWA will be using in-house personnel for the installation of the ERTs and respective antenna collection network for the project and therefore there will be no learning curve and the operation will be efficiently managed by the in-house DWA supervisors. DWA estimates a maximum of two years to complete this project.

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

  No permits or approvals need to be obtained for Project implementation.

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

  DWA initially installed Itron 100W ERTs on five 5 routes to assess the different components of the project. This exercise showed the benefits of having the ability of data-logging from

ERTs and time saved for meter reading and the added value in direct communication with customers. The five routes totaled 905 accounts with the majority being residential customers. Since then, DWA has continued implementation of the Phase 1 Project by installing more than 5,000 ERTs by inhouse staff. Completion of the pilot and the Phase I projects have paved the way for DWA to implement the proposed Project that will be the final phase for converting all the meters to AMI system. DWA is ready to start as soon as the grant agreement is executed.

- *Describe any new policies or administrative actions required to implement the project.*

  No new policies are required to implement the Project. DWA board members are in full support of the Project.

- *Please also include an estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates. Milestones may include, but are not limited to, the following: complete environmental and cultural compliance, mobilization, begin construction/installation, construction/installation (50%), construction/installation (100% complete). Was the expected timeline for environmental and cultural compliance discussed with the local Reclamation Regional or Area Office?*

  The estimated Project schedule is in Table 5 below.

Table 5. Project Schedule

Phase	Phase Start	Phase Finish
Notice of Award		June 2023
Equipment Order and Delivery	July 2023	January 2024
Project Implementation	January 2024	April 2025
Project and Grant Closeout	May 2025	July 2025

Evaluation Criterion F-Collaboration (6 points)

Up to 6 points may be awarded for projects that promote and encourage collaboration among parties in a way that helps increase the sustainability of the water supply.

- *Please describe how the project promotes and encourages collaboration. Consider the following:*
- *Is there widespread support for the project? Please provide specific details regarding any support and/or partners involved in the project. What is the extent of their involvement in the process?*

  Groundwater basins do not follow jurisdictional boundaries, and most must be shared among several, if not many water agencies. Therefore, planning for their responsible use and ensuring current and long-term sustainability requires all stakeholder and umbrella agencies to work together and take part in the planning process. Therefore, DWA has a long history of very close coordination with agencies that share its water resources, as well as

with umbrella state agencies and wholesale water supply agencies. In the case of DWA, stakeholder agencies not only provide input on planning efforts, but the plans are developed jointly with them as one overarching document. For example, the 2020 RUWMP covers all six agencies that serve customers in the Coachella Valley (DWA, Coachella Valley Water District, Coachella Water Authority, Indio Water Authority, Mission Springs Water District and Myoma Dunes Mutual Water Company).

In addition, DWA is working on updating its groundwater sustainability plans (Indio Subbasin Alternative Plan Update and Mission Creek Subbasin Alternative Plan Update) as a joint effort with the member agencies. AMI technologies have proven to be an effective metering system for various water agencies. The partner water agencies mentioned above all have a stake in conserving water, which is what the Project achieves.

- *What is the significance of the collaboration/support?*

The significance of the collaboration is that the AMI Project would provide a step forward in contributing towards DWA's conservation goals. This AMI Project will result in an additional availability of approximately **561 AFY** of annual water supply that would otherwise be lost and unavailable to all the partner agencies and the region. These agencies have shared conservation goals which are increasingly important as the population and future use projections in the region continue to escalate. Increased collaboration between DWA and its customers will also demonstrate acknowledgement of this agency's progressive approach to increasing conservation through improved water management, leak identification and resolution, education, and customer service.

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

As it has been noted, DWA participates in local and regional water resource management efforts. Information sharing about the program, lessons learned, and success of the program to date provide the incentive and a road map for other agencies to start or follow similar conservation programs. Other water managers in the region including the CWA, CVWD, IWA, MSWD, and Valley Sanitary District (VSD) join DWA on various committees and have partnered in multiple initiatives. Each of these partner agencies has an interest in solving the problem of high-water use. By implementing the AMI project, DWA demonstrates its proactive approach in helping the region.

Additionally, DWA used data from other agencies, such as East Bay Municipal Utilities District, to calculate water savings associated with AMI related customer web portals to analyze the Projects feasibility. The data from EBMUD showed substantial water savings and therefore influenced DWA to move forward with the Project. It is likely that other agencies will react similarly to DWA's AMI Project.

- *Please attach any relevant supporting documents (e.g. letters of support or memorandum of understanding)*

  Please see Appendix A for Letters of Support for this Project.

Evaluation Criterion G-Additional Non-Federal Funding (4 points)

Up to 4 points may be awarded to proposals that provide non-Federal funding in excess of 50% of the project costs. State the percentage of non-federal funding provided using the following calculation: (Non-federal funding/ Total Project Costs)

DWA will be contributing 53.6% of the total Project costs ($576,769/$1,076,769) as part of this application In addition, DWA will be establishing a CEP with agency funds.

Table 6. Funding Match Amounts

Agency	Funding Provided	% of Total Costs
DWA	$576,769	53.6%
Reclamation	$500,000	46.4%

Evaluation Criterion H-Nexus to Reclamation (4 points)

Up to 4 points may be awarded if the proposed project is connected to a Reclamation project or Reclamation activity. No points will be awarded for proposals without connection to a Reclamation project or Reclamation activity.

Describe the nexus between the proposed project and a Reclamation project or Reclamation activity. Please consider:

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

  Yes, Reclamation is a critical partner in DWA's water management and conservation efforts. DWA transferred its water rights with Reclamation from the SWP to MWD in exchange for water from the Colorado River.

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

  DWA has water rights to 55,750 AFY of SWP water, in part through an exchange with MWD. This allocation is set to expire in 2035 and is contingent upon drought conditions in any given year meaning allocations can be curtailed if the SWP system cannot support it. However, there is no direct pipeline or aqueduct from the SWP to DWA. Therefore, DWA and neighboring CVWD have an agreement in place to exchange their SWP water with the MWD for Colorado River water, which comes through the Coachella Valley in an aqueduct. MWD is a holder of a Water Delivery Contract with Reclamation.

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

Yes, the Project will reduce the amount of groundwater pumped from the Coachella Valley Water Basin through improved leak detection and water management. This basin is home to several Reclamation Projects, including other WaterSMART projects.

- *Is the applicant a Tribe?*

  No, the applicant is not a Tribe.

Performance Measures

This Project is designed to increase water use efficiency and improve water management through the reduction of water waste resulting from leaks, breaks and inefficient water use. DWA will compile data to report on water savings as a direct result of project implementation.

Performance measures will consist of the following:

Performance Measure No. 1: Quantifiable Water Savings

DWA has existing records and annual reports of each of the Agency's water meters. The 4,463 water meters that will be replaced as part of the Project will be broken out for the year prior to implementation of the Project to determine the quantity of water used by these meters. One year after implementation of the Project, the quantity of water going through these meters will be compared to the prior quantity to validate the Project's water savings.

The results of this analysis will be summarized in a Final Project Report and submitted to Reclamation.

Performance Measure No. 2: Improved Water Management

The Final Project Report will also contain a section on Improved Water Management. This section will provide a qualitative description of all the of operational improvements such as remote meter readings, automatic billings, and leak detection and how these improvements afford opportunities for better overall water management.

SECTION 2: PROJECT BUDGET

Funding Plan and Letters of Commitment

The Project is a key Project for DWA as its implementation will finalize the Agency's AMI Project and provide DWA with improved water management and respective water conservation. There has been substantial expenditure to date to complete the Project plans and DWA is eager and committed to start and complete this project upon award of this grant funding.

As shown in the DWA Board Resolution approved on July 5, 2022, DWA is committed to providing the remaining matching fund towards construction necessary to complete this project immediately.

DWA will be providing the match funding with its own fiscal resources and no third-party funding will be required.

Budget Proposal

Table 7. Total Project Cost Summary

SOURCE	AMOUNT
Costs to be reimbursed with the requested Federal Funding	$500,000
Costs to be paid by the applicant	$576,769
Value of third-party contributions	$0
TOTAL PROJECT COST	**$1,076,769**

Table 8. Non-Federal and Federal Funding Sources Summary

FUNDING SOURCES	AMOUNT
Non-Federal Entities	
1. Desert Water Agency	$576,769
Non-Federal Subtotal	$576,769
REQUESTED RECLAMATION FUNDING	**$500,000**

Table 9. Budget Proposal

Budget Item	Computation		Quantity Type	Total Costs
	$/Unit	Quantity		
Salaries and Wages				
Project Manager (Garrett Nelson)	$ 53.21	416	Hour	$ 22,135
Fringe Benefits				
Project Manager (Garrett Nelson)	$ 11.25	416	Hour	$ 4,680
Travel				
N/A				
Equipment				
N/A				
Supplies/Materials				
N/A				
Contractual				
ERT				
50W Register and ERT	$ 171	22	Unit	$ 3,762
60W ERT	$ 96	2767	Unit	$ 265,632
60W Register and ERT	$ 171	1674	Unit	$ 286,254
Installation Labor	$ 13	4463	Unit	$ 58,019
Network Infrastructure				
CCU 100, Internal GPS/WAN Antenna, AC Powered	$ 7,349	6	Unit	$ 44,094
CCU 100, Internal GPS/WAN Antenna, DC Powered	$ 7,383	3	Unit	$ 22,149
Repeater 100, Internal GPS Antenna, AC Powered	$ 6,112	3	Unit	$ 18,336
Repeater 100, Internal GPS Antenna, DC Power, Sunwize Solar	$ 6,147	11	Unit	$ 67,617
Collector and Repeater Access Radio	$ 316	1	Unit	$ 316
Hardware				
Itron Mobile Radio 2 w/USB cable and charger	$ 2,095	2	Unit	$ 4,190
Carry Accessory, Shoulder and Belt Clip	$ 75	3	Unit	$ 225
Tax (7.75%)	$ 12,162	1	LS	$ 12,162
Itron Cloud Services				
Intial Setup	$ 28,159	1	LS	$ 28,159
Fixed Network Managed Services	$ 34,368	1	LS	$ 34,368
Professional Services	$ 204,671	1	LS	$ 204,671
Third-Party In-Kind Contributions				
N/A				
Other				
N/A				
TOTAL DIRECT COSTS				**$ 1,076,769**
Indirect Costs				
Reclamation Environmental Review				
TOTAL ESTIMATED PROJECT COSTS				**$ 1,076,769**

Budget Narrative

Salaries and Wages

Garrett Nelson, the Field Services Supervisor will be the project manager for this Project. It is anticipated that he will work 4 hours per week throughout the duration of the Project (416 hours total). His hourly rate is $53.21.

Fringe Benefits

Garett Nelson, the Field Services Supervisor will be the project manager for this Project. It is anticipated that he will work 416 hours on various tasks throughout the duration of the Project. His hourly fringe benefit rate is $11.25.

Travel

Not applicable.

Equipment

All equipment necessary for the implementation of the Project are included in the contractual/construction cost of this project.

Materials and Supplies

Not applicable.

Contractual

The contractual/construction expenses are the costs associated with purchasing and installing all 4,463 ERTs are listed as Equipment. The fixed network component has also been included in this section. The labor costs associated with installation of ERTs is assumed to be completed by DWA in-house personnel and has been allocated in the Salaries and Wages category.

Third-Party In-Kind Contributions

Not applicable.

Environmental and Regulatory Compliance Costs

The Project is anticipated to be Categorically Exempt from CEQA and NEPA environmental review. However, $1,000 has been allocated for Reclamation environmental review.

Other Expenses

Not applicable.

Indirect Costs

Not applicable.

SECTION 3: ENVIRONMENTAL AND CULTURAL RESOURCES AND COMPLIANCE

To allow Reclamation to assess the probable environmental and cultural resources impacts and costs associated with each application, all applicants must respond to the following list of questions focusing on NEPA, ESA, and NHPA requirements. Please answer the following questions to the best of your knowledge. If any question is not applicable to the project, please explain why. The application should include the answers to:

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

The Project involves the installation of ERTs on existing meters that are already CEQA and NEPA compliant. No earth disturbing work is required for implementation of the Project. Additionally, the internal evaluation of the Project has determined that the Project falls under CEQA Categorical Exemption. Therefore, no impact to the surrounding environment will occur.

- *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?*

The Project is categorically exempt meaning that no impact to endangered species or critical habitats exist within the Project site will occur.

- *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.*

The Project will install ERTs at existing privately owned or DWA owned properties. No impacts to wetlands or surface waters will occur.

- *When was the water delivery system constructed?*

DWA's water system began with the diversion of local creeks in the early 1920's.

- *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 Project involves the installation of ERTs on existing meters throughout DWA's service area. No irrigation features are a part of this Project and therefore no modifications will occur.

- *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.*

According to the National Park Service National Register of Historic Places online tool, no Historic Places are at or within a ½ mile radius of any of the meters(project sites).

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

There are no prehistoric or historic-archaeological resources that have been previously recorded within or near the Project sites.

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

Much of DWA overlaps with land of the Agua Caliente Tribe. However, the Project has support from this Tribe, as seen in Appendix A. Therefore, no access to Tribal lands will be negatively altered by the Project.

- *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 involves the installation of ERTs on existing meters. No earth disturbing activities will take place and therefore no vegetation will be removed or introduced at the Project sites and therefore no noxious weeds or non-native species will be spread.

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

No; the proposed project will NOT have a disproportionately high and adverse effect on low income or minority populations. In fact, the proposed project will have a **POSITIVE** effect on the local (and within the CVGB) population, including low income and minority populations. The local population will benefit from the energy efficiency and water savings that AMI implementation will bring. The more conservation, the less infrastructure DWA will have to build in the future, which will mean lower water rates in the long-term. In addition, the drought-stricken basin-wide population will benefit from the increased availability of water supply.

SECTION 4: REQUIRED PERMITS OR APPROVALS

No permits or approvals other than the contract approvals that have been noted in the schedule section are anticipated to be required for project implementation.

SECTION 5: OVERLAP OR DUPLICATION OF EFFORTS STATEMENT

DWA certifies that there is no overlap between the proposed Project or any other active or anticipated proposals or projects in terms of activities, costs, or commitment of key personnel. Additionally, DWA certifies that this proposal does not duplicate any proposal or project that has been submitted for funding consideration to any other potential funding sources.

SECTION 6: CONFLICT OF INTEREST DISCLOSURE

No actual or potential conflicts of interest associated with the implementation of this Project have been identified prior or during the time of submission of this application.

SECTION 7: UNIFORM AUDIT REPORTING STATEMENT

DWA acknowledges the requirement for a Single Audit report and has/will continue to comply with this requirement, if applicable.

SECTION 8: LETTERS OF SUPPORT AND LETTERS OF PARTNERSHIP

Please refer to Appendix A for project Letters of Support.

SECTION 9: OFFICIAL RESOLUTION

RESOLUTION NO. 1286

RESOLUTION OF THE BOARD OF DIRECTORS OF DESERT WATER AGENCY AUTHORIZING AND APPROVING SUBMISSION FOR A US BUREAU OF RECLAMATION WATER AND ENERGY EFFICIENCY GRANT FOR ADVANCED METERING INFRASTRUCTURE

WHEREAS, the Desert Water Agency was established by an Act of the California Legislature in 1961 as a public water management agency; and

WHEREAS, the Agency views water conservation investments as a critical strategy to meet future water needs; and

WHEREAS, working with members of our own community to achieve local water conservation gains is an ideal approach; and

WHEREAS, customers will have easy and quick access to water use and billing data. Case studies have shown that communities that upgrade to AMI systems can achieve water consumption savings of at least 15 percent, and

WHEREAS, AMI is the best available technology and also promotes operational efficiencies because once the program is fully developed, manual meter reading will not be necessary.

WHEREAS, Desert Water Agency intends to submit an application for five hundred thousand dollars in financial assistance from the United States Bureau of Reclamation through its WaterSMART Water and Energy Efficiency Grant program in fiscal year 2023; and

WHEREAS, the funding requested is for a phase of the Desert Water Agency Advanced Metering Infrastructure Program that includes the installation of radio transmitters at customer meters; and

WHEREAS, the U.S. Department of the Interior, Bureau of Reclamation, Policy and Administration requires Governing Body approval for submission of an application; and

WHEREAS, if successful, the Agency will use its own budgeted funds for the matching funds in the funding plan submitted with the application; and

WHEREAS, Desert Water Agency will work with the Bureau of Reclamation to meet established deadlines for entering into a cooperative agreement.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of Desert Water Agency hereby authorizes staff to sign and submit an application for grant funding through the United States Bureau of Reclamation's Water and Energy Efficiency Grant program and authorizes the General Manager, or his designee, to carry out the Agency's responsibilities under the grant agreement.

ADOPTED this 5th day of July, 2022.

Kristin Bloomer, President

ATTEST:

Joseph K. Stuart, Secretary-Treasurer

SECTION 11: PROOF OF SAM REGISTRATION

SECTION 12: APPENDICES

Appendix A: Letters of Support

Appendix B: 2020 Water Audit

APPENDIX A: LETTERS OF SUPPORT

City of Palm Springs
Justin Clifton
City Manager
3200 E. Tahquitz Canyon Way • Palm Springs, California 92262
Tel: (760) 322-8350 • Fax: (760) 323-8207 • Web: www.palmspringsca.gov

June 16, 2022

Bureau of Reclamation
Financial Assistance Operations
Attn: Mr. Josh German
P.O. Box 25007, MS 84-27815
Denver, CO 80225

RE: Request for Support for Desert Water Agency's Application to the US Bureau of Reclamation Water and Energy Efficiency Grant program for Fiscal Year 2023

Dear Mr. German:

On behalf of the City of Palm Springs, I am writing to express support for Desert Water Agency's Application to the US Bureau of Reclamation Water and Energy Efficiency Grant program for Fiscal Year 2023.

Desert Water Agency (DWA) serves approximately 75,000 residents in and around Palm Springs, which is a desert region located in Southern California. The City is working alongside the Agency on long-term sustainability solutions. DWA is implementing a water energy and efficiency project which will conserve water and allow flexibility in response to intermittent drought conditions in California.

This Advanced Metering Infrastructure (AMI) project aims to provide real-time information to track water customer demand and use to our city's residents. Interaction with this data will allow our residents to manage and monitor their water consumption and be more efficient with their water use.

This project, already underway with support from USBR, will help our region save water and energy while it helps condition locals to be more water wise. This is something the City strongly supports. We also see the financial benefits of water saving in lower water bills and deferring infrastructure and supply investments. This is critical because the City's median household income is nearly 30% below the statewide average.

I have no doubt this will have long-lasting benefits to people in the Palm Springs area. I respectfully ask for your support on Desert Water Agency's Application to the US Bureau of Reclamation Water and Energy Efficiency Grant program for Fiscal Year 2023. Thank you for your time and consideration.

Sincerely,

Justin Clifton, City Manager

Post Office Box 2743 • Palm Springs, California 92263-2743

July 12, 2022

Bureau of Reclamation
Financial Assistance Operations
Attn: Mr. Josh German
P.O. Box 25007, MS 84-27815
Denver, CO 80225

Subject: Request for Support for Desert Water Agency's Application to the US Bureau of Reclamation Water and Energy Efficiency Grant program for Fiscal Year 2023

Dear Mr. German:

As the Chief Planning Officer for the Agua Caliente Water Authority, I am writing in strong support of Desert Water Agency's Application to the US Bureau of Reclamation Water and Energy Efficiency Grant program for Fiscal Year 2023. Desert Water Agency (DWA) serves approximately 75,000 residents in and around Palm Springs, including a significant number of the over 500 Tribal Members that reside on or near the 31,500 acre Agua Caliente Indian Reservation. The Coachella Valley is a desert region located in Southern California, and DWA is implementing a water efficiency project to conserve water and allow flexibility in response to intermittent drought conditions in the State. The Agua Caliente Band of Cahuilla Indians have long been good stewards of water resources and a proponent for sustainable groundwater management in the Coachella Valley.

This Advanced Metering Infrastructure (AMI) project aims to provide real-time information to track water customer demand and use to Tribal Members and the broader Reservation community. Interaction with this data will enhance residents' ability to quickly detect and stop leaks, and give them daily information on water use so they can improve their efforts to conserve. This project will help our region save water and energy while providing residents with a greater understanding of efficient water use. AMI technology also yields financial benefits of water savings in lower water bills and deferring infrastructure and supply investments.

The project will have long-lasting benefits to the Reservation community. On behalf of the Agua Caliente Band of Cahuilla Indians, I respectfully ask for your support on Desert Water Agency's Application to the US Bureau of Reclamation Water and Energy Efficiency Grant program for Fiscal Year 2023. Thank you for your time and consideration.

Very truly yours,

Margaret Park

Margaret E. Park, AICP
Chief Planning Officer
AGUA CALIENTE WATER AUTHORITY

5401 Dinah Shore Drive
Palm Springs, Ca 92264

760.699.6800
aguacaliente-nsn.gov

Cathedral City

June 22, 2022

Bureau of Reclamation
Financial Assistance Operations
Attn: Mr. Josh German
P.O. Box 25007, MS 84-27815
Denver, CO 80225

RE: Request for Support for Desert Water Agency's Application to the US Bureau of Reclamation Water and Energy Efficiency Grant program for Fiscal Year 2023

Dear Mr. German:

On behalf of the City of Cathedral City, I am writing to express support for Desert Water Agency's Application to the US Bureau of Reclamation Water and Energy Efficiency Grant program for Fiscal Year 2023.

Desert Water Agency (DWA) serves approximately 75,000 residents in Cathedral City and surrounding areas, which is a desert region located in Southern California. The City is working alongside the Agency on long-term sustainability solutions. DWA is implementing a water energy and efficiency project which will conserve water and allow flexibility in response to intermittent drought conditions in California.

This Advanced Metering Infrastructure (AMI) project aims to provide real-time information to track water customer demand and use to our city's residents. Interaction with this data will allow our residents to manage and monitor their water consumption, and be more efficient with their water use.

This project, already underway with support from USBR, will help our region save water and energy while it helps condition locals to be more water wise. This is something the City strongly supports. We also see the financial benefits of water saving in lower water bills and deferring infrastructure and supply investments. This is critical because the City's median household income is about 35% below the statewide average.

I have no doubt this will have long-lasting benefits to people in the Palm Springs area. I respectfully ask for your support on Desert Water Agency's Application to the US Bureau of Reclamation Water and Energy Efficiency Grant program for Fiscal Year 2023. Thank you for your time and consideration.

Sincerely,

John A. Corella, P.E.
Director of Engineering/Public Works

APPENDIX B: 2020 WATER AUDIT

Please refer to DWA's 2018-2020 Water Audits.