WaterSMART Grants: Water and Energy Efficiency Grants for Fiscal Year 2024
(NOFO No. R24AS00052)

Coachella Valley Regional Conservation and Incentive Program, Inoperable Valve Replacement Project, and Meter Replacement Project

Submitted by:

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TITLE PAGE

Project Title: Coachella Valley Regional Conservation and Incentive Program, Inoperable Valve Replacement Project, and Meter Replacement Project

Applicant Name: Coachella Valley Water District

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TABLE OF CONTENTS

SECTION **PAGE NO.**

1. TECHNICAL PROPOSAL AND EVALUATION CRITERIA

1.1 Executive Summary

Date: February 22, 2024 **Applicant:** Coachella Valley Water District (CVWD)
City: Palm Desert **County:** Riverside **State:** California

Applicant Category: CVWD is a Category A applicant, a water district in California.

The Coachella Valley Regional Conservation and Incentive Program, Inoperable Valve Replacement Project, and Meter Replacement Project (Project) is a regional program that consists of multiple project components being implemented by CVWD, Coachella Water Authority (CWA), Desert Water Agency (DWA), Mission Springs Water District (MSWD), and Indio Water Authority (IWA). This multifaceted project will provide rebates for replacing turf with desert-friendly landscapes, replacing low-efficiency devices with high-efficiency devices, providing an evaporative cooler tune-up and changeout program, replacing inoperable valves, and replacing aging meters within CWA's service area. The Project will achieve water savings and provide improved operational efficiencies, energy savings, and multiple environmental benefits. The Coachella Valley relies on imported Colorado River water and groundwater pumped from the Coachella Valley Groundwater Basin. This Project will assist the Region's water purveyors in effectively managing groundwater by reducing demands and groundwater pumping. CVWD is applying on behalf of CWA, DWA, MSWD, and IWA to the WaterSMART Water and Energy Efficiency grant program for $5,000,000 under Funding Group III. The Project is estimated to result in water savings of 924 acre-feet per year of water (AFY) or a lifetime of savings of 11,916 acre-feet (AF) which will remain in the groundwater basin.

The length of time and estimated completion date for the proposed project.

The Project will begin July 2024 and be completed by December 2028.

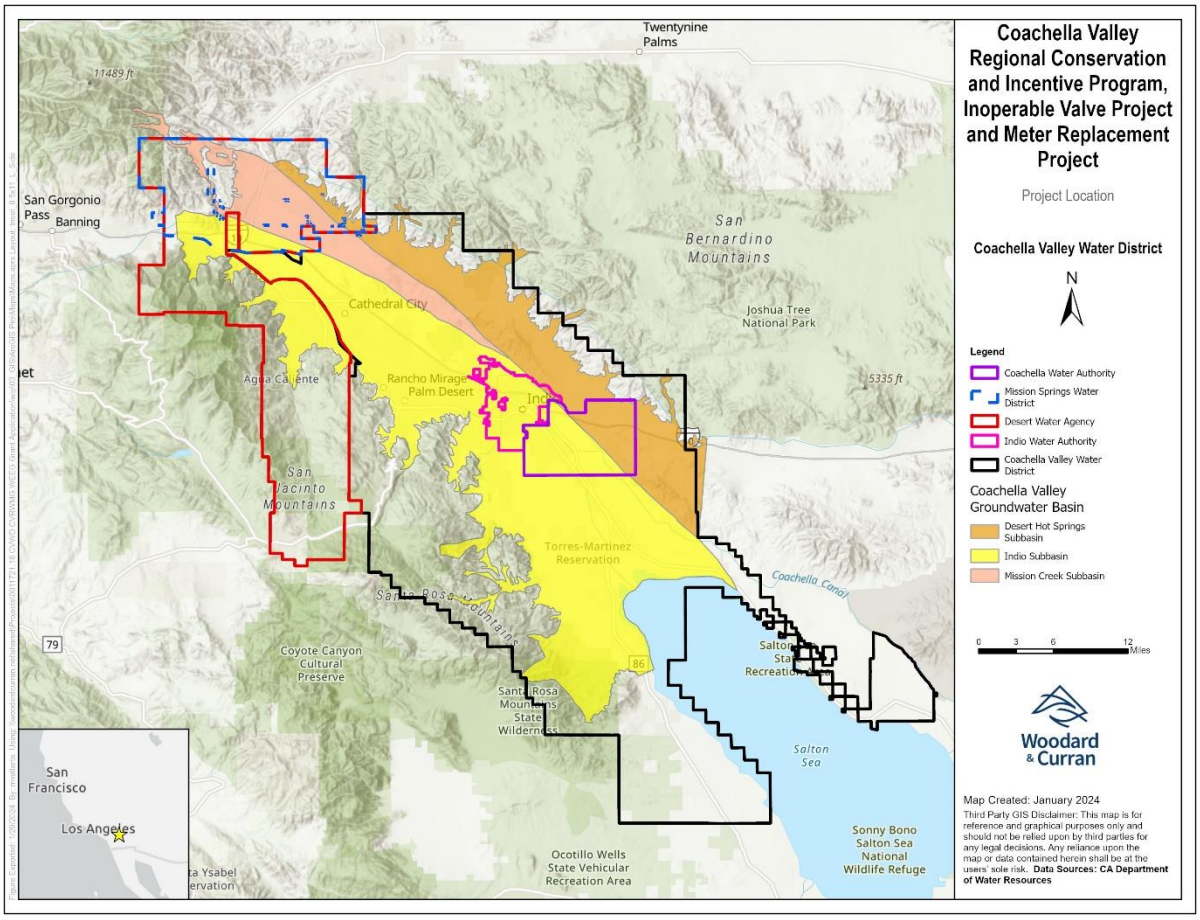
Whether or not the proposed project is located on a Federal facility.

The project is not located on a federal Facility.

1.2 Project Location

The Coachella Valley lies within the Whitewater River watershed, which is located within Riverside County, California in southern California as shown in Figure 1.

Figure 1: Project Map



1.3 Project Description

1.3.1 Background

CVWD, along with CWA, DWA, MSWD, IWA and Valley Sanitary District, is part of the Coachella Valley Regional Water Management Group (CVRWMG), which is a collaborative effort led by the five water purveyors and one wastewater agency of the Coachella Valley to implement an Integrated Regional Water Management Plan (IRWM). IRWM is a collaborative effort to identify and implement water management solutions on a regional scale that increase regional self-reliance, reduce conflict, and build water and climate resiliency. The CVRWMG's IRWM Region is located in central Riverside County.

The CVRWMG is located in the Colorado River Hydrologic Region as defined by the California Department of Water Resources (DWR). The Coachella Valley Climate is characterized by low precipitation and high summer daytime temperatures. Precipitation

typically occurs during the winter months with an annual mean rainfall ranging from 3 to 5.5 inches. The CVRWMG's boundaries fall within DWR's highest climate zone (18). Therefore, it takes more water to grow landscapes here than in any other portion of California.

1.3.2 Water Supplies

1.3.2.1 Coachella Valley Water District

CVWD has access to two sources of imported water: Colorado River and the State Water Project (SWP). CVWD receives Colorado River water through the Coachella Canal (Canal). This water is used for agricultural, golf course, and landscape irrigation purposes, as well as groundwater recharge (WSC 2021). Since there is no physical connection to convey SWP water to Coachella Valley, CVWD has entered into exchange agreements with the Metropolitan Water District of Southern California (MWD). CVWD receives water from MWD's Colorado River Aqueduct (CRA), and in exchange MWD receives SWP water. This water exchange is used for groundwater recharge. Groundwater is the principal source of municipal water supply in the Coachella Valley and CVWD obtains groundwater from the Indio and Mission Creek Subbasins. CVWD also provides recycled water from two water reclamation plants.

1.3.2.2 Coachella Water Authority

CWA produces all its water supplies from the Coachella Valley Groundwater Basin, specifically, the eastern portion of the Indio Subbasin (WSC 2021). The Indio Subbasin is regionally managed by CVWD, CWA, DWA, and IWA within their jurisdictional boundaries.

1.3.2.3 Desert Water Agency

DWA's main water supply sources include imported water, groundwater, and surface water. Colorado River water is exchanged for SWP water per the 2019 and prior Exchange Agreements among DWA, CVWD, and MWD. SWP water consists of DWA's apportionment of its Table A allocation, Article 21 surplus water allocation (when available), and other surplus water acquired and conveyed through the SWP (WSC 2021). DWA extracts groundwater from the Indio Subbasin and diverts water from creeks in the San Jacinto Mountains and Whitewater River (WSC 2021).

1.3.2.4 Indio Water Authority

Groundwater is IWA's sole source of water supply. Supplies for the City of Indio are primarily from the deep aquifer in the Indio Subbasin, which is the largest subbasin in the Coachella Valley Groundwater Basin (WSC 2021).

1.3.2.5 Mission Springs Water District

MSWD's currently receives 100% of its water supply from the Coachella Valley Groundwater Basin, primarily from the Mission Creek Subbasin (WSC 2021).

1.3.3 Project Description

The goal of the Project is to reduce water demand by offering rebates to support turf conversions, replace low-efficiency devices with high-efficiency devices, enhance the efficiency of evaporative coolers, replace inoperable valves, and replace meters with Advanced Metering Infrastructure (AMI). This project provides a multifaceted approach across three conservation areas, detailed in Tasks 1 through 4 below:

- Task 1 – Turf Conversions and Conservation Incentive Programs: This task consists of expanding CVWD and DWA turf removal programs to provide rebates to a variety of customers throughout Coachella Valley to replace high-water consuming turf with low-water-use desert-friendly landscaping. IWA will be offering turf removal and smart irrigation conversions through a direct install program in disadvantaged communities within its service area. In total, approximately 1,959,875 square feet of turf will be removed, resulting in 336 AFY of water savings. Water savings are subject to change given certain factors that impact program participation. DWA and MSWD will also provide rebates to replace old, inefficient water-use devices, such as toilets, and washing machines with new and efficient devices that can save water, energy, and money on water bills.
- Task 2 – Evaporative Cooler Tune-Up & Changeout Program: This task aims to enhance the efficiency and functionality of evaporative coolers. MSWD will provide regular tune-ups to optimize the performance of existing coolers and will provide a changeout aspect, providing opportunities for the replacement of outdated or inefficient evaporative coolers with more energy-efficient models. This program will be available to residential and commercial customers.
- Task 3 – Inoperable Valve Replacement: This task will replace 30 inoperable valves within CWA's service area. Certain areas of CWA's water system cannot be isolated due to inoperable valves when maintenance is required, and nearby fire hydrants are opened to reduce pressures. As a result, it is estimated that 193,359 gallons of potable water are wasted each year. Replacing inoperable valves will allow CWA staff to close portions of the system during maintenance, which will eliminate the need to open fire hydrants and reduce water waste.
- Task 4 – Meter Replacement: This task will replace approximately 5,000 Automated Meter Reading (AMR) meters with AMI meters. CWA's AMR meters are declining in accuracy and many of them are not registering consumption. By replacing the

AMR meters with AMI meters, it will enable CWA to measure customers' water usage accurately and increase the ability to detect water leaks. With access to real-time and accurate water usage data, customers will be encouraged to conserve water which will result in water savings.

Task 1 will be implemented by CVWD conservation staff, DWA conservation staff, IWA conservation staff, and MSWD conservation staff. IWA will administer Task 1 via a direct install program and will coordinate with a contractor to complete turf conversions and related efficient irrigation work. Task 2 will be administered by MSWD conservation staff.

The turf and conservation incentives applications will be reviewed and approved by CVWD, DWA, and MSWD. CVWD, DWA, and MSWD will also conduct pre- and post-visits to customer sites for turf installations, verification of successful project completion, customer support, and rebate check processing. This includes work to measure and report program progress and budgeted funds for materials and equipment necessary to implement conservation measures.

General terms and requirements for the turf and conservation incentive rebates are:

- Applicants must submit landscape plans for all areas to be converted from turf to drought tolerant landscaping. Plans must clearly show[1]:
    - Total project area with turf removal areas clearly identified
    - Proposed landscaping
    - Total estimated water savings
- Applicants must purchase eligible high-efficiency appliances and submit proof of purchase and installation[2]
- Rebates will be paid after the project has been completed and agencies have verified project implementation

IWA conservation staff will administer the Project through a direct install program and coordinate with the contractor to complete the turf conversion and related irrigation work. IWA will be reviewing eligible project does eligible project sites for direct install conversions, complete pre- and post-inspections, obtain customer permission to access property (if applicable), verify successful project completion, and provide customer support and payment processing to vendor(s).

[1] DWA does not require landscaping plans or estimated water savings calculations for its turf rebate program.
[2] DWA requires customers to submit a photo of the installed high-efficiency washer and proof of purchase.

General terms and requirements for IWA's direct install program are:

- Property owner must complete the applicable right-of-entry waiver form prior to IWA commencing work.
- Property owner must agree to pre- and post-inspections to verify project completion.
- Property owner must give the contractor or vendor access to the property for the purpose of removing turf and/or installing irrigation controllers.

Tasks 3 and 4 will be administered by City of Coachella/CWA Utilities Department. CWA will use grant funds to purchase the materials necessary for the inoperable valve and meter replacements.

1.4 Evaluation Criteria

1.4.1 Evaluation Criterion A—Quantifiable Water Savings (25 points)

Up to 25 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.

Task 1 – Turf Conversions and Conservation Incentive Program

Task 1 is estimated to convert 1,959,875 square feet (45 acres) of turf to desert-friendly landscapes. Irrigation savings associated with turf removal are estimated to be 55.8 gallons per year per square feet of turf based on the 2005 Southern Nevada Water Authority (SNWA) Xeriscape Conversion Study. Therefore, 1,959,875 square feet of turf removal will result in an estimated water savings of 109,361,025 gallons per year or 336 acre-feet per year (AFY). Based on previous turf conversions, the CVRWMG agencies have determined that turf conversions have a life span of 15 years. Therefore, the Project would have a lifetime savings of 5,034 AF.

ENERGY STAR® estimates that the "average American family washes 300 loads of laundry per year." The Alliance for Water Efficiency estimates that tradtional washers use 29 to 45

gallons per load and that ENERGY STAR® certified high-efficiency washers use 15 to 30 gallons per load. Using the midpoint of these two ranges, replacing a washer saves approximately 14.5 gallons per load. Assuming 300 loads per year year, the savings per washing machine replaced is 4,350 gallons per year. Estimating approximately 444 washing machines would be replaced, the Project will save 1,930,571 gallons per year or 6 AFY. The average lifespan of washing machines are 10 years (www.cnet.com). Using that average, the Project would have a lifetime savings of 60 AF.

ENERGY STAR® estimates a high-efficiency dishwasher could save approximatley 3,850 gallons of water throughout its lifetime (10 years). Estimating that 30 dishwashers would be replaced, the Project will save about 115,500 gallons or 0.35 AF throughout the lifetime of dishwashers or 0.04 AFY annually.

New WaterSense toilets use 1.28 gallons per flush. The toilets to be replaced will range from 1.6 to 3.5 or greater gallons per flush. Per Table ES.3 of the Water Research Foundation's Residential End Uses of Water Version 2 (PDF Report #4309b), the average household flushes a toilet 13 times per day. Assuming that that the program will replace an average of two toilets per household at 6.5 flushes per day, the water savings will range from approximately 760 to 5,300 gallons per year per toilet. Assuming that half of the estimated 364 toilets to be replaced have a gallons per flush of 1.6 and the other half have a gallons per flush of 3.5, the annual water savings is approximately 1.1 million gallons or 3.4 AFY. Assuming that toilets have a 20 year life, the water savings over the life of the project is 67 AF based on the Equipment Expected Useful Life – Energy Audits and Improvements for Commericial Buildings report by John Wiley & Sons, Inc. (https://onlinelibrary.wiley.com/doi/pdf/10.1002/9781119174851.app17)

Smart irrigation controllers are controllers that reduce outdoor water use by monitoring and using information about site conditions and applying the right amount of water based on those factors. There are two types of Smart irrigation controllers: weather-based irrigation controllers (WBICs) and soil moisture-based irrigation controllers. The U.S. EPA estimates that a WBIC can save the average home nearly 7,600 gallons of water annually, while soil moisture-based irrigation controllers can save the average home about 15,000 gallons annually. Assuming half of the 259 irrigation controllers would be WBIC and the other half would be soil mositure-based, water savings would be 2,962,700 gallons annually or 9 AFY. Assuming that smart irrigation controllers have a lifespan of 10 years, the Project would have a lifetime savings of 90 AF.

Task 2 – Evaporative Cooler Tune-Up & Changeout Program:

Evaporative coolers are a type of air conditioner that cool homes and industrial facilities in an energy-efficient manner by evaporating water. It is estimated that evaporative

coolers used 183,523,434 gallons (563 AF) of water in 2022 in MSWD. By replacing coolers with high-efficiency models without "bleed off" and properly maintaining coolers, approximately 61,939,160 gallons (190 AF) of water can be conserved. This is a 33% water savings. The water usage and savings calculations are detailed in Section 3. Assuming that the lifespan of a evaporative cooler is 5 years, the Project would save 950 AF (www.thekuuleeffect.com).

Task 3 – Inoperable Valve Replacement

It is estimated that 1-2 hydrants are opened five to six times a year for 30 to 45 minutes at a time with a flow rate of 625 gallons per minute. In total, this wastes approximately 193,359 gallons of water each year. However, that number is increasing as the system ages and experiences more leaks. The Project will replace 30 inoperable valves across the public water system, which will allow CWA staff to close off portions of the system without having to open hydrants. By using valves instead of opening hydrants, it is estimated that CWA will save 193,359 gallons or 0.59 AFY of potable water throughout its service area each year for the life of the valves (50 years), totaling a lifetime savings of 30 AFY.

Task 4 – Meter Replacement

Water meters wear out over time, which affects the accuracy of measuring water usage. Replacing meters will restore the measuring accuracy of consumer demands. CWA's customers will be able to access real-time water usage data via the online software Harmony and Microsoft Azure or a similar software program. The ability to provide usage data to customers is important for managing their consumption and the cost of their bill. Additionally, the collection of data will allow customer service representatives to do meter interrogations on their desktop and inform customers of usage periods. Further, the software collecting the data will use built-in analytics to identify homes with leaks, which will lead to more water savings. This real-time water usage data will assist customers in understanding their water usage patterns. CWA anticipates that by providing its customers with accurate water usage data, the customers will be encouraged to change their water usage behaviors, reducing their water usage. These self-imposed water usage habit changes will result in a 5% water savings throughout CWA's service area based on estimates from a WaterSmart dashboard software. In Calendar Year (CY) 2022, CWA supplied 7,571 AFY of water. Using the 5% water savings estimate, the Project will save CWA approximately 379 AFY of water per year for 15 years, totaling a lifetime savings of 5,685 AFY.

Table 1: Water Savings

Task	Water Savings (AFY)	Lifetime Savings (AF)
Task 1 – Turf Conversions and Conservation Incentive Program	336	5,251
Task 2 – Evaporative Cooler Tune-Up & Changeout Program	190	950
Task 3 – Inoperable Valve Replacement	0.59	30
Task 4 – Meter Replacement	379	5,685
Total	**924**	**11,916**

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

Current losses are lost evapotranspiration from surface soil in the hot and arid climate of the Coachella Valley. Other current losses seep into the ground from system leaks. If the leak is at a non-permeable surface, losses may eventually flow to the storm drain.

    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?***

Current losses are generally not being used because they are largely lost to evapotranspiration. A smaller portion of the losses may seep into the soil and ultimately percolate into the groundwater aquifer.

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

There are no known benefits associated with the current losses. Much of the loss is to evapotranspiration. While a small percentage of irrigation water can return through percolation into the groundwater, this volume of recharge is minimal and does not provide a benefit relative to other groundwater management activities including reductions in pumping through conservation.

3) 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, note: 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.

Task 1: Turf Conversions and Conservation Incentive Programs: Irrigation savings related to turf conversion were estimated from the Xeriscape Conversion Study (Southern Nevada Water Authority, 2005) which estimated an average water savings of 55.8 gallons per square foot per year. In previous analysis, DWA indicated a savings of 56.2 gallons per square foot per year. However, estimates from the Xeriscape Conversion Study were used for a conservative estimate. Each agency allocates a different amount of rebate and funding towards turf conversion rebates, summarized in Table 2. Note that IWA is offering turf removal through a direct install program. For purposes of the calculation, it is assumed that approximately 120,292 square feet of turf will be removed in IWA's service area. This assumption is based on previous direct install program participation and the preliminary costs of hiring a contractor for turf removal.

The total water savings is 336 AF per year. Table 2 summarizes the assumptions and calculations of water savings.

Table 2: Turf Conversion Calculations

	CVWD	DWA	IWA[5]
Rebate ($/sq ft)	4	3	N/A
Grant ($)	$1,492,500	$1,640,000	$180,438
Match ($)	$1,492,500	$1,640,000	$180,438
Irrigation Savings (gallons/year/sq ft)[1]	55.8	55.8	55.8
Turf Removed (sq ft)[2]	746,250	1,093,333	120,292
Total Water Savings (gallons)[3]	41,640,750	61,007,981	6,712,275
Total Water Savings (AFY)[4]	128	187	21
Total Water Savings (AFY)	**336**		

[1]*Xeriscape Conversion Study (Southern Nevada Water Authority, 2005)*

[2]*Total funding (grant + match) divided by the rebate*

[3]*Area of turf removed multiplied by the irrigation savings*

[4]*Water savings in gallons divided by 325,851 gallons per AF*

[5]*IWA will be removing turf through a direct install program.*

Water savings from installing high-efficiency washing machines were based on estimates from ENERGY STAR® and the Alliance for Water Efficiency. ENERGY STAR® estimates that the average American family washes 300 loads of laundry per year and the Alliance for Water Efficiency estimates that traditional washing machines use 29 to 45 gallons per load, while ENERGY STAR® certified high-efficiency washing machines use 15 to 30 gallons per load. Taking the midpoint of these ranges, installing high-efficiency washing machines would save about 14.5 gallons per load. Based on the average of 300 loads per year, the water savings per washing machine replaced amounts to 4,350 gallons annually. Assuming that the Project will replace 444 washing machines, the Project is anticipated to save 1,930,571 gallons per year or 6 AFY.

Water savings from high-efficiency dishwashers are based on estimates from ENERGY STAR®, which estimates that high-efficiency dishwashers could save approximately 3,850 gallons of water through its lifetime of 10 years or 385 gallons annually. Estimating that about 30 dishwashers would be replaced, the Project will save about 11,550 gallons annually (0.04 AFY) or 115,500 gallons (0.35 AFY) of water throughout the lifetime of dishwashers.

Based on an estimate from the U.S. EPA, WaterSense toilets use about 1.28 gallons per flush. Older toilets are assumed to use between 1.6 to 3.5 gallons per flush. Per the Water Research Foundation's Residential End Uses of Water Version 2 report, the average household flushes a toilet 13 times per day. Assuming that the Project will replace an average of two toilets per household at 6.5 flushes per day, the water savings will range from approximately 760 to 5,300 gallons per year per toilet. Under the assumption that half of the 364 toilets slated for replacement have a flush volume of 1.6 gallons and the remaining half at 3.5 gallons, the projected annual water savings would be 1.1 million gallons or 3.4 AFY.

Water savings from Smart irrigation controllers are based on estimates from the U.S. EPA. The U.S. EPA estimates that WBICs can save the average household 7,600 gallons (EPA – WBIC) and soil-moisture based irrigation controllers can save the average household 15,000 gallons (EPA-Soil-Moisture Based). Assuming that about half of the 259 irrigation controllers installed would be WBIC and the other half would be soil-moisture based, the Project would save approximately 2,962,700 gallons or 9 AFY.

The total water savings from installing water efficient devices is 20 AFY and is summarized

in Table 3 below.

Table 3: Water Efficient Devices Savings

Water Efficient Devices	Water Savings (AFY)
Washing Machines	6
Dishwashers	0.04
Toilets	3.4
Irrigation Controllers	9
Total	**18**

Task 2: Evaporative Cooler Tune-Up & Changeout Program: There are two primary steps to calculating water savings from evaporative cooler tune-up and changeouts. The first step is to calculate the total water usage from evaporative coolers in the program region (MSWD). The total water usage is a function of (a) unit size, (b) count of coolers, and (c) the weather/usage time.

A) The unit size, in cubic feet per minute, is calculated as follows:

$$Unit\ size\ (cfm) = Total\ house\ area\ (ft^2) * ceiling\ height\ (ft) * \frac{air\ exchanges\ (per\ hour)}{60\ minutes/hour}$$

$$Unit\ size\ (cfm) = 1{,}548\ ft^2 * 8\ ft * \frac{30\ exchanges\ per\ hour}{60\ minutes/hour}$$

$$Unit\ size\ (cfm) = 6{,}192\ ft^3/m$$

The average home square footage was based on a 2023 closed home sales report that included 361 homes sold in Desert Hot Springs between January 1, 2023, through December 29, 2023. The Department of Energy indicates an average of 30 exchanges per hour.

B) The count of coolers employed Google Earth aerial imagery to estimate the amount of rooftop-mounted coolers. 50 blocks within Desert Hot Springs were randomly selected for a count of houses and suspected evaporative coolers. Approximately 18.8% of homes had rooftop-mounted evaporative coolers. Evaporative cooler data does not include window, wall, or ground-mounted evaporative coolers due to Google Earth imagery limitations and is therefore considered to be a conservative estimate.

C) Usage time was based on Remote Automatic Weather Stations (RAWS) weather data was obtained from the MesoWest cooperative project (MesoWest Data (utah.edu)) utilizing the Palm Springs Regional Airport station (Station ID: KPSP) for the 2022 calendar

year. The weather includes the hourly air temperature (°F) and relative humidity.

These three pieces of information were input into the Evaporative Cooler Water Use Calculation Excel spreadsheet that DWR provided in the Water Use Objective Interim Reporting Packet on the WUE Portal. The Excel spreadsheet utilizes the following formula to calculate the water usage:

$$= IF(F5 < 72, 0, 60 * CFM * (1/3.79) * (Hum\_rat((F5 - 32) * 5/9 - Eff * ((F5 - 32) * 5/9 - Wet\_bulb((F5 - 32) * 5/9, G5/100, P)), Wet\_bulb((F5 - 32) * 5/9, G5/100, P), P) - Hum\_rat((F5 - 32) * 5/9, Wet\_bulb((F5 - 32) * 5/9, G5/100, P), P)) * (1/35.3147) * Dry\_Air\_Density(P, (F5 - 32) * 5/9, Hum\_rat((F5 - 32) * 5/9 - Eff * ((F5 - 32) * 5/9 - Wet\_bulb((F5 - 32) * 5/9, G5/100, P)), Wet\_bulb((F5 - 32) * 5/9, G5/100, P), P)))$$

Combined, the total water usage of evaporative coolers in MSWD is 183,523,434 gallons, or 563 AFY.

The second step is to calculate the amount of water savings. Water savings is a function of (a) the count of inefficient models and (b) the percent of water savings by upgrading to a new model or optimally maintaining the water cooler. In addition to the water used by evaporation, some evaporative coolers flush the buildup in the system, a process known as "bleed off." Systems with bleed off increase water consumption by 50 percent (Karpiscak et al. 1998). It is assumed that roughly 50 percent of water systems include bleed off based on the same study. Therefore, if there are 13,144 homes in MSWD and 18.8 percent of homes use evaporative coolers and 50 percent of the evaporative coolers have bleed off, there are 1,236 homes with bleed off. That is 91,761,700 gallons of water annually. A changeout and replacement program would reduce the water consumption by 50 percent, resulting in water savings of 45,880,900 gallons per year, or 141 AF.

Task 3: Inoperable Valve Replacement: Water savings related to replacing inoperable valves were estimated by CWA staff based on the number of times hydrants are opened during maintenance activities. It is estimated that 1-2 hydrants are opened five to six times a year for 30 to 45 minutes at a time with a flow rate of 625 gallons per minute. In total, this wastes about 193,359 gallons of water per year or 0.59 AFY. By replacing valves across CWA's system, it will allow staff to close off portions of the system without having to open hydrants, and thus resulting in a water savings of 193,359 gallons of water per year of 0.59 AFY.

Task 4: Meter Replacement: Water savings related to replacing AMR meters with AMI meters are based on a 5% water use reduction based on the "Evaluation of East Bay Municipal Utility District's Pilot of WaterSMART Home Water Reports (2013)." In CY 2022, CWA supplied 7,571 AFY of water. Using the 5% water savings estimate, the Project will

save about 379 AFY of water per year.

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

(1) Canal Lining/Piping: Canal lining/piping projects can provide water savings when irrigation delivery systems experience significant losses due to canal seepage. Applicants proposing lining/piping projects should address:

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

b. How have average annual canal seepage losses been determined? Have ponding and/or inflow/outflow tests been conducted to determine seepage rates under varying conditions? If so, please provide detailed descriptions of testing methods and all results. If not, please provide an explanation of the method(s) used to calculate seepage losses. All estimates should be supported with multiple sets of data/measurements from representative sections of canals.

c. What are the expected post-project seepage/leakage losses and how were these estimates determined (e.g., can data specific to the type of material being used in the project be provided)?

d. What are the anticipated annual transit loss reductions in terms of acre-feet per mile for the overall project and for each section of canal included in the project?

e. How will actual canal loss seepage reductions be verified?

f. Include a detailed description of the materials being used.

Not applicable as the Project is not a canal lining/piping project.

(2) Municipal Metering: Municipal metering projects can provide water savings when individual user meters are installed where none exist to allow for unit or tiered 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 from the project been determined? Please provide all relevant calculations, assumptions, and supporting data.

Only Task 4 involves the installation of AMI meters, which will be administered by CWA.

By replacing AMR meters with AMI meters, CWA's customers will be able to access real-time water usage data via the online software Harmony and Microsoft Azure or a similar software program. CWA anticipates that by providing its customers with real-time water data, customers would be able to understand their water usage patterns and encourage them to implement more efficient water usage patterns. CWA estimates that water usage habit changes would result in a 5% water savings throughout CWA's service area based on estimates from a WaterSMART dashboard and regional studies (citation?). In CY 2022, CWA supplied approximately 7,571 AFY of water. A 5% savings based on water usage from 2022 would result in a 379 AFY of water savings, which is enough for 758 homes, assuming each home uses 0.5 AFY of water.

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

AMI meters play an important role in reducing losses by incorporating real-time monitoring and early detection mechanisms. The real-time monitoring capabilities of AMI meters will allow utilities to swiftly detect and address leaks in the distribution system, minimizing water losses. Water losses can include "apparent losses," which are due to meter inaccuracies, and "real losses," which are the physical losses of water from the system through leakage and tank overflows. An AMI system can help mitigate the impacts of both apparent and real water losses. CWA utilizes the AWWA Free Water Audit Software: Worksheet to determine water losses in its water system. In CY 2022, CWA determined that water losses were approximately 581 AFY. Irregular changes in water use will be detected by the upgraded AMI system, identifying leaks, and triggering early response to fix leaks with as little water loss as possible.

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.

The Behavioralist and AWWA's "Increasing consumer benefits & engagement in AMI-based conservation programs – Guidebook for practitioners" report (2022) showed an average decrease in daily residential water usage between 6.3 and 12.1% when using AMI. "Evaluation of East Bay Municipal Utility District's Pilot of WaterSMART Home Water Reports" (2013) found an average 5% water use reduction as a result of customers receiving home water reports from AMI data. This estimate may be a conservative estimate as it does not account for water savings resulting from AMI leak alerts.

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

CWA will install 5,000 AMI meters. The AMI meters are anticipated to be manufactured by Master Meter, and the model type will be Allegro ¾. It is anticipated that more than 90% of the AMI meters will be ¾.

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

Following Project completion, CWA will compare the water usage and assess changes in actual consumption before and after installation. Upon obtaining the requested funding, CWA plans to launch an outreach program to promote AMI meters and to encourage water savings. Additionally, CWA will analyze pre- and post-Project water loss data through water loss calculations using the AWWA Method.

(3) Irrigation Flow Measurement: Irrigation flow measurement improvements can provide water savings when improved measurement accuracy results in reduced spills and over- deliveries to irrigators.

Not applicable to the Project.

(4) Turf Removal: Applicants proposing turf removal projects should address:

a. How have average annual water savings estimates been determined? Please provide all relevant calculations, assumptions, and supporting data.

Irrigation savings related to turf conversion were estimated from the Xeriscape Conversion Study (Southern Nevada Water Authority, 2005) which estimated an average water savings of 55.8 gallons per square foot per year. The Xeriscape Conversion Study was used due to Nevada's comparable arid desert climate. Nevada experiences arid conditions with low annual precipitation (University of Nevada, Reno n.d), which is similar to the Coachella Valley. The average water savings per square foot was multiplied by the total area of turf conversion, as described in Question 3 above.

a. What is the total surface area of turf to be removed and what is the estimated average annual turf consumptive use rate per unit area?

An estimated total of 1,959,875 square feet (44acres) of high-water use turf would be removed as a result of this Project. The estimated average annual turf consumptive use rate per unit area is estimated as 55.8 gallons per square foot (7.46 AF/acre). In total, the turf removal element of this Project would result in water savings of 336 AFY as described in the answer to question 3 above.

b. Was historical water consumption data evaluated to estimate average annual turf consumptive use per unit area? If so, did the evaluation include a weather adjustment component?

The Southern Nevada Water Authority Xeriscape Conversion Study gathered monthly consumption records for at least five years. The parcels in the study have a similar climate to locations in the Coachella Valley, so no weather adjustment was made. Recently, the

CVRWMG agencies have initiated a Regional Conservation Study to quantify turf replacement program water savings in the region. The study is ongoing, but preliminary findings indicate that grass removal projects yield a mean reduction of 15.5% in measured water consumption across all commercial, industrial, institutional and multi-family sectors.

c. Will site audits be performed before applicants are accepted into the program?

Site audits will be performed before applicants are accepted into the rebate program. CVWD, DWA, and IWA staff will verify there is living turf and an operating irrigation system in the location to be converted. The total area (in square feet) that will be converted from turf to waterwise landscaping will be measured. Conservation staff have established a detailed pre-approval inspection process that will allow water savings comparisons to be made when the turf conversion has occurred.

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

In order to verify the water savings, water use data will be compared pre- and post-project implementation. Post-inspection is a standard part of the verification process for all agencies. Additionally, IWA will be utilizing a direct install approach, so turf conversion can be monitored by staff. Therefore, local data will be available to verify water savings after implementation takes place.

(5) Smart Irrigation Controllers, Controllers with Rain Sensor Shutoff, Drip Irrigation, and High-Efficiency Nozzles: Applicants proposing smart irrigation controllers, controllers with rain sensor shutoff, drip irrigation, or high-efficiency nozzle projects should address:

a. How have average annual water savings estimates been determined? Please provide all relevant calculations, assumptions, and supporting data.

As mentioned in Question 1, water savings from Smart irrigation controllers are based on estimates from the U.S. EPA. The U.S. EPA estimates that WBICs can save the average household 7,600 gallons annually (EPA – WBIC) and soil-moisture based irrigation controllers can save the average household 15,000 gallons annually (EPA-Soil-Moisture Based). Assuming that about half of the 259 irrigation controllers installed would be WBIC and the other half would be soil-moisture based, the Project would save approximately 2,962,700 gallons or 9 AFY.

b. Was historical water consumption data evaluated to estimate the percent reduction in water demand per unit area of irrigated landscape? If so, did the evaluation include a weather adjustment component?

Historical water consumption data was not evaluated to estimate the percent reduction in water demand per unit area of irrigated landscape. The evaluations described in the section above do not include a weather adjustment component.

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

It is estimated that 259 irrigation controllers manufactured by Hunter Industries will be installed. However, the quantity, type, and model of devices may change depending on availability of the model.

d. Will the devices be installed through a rebate or direct-install program?

Devices will be installed through a direct install program.

e. Will site audits be performed before and after installation?

Yes, there will be a pre-inspection of sites with existing irrigation and then post-inspection after completion.

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

Actual water savings will be verified upon completion of the Project through review of water usage comparison before and after the direct install program.

(6) High-Efficiency Indoor Appliances and Fixtures: Installing high- efficiency indoor appliances and fixtures can provide water savings for municipal water entities where there is significant potential for replacing existing non-efficient indoor appliances and fixtures. Applicants proposing high-efficiency indoor appliance and fixtures projects should address:

a. How have average annual water savings estimates been determined? Please provide all relevant calculations, assumptions, and supporting data.

Estimated water savings from washing machines were estimated based on information found on the ENERGY STAR® website (https://www.energystar.gov) and the Alliance for Water Efficiency (https://www.allianceforwaterefficiency.org/). Estimated dishwater savings were estimated based on information found on the ENERGY STAR® website (https://www.energystar.gov). Estimated water savings for toilets were estimated from the Water Research Foundation's residential End Uses of Water Version 2 Report, United Stated Environmental Protection Agency's Residential Toilets webpage (https://www.epa.gov/watersense/residential-toilets), and Equipment Expected Useful Life – Energy Audits and Improvements for Commericial Buildings report by John Wiley & Sons, Inc. Water savings estimates for washing machines, dishwashers, and toilets were explained in Question 1 under Evaluation Criterion A.

b. What types (clothes washers, shower heads, etc.) of appliances and fixtures will be installed and what quantity of each?

The Project will install high-efficiency washing machines, dishwashers, and toilets. It is anticipated that approximately 444 ENERGY STAR® washing machines, 30 ENERGY STAR®dishwashers, and 364 WaterSense toilets would be installed. Depending on

availability and inflation, the total number of washing machines, dishwashers, and toilets is subject to change.

c. Have studies been conducted to verify the existence of non-efficient appliances and fixtures? Provide published water savings rates for each of these devices and reference the source for each of the device savings rates.

Studies have not been conducted to verify the existence of non-efficient appliances and fixtures. However, there is a demand for conservation incentive programs throughout Coachella Valley as evident in the several programs that the CVRWMG agencies have implemented in the past. Those programs have been completed once grant funds have been exhausted. As mentioned under Question 1 in Evaluation Criteria A, ENERGY STAR® estimates high-efficiency washers use 15 to 30 gallons per load. Assuming 300 loads per year, the savings per washing machine replaced is 4,350 gallons per year. ENERGY STAR® also estimates that a high-efficiency dishwasher could save approximately 3,850 gallons of water throughout its lifetime, which is 10 years. The U.S. EPA has estimated that WaterSense toilets use about 1.28 gallons per flush. Calculations of the total water savings were explained in Question 1 under Evaluation Criteria A.

d. Will the devices be installed through rebate or direct-install programs?

DWA will provide the installation of washing machines through rebate. MSWD will provide installation of devices through a mixture of rebates and direct install programs.

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

Verification of potential water savings is intended upon completion of the Project through a review of water usage data prior and after the program completion. Outcomes may be subject to change depending on various factors, such as shifts in user behavior and the performance of the high-efficiency appliances.

(7) Commercial Cooling Systems: Cooling towers are components of many refrigeration systems with many applications. They dissipate heat to the atmosphere through the evaporative process and are common in manufacturing processes where cooling is required. They are also used for cooling large commercial buildings. Cooling tower structures vary in size, design, and efficiency. Regardless, all cooling towers consume large volumes of water and energy.

Open-circuit or direct contact are the most common types of cooling towers. Water is supplied to the tower after gathering heat and then released in the upper tower levels. A fan near the base of the tower creates upward airflow. Closed-circuit towers are more efficient and closed-circuit towers with adiabatic cooling are more efficient yet.

Water and energy savings can be achieved by replacing or retrofitting older low efficiency cooling towers. Applicants proposing cooling system projects

should address:

a. How have average annual water savings estimates been determined? Please provide all relevant calculations, assumptions, and supporting data.

Average annual water savings have been calculated by, first, determining the total water usage from evaporative coolers in MSWD (563 AF) and, second, estimating the unit water savings (50%) and count of inefficient water coolers (1,236). Detailed calculations are included in Question 3 above.

a. Was historical water consumption data evaluated to estimate the percent reduction in water demand?

There are no meters in the Project area dedicated to monitoring water usage solely for evaporative coolers, but instead meters measure use from entire homes or businesses. The Karpiscak study, utilizing consumption data, monitored evaporative cooler water measures from 1993 to 1994 to calculate water savings.

b. Specify type (manufacturer and model) of cooling tower system to be installed and/or provide a detailed description of the system retrofit plan.

The retrofit plan will involve residential and commercial site visits. Contractors will inspect the evaporative coolers to check for leaks, examine the float arm, and clear mineral and sediment buildup to reduce TDS concentration and improve cooling efficiency. If the evaporative cooler includes "bleed out," then the evaporative cooler would be retrofitted to operate without bleed out. High-water consumption models will be replaced with newer, water efficient models.

Note: An agreement will not be awarded for an improvement to conserve irrigation water unless the applicant agrees to the terms of P.L. 111-11 § 9504(a)(3)(B) (see Section F.2.7 Requirements for Agricultural Operations under P.L. 111-11 §9504(a)(3)(B).

1.4.2 Evaluation Criterion B- Renewable Energy (20 Points)

Up to 20 points may be awarded based on the extent to which the project increases the use of renewable energy or otherwise results in increased energy efficiency and reduced greenhouse gas emissions.

For projects that include constructing or installing renewable energy components, please respond to Subcriterion B.1: Implementing Renewable Energy Projects Related to Water Management and Delivery. If the project does not implement a renewable energy project but will increase energy efficiency, please respond to Subcriterion B.2. Increasing Energy Efficiency in Water Management. If the project has separate components that will result in both implementing a renewable energy project and increasing energy efficiency, an applicant may respond to both.

Note: An applicant may receive points under both Subcriterion B.1 and B.2 if the project consists of an energy efficiency component separate from the renewable energy component of the project. However, an applicant may receive no more than 20 points total under both Subcriterion B.1 and B.2.

Not applicable. The Project does not have a renewable energy component. This Project increases energy efficiency through water conservation improvements that result in reduced energy use for pumping groundwater, so Subcriterion B.2 is addressed. Additionally, the Project enhances energy efficiency by incorporating energy-efficiency appliances and eliminating the need to drive to collect water usage data from AMR meters.

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

Up to 20 points may be awarded for projects that are installing new renewable energy capacity.

Describe the amount of energy capacity. For projects that implement renewable energy systems, state the estimated amount of capacity (in kilowatts) of the system. Please provide sufficient detail supporting the stated estimate, including all calculations in support of the estimate.

Describe the amount of energy generated. For projects that implement renewable energy systems, state the estimated amount of energy that the system will generate (in kilowatt hours per year). Please provide sufficient detail supporting the stated estimate, including all calculations in support of the estimate. Please explain how the power generated as a result of this project will be used, including any existing or planned agreements and infrastructure.

Describe the status of a mothballed hydropower plant. For projects that are bringing mothballed hydropower capacity back online, please describe the following:

- *Clearly describe the work that will be accomplished through the WaterSMART Grant. Note: Normal OM&R activities are not eligible for funding. The work being proposed must be an investment.*
- *Provide information about the capacity (in kilowatts) of the existing hydro system and the expected capacity once it is brough back on-line.*
- *Provide information about the duration that the hydro system has been offline and the reasons why it has been mothballed. Please include any regulatory reporting or filings (e.g., FERC filings) or other documentation regarding the system.*

Describe any other benefits of the renewable energy project. Please describe and provide sufficient detail on any additional benefits expected to result from the renewable energy project, including:

- *How the system will combat/offset the impacts of climate change, including an expected reduction in greenhouse gas emissions*
- *Expected environmental benefits of the renewable energy system.*
- *Any expected reduction in the use of energy currently supplied through a Reclamation project.*
- *Anticipated benefits to other sectors/entities.*
- *Expected water needs, if any, of the system.*

AND/OR

1.4.2.2 Subcriterion B.2—Increasing Energy Efficiency in Water Management

Up to 6 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.***

By reducing water demand throughout Coachella Valley, the Project will result in energy efficiency. Water savings from the Project would result in energy savings associated with reduced energy required to pump groundwater. To estimate the associated energy savings, calculations were based on energy data estimates provided by the CVRWMG agencies. CVRWMG wells use an average 448.6 kilowatt-hours (kWh) per AF. Assuming an annual water savings of 924 AFY for the entire Project, the energy savings are estimated at approximately 414,312 kWh per year. All energy savings from reduced groundwater pumping are summarized in Table 4.

Table 4: Energy Savings from Reduced Groundwater Pumping

Task	Energy Savings (kWh/year)
Task 1 – Turf Conversions and Conservation Incentive Program	158,558
Task 2 – Evaporative Cooler Tune-Up & Changeout Program	85,234

Task 3 – Inoperable Valve Replacement	265
Task 4 – Meter Replacement	170,019
Total	**414,312**

The Project will create additional energy savings through reducing fossil fuel consumption. By replacing AMR meters with AMI meters, CWA staff will no longer need to drive to the 5,000-meter locations to record water usage data. It is assumed that 0.3 miles is driven for each meter. The energy savings result from the reduced miles driven is 2,857 kWh per year is shown below in Table 5.

Table 5: Energy Savings from Reduced Vehicle Miles Driven

Energy Savings	Value	Unit	Calculation	Source
Number of Meters Connected to System	5,000	Meters	-	CWA
Annual Mileage	1,500	Miles	-	CWA
Estimated Number of Miles Driven for Meters	0.3	Miles	5,000 meters / 1,500	-
Annual Gallons	78.01	gallons	1,500 miles / 21.5 *1.10	U.S. EPA average MPG + 10% for stop and go conditions
Energy Saved	**2,857**	**kWh/year**	**78.01 gallons*1.25 therms/gallon**	**U.S. EPA**

			***29.3 kWh/therm**	

The Project would also create energy savings through the installation of high-efficiency washing machines and dishwashers. ENERGY STAR® estimates that the average American family does 300 loads of laundry per year with an average time of 37.5 minutes per load. An old washing machine uses an average of 2.28 kWh per load, while a high-efficiency washing machine uses 1.0 kWh per load (Silicon Valley Power n.d.). The Project is estimated to replace 444 washing machines. Using these estimates, the Project would save about 50,616 kWh of energy per year. An old dishwasher is estimated to use between 1-2.17 kWh per load. According to the Water Research Foundation's Residential End Uses of Water Version 2 (PDF Report #4309b), the average American does 95 loads of dishes per year. A high-efficiency dishwasher uses about 0.5 kWh per load. The Project is estimated to replace 30 dishwashers. Using the midpoint of an old dishwashers energy use and using these estimates, the Project is estimated to save about 3,092 kWh of energy. Energy savings from installation of high-effiency appliances is saved in Table 6 below.

Table 6: Energy Savings from High-Efficiency Appliances

Unit	Old Appliances	High-Efficiency Appliances
Washing Machines		
Number of Loads	300	300
kWh Usage per Load	2.28	1.9
Total Energy Use per Washer (kWh)	684	570
Total Washers	444	444
Total Energy Use (kWh)	303,696	253,080
Savings (kWh)	**50,616 (303,696 – 253,080)**	
Dishwashers		
Number of Loads	95	95
kWh Usage per Load	1.585[1]	0.5

Total Energy Use per Dishwasher (kWh)	151	47.5
Total Dishwashers	30	30
Total Energy Use (kWh)	4,517	1,425
Savings (kWh)	**3,092 (4,517 – 1,425)**	

[1]Midpoint of 1 – 2.17 kWh per load

Though the rate of which of this is unknown, it is likely that customers use air conditioning (AC) system if evaporative coolers are inefficient. Therefore, though it is unquantifiable, installation of evaporative cooler systems reduces energy use compared to AC (www.energy.gov). In total, the Project would save 491,448 kWh of energy. All energy savings are summarized below in Table 7. Energy savings from WaterSense toilets were not included as it is assumed that WaterSense toilets would rely on gravity to flush.

Table 7: Summary of Energy Savings

Component	Energy Savings (kWh)
Energy Savings from Reduced Groundwater Pumping	414,312
Energy Savings from Eliminating Vehicle Mileage	2,857
Energy Savings from Washing Machines	50,616
Energy Savings from Dishwashers	3,029
Total	**470,814**

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

The Project would reduce 470,814 kWh by reducing groundwater pumping, eliminating the need to drive to meters, and installing high-efficiency appliances. The U.S. EPA's Greenhouse Gas Equivalencies Calculator was used to estimate the greenhouse gas emissions based on "Kilowatt-hours avoided." The rate of energy associated with energy consumption reduction is 470,814 kWh/year, which translates to 329 metric tons of CO_2.

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

the proposed project impact the current pumping requirements and energy usage?

CVRWMG agencies' groundwater wells approximately pump between 500-3,200 gallons per minute (gpm) and uses an average 448.6 kWh per AF. Reduced groundwater pumping is expected to increase operational efficiency of the groundwater wells and reduce the energy usage through the reduction of groundwater pumping.

- ***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.***

Energy savings estimates originate from the point of diversion. Energy savings are calculated based upon the amount of onsite groundwater pumping that would be reduced as a result of Project implementation. Therefore, calculations take place at the point of diversion where groundwater is extracted from the aquifer and not based upon an alternate site of origin.

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

No, energy data estimates were not included in the calculation as regional treatment is limited to the addition of chlorine due to its minimal impact on the overall treatment process.

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

Currently, one CWA staff drives around CWA's service area to collect water usage data from the existing AMR meters. CWA estimates that the staff member drives 1,500 miles per year. By replacing AMR meters with AMI meters, it eliminates the need for staff to drive to collect data. Per the U.S. EPA, the average light vehicle emits approximately 400 grams of CO_2 per mile. Using this estimate, a total of 600,000 grams of CO_2 or 0.6 metric tons of CO_2 is emitted per year from gathering data from the AMR meters. In total, about 0.6 metric tons of CO_2 will be reduced annually by eliminating the need to drive 1,500 miles, which is equivalent to 1.4 barrels of oil consumed and 672 pounds of coal burned according to U.S. EPA's Greenhouse Gas Equivalencies Calculator.

1.4.3 Evaluation Criterion C—Other Project Benefits (15 points)

Up to 15 points may be awarded under this criterion. This criterion prioritizes projects that address a specific water and/or energy concern(s), including enhancing drought resilience and sustainability, addressing the current and future impacts of climate change, and providing ecological benefits.

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

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

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

The Coachella Valley has been subject to frequent drought conditions due to the region's arid climate and drought emergencies in the Western United States. Arid regions, by definition, receive little to precipitation and are characterized by negative moisture balances, meaning that potential evapotranspiration rates permanently exceed precipitation rates (Marsh and Kaufman 2013). Thus, most water is immediately transferred back to the atmosphere after a precipitation event. Due to the arid climate and lack of precipitation, Coachella Valley relies on imported water from the SWP and the Colorado River to replenish and sustainably maintain the Coachella Valley Groundwater Basin. However, imported water sources are significantly impacted by drought conditions.

The State of California issued a State of Emergency throughout the state in 2015 and again in 2021 (https://www.gov.ca.gov/wp-content/uploads/2021/10/10.19.21-Drought-SOE-1.pdf). The SWP and the Colorado River watersheds are impacted by droughts, which impacts the replenishment of the groundwater basin. The state declared that SWP deliveries would be limited to 5% in March 2022. Over the past 10 and 15 years, SWP deliveries have typically averaged 41% and 35%, which is lower than the long-term averages used in planning. In August 2022, the Department of Interior declared a Tier 2 shortage for the Colorado River. California voluntarily cut back Colorado River water use and CVWD's Board of Directors approved two voluntary actions in November 2022 that will significantly reduce Colorado River replenishment starting in 2022 and through 2025. The decrease in allotment will significantly impact the region's water supply reliability as imported water is used to replenish the Coachella Valley Groundwater Basin, which is the main source of water in the region. The Coachella Valley region needs to take actions to offset reductions of imported supplies for replenishment to ensure groundwater sustainability and drought resilience.

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

During the 2020-2022 drought, Riverside County, where the Project is located, experienced severe drought conditions (see Figure 2). The emergency declaration led local water suppliers in Coachella Valley to enact Level 2 of their Water Shortage Contingency Plans (WSCPs). The WSCP defines water shortage levels and identifies corresponding response actions and procedures for reducing demand for water during mild to severe droughts or other water shortage conditions. This enforcement applied restrictions on water use throughout the region.

As mentioned, the region relies on imported water from the SWP and Colorado River to replenish the Coachella Valley Groundwater Basin, but these water sources are being impacted by climate change. The 2012 Colorado River Basin Water Supply and Demand Study indicated that climate change will reduce system runoff from the Colorado River primarily due to warming and loss of snowpack. Over the next 50 years, Upper Colorado River streamflow is projected to decrease by approximately 9%, along with a projected increase in both drought frequency and duration as compared to the observed historical drought. A 2019 study from the PPIC stated that climate change has impacted drought conditions in California. On average, the Sierra Nevada snowpack supplies approximately one-third of the state's water needs. However, warmer temperatures are causing less precipitation to fall as snow and accelerating spring melt, diminishing the Sierra Nevada snowpack. The reduced snowpack will make it difficult for the state to meet its water demands because there is not enough runoff to fill the state's reservoirs. This reduction of imported water allotment from the SWP and Colorado River will greatly impact Coachella Valley's water supply reliability as the region heavily relies on imported water to replenish the basin and to sustainably manage the aquifer.

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

Droughts are becoming a recurring feature in California due to climate change (Mount et al 2021). Climate change has the potential to affect not only local demand and supplies but reduce the amount of water available for import. The 2022 Indio Subbasin Water Management Plan Update and 2022 Mission Creek Subbasin Alternative Plan Update (WMPs) included a climate change analysis. The analysis indicates the greatest vulnerability to the Coachella Valley region is reduced local and imported water supplies to replenish the basin. Increased temperatures would increase demands for irrigation, municipal water use, and evaporative losses from canals and open reservoirs. Impacts would result in decreased availability of local surface water for direct and replenishment uses. Recent data and climate change models indicate that watershed runoff may decrease by 27%. WMPs scenarios incorporate assumptions of reduced SWP deliveries and Colorado cuts due to climate change impacts that are already materializing as prolonged and recurring droughts. SWP deliveries over the last 10 to 15 years have averaged 41% and 45% respectively, which is well below the long-term averages for planning. As mentioned, in response to the shortages on the Colorado River, California is voluntarily cutting back Colorado River use and CVWD's Board of Directors approved two voluntary actions in November 2022 that will significantly reduce replenishment starting in 2022 through 2025. As part of its adaptive approach, the region needs to take actions

to offset reductions of imported and local supplies to ensure groundwater sustainability and drought resilience.

- ***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.***

Pumping groundwater to meet water demand is energy intensive and depends on the use of fossil fuels. In California, rotating power outages occur to manage energy demand and ensure grid reliability. Power outages are necessary during insufficient energy supply situations, such as heat waves, wildfires, or transmission line outages. Riverside County, where the Project is located, is known to have power outages during the summer (https://ktla.com/news/local-news/riverside-residents-without-power-amid-heatwave/) due to higher demand in the power system. Conserving water, reducing groundwater pumping, and installing high-efficiency appliances reduce the CVRWMG agencies' impact on the grid, lessening the need for local energy providers to participate in outages.

- ***Please describe how the project will directly address the concern(s) stated above.***

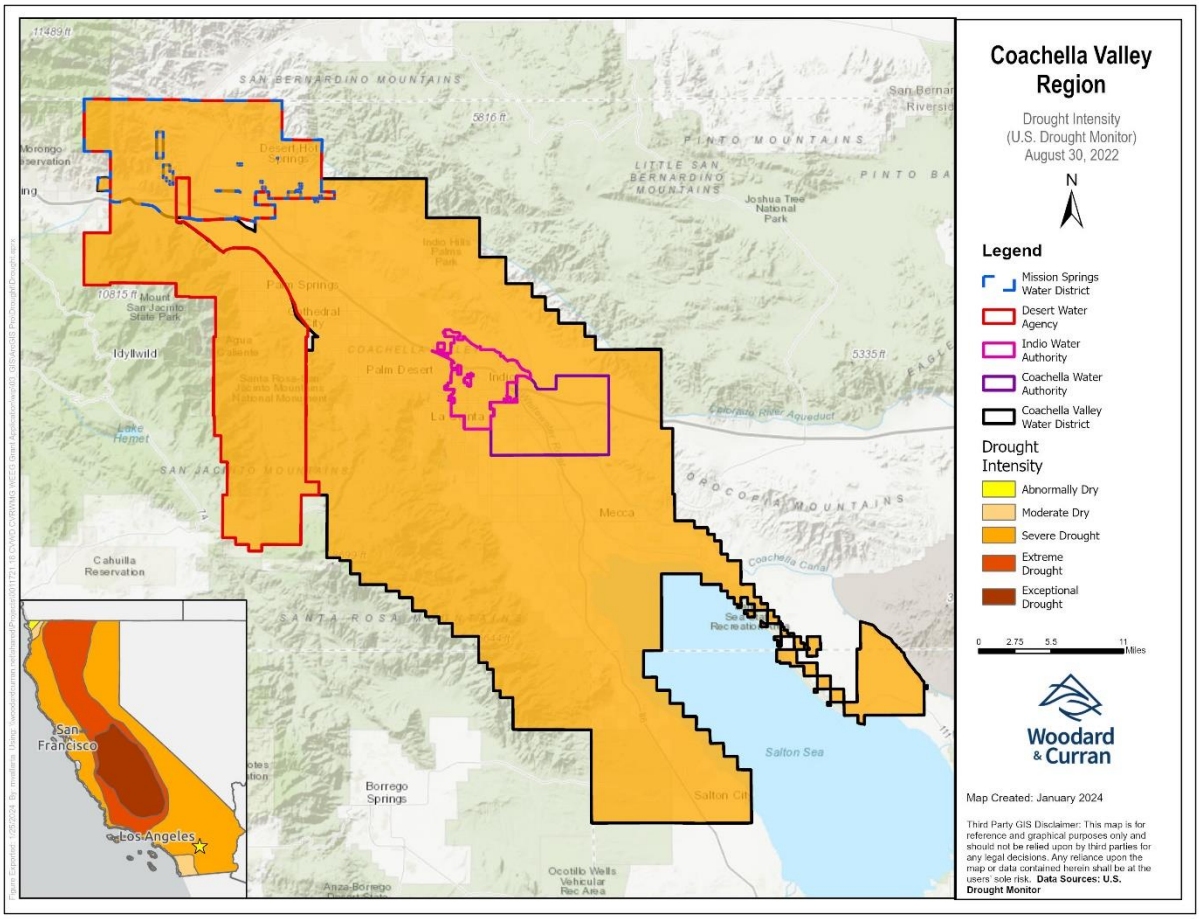
As mentioned, the Coachella Valley region is dependent on imported water to replenish and sustainably manage the Coachella Valley Groundwater Basin due to low precipitation. However, imported water sources are extremely vulnerable to drought, which jeopardizes the region's water supply reliability. The Project will reduce groundwater pumping and address the specific concerns of groundwater depletion, water supply reliability, and heightened competition for water supplies, especially in drought conditions. The Project will directly address the water supply shortage concerns stated above by funding conservation measures, reducing water waste by replacing inoperable valves, and improving water usage data, resulting in reducing the overall groundwater use. The Project will reduce groundwater pumping, leaving more water supply available in the water system overall that can be leveraged during drought and dry years, thereby increasing water supply resiliency and decreasing the impact of water supply shortages. Reducing groundwater pumping will also reduce energy use and diminish the use of fossil fuels. In addition, the Project would reduce energy use by eliminating the need for CWA staff to drive to collect water usage data and by installing high-efficiency appliances, reducing the CVRWMG agencies' impact on the grid.

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

Yes, the Project will result in more efficient management of water supply in the region through water conservation. Water conservation is a major component of overall management in the Indio Subbasin and Mission Creek Subbasin as indicated in the WMPs

(Todd Groundwater and Woodard & Curran 2021; Wood and Kennedy Jenks 2021). The Project would reduce the overall water demand, meaning that less groundwater needs to be extracted from the Coachella Valley Ground Water Basin, which increases the region's water supply reliability. Additionally, the Project will directly result in more efficient management of the water supply by reducing groundwater pumping and providing greater flexibility to water purveyors to leverage water supplies during droughts and emergencies.

Figure 2: Drought Intensity - August 30, 2022



- ***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.***

Conserved water that offsets groundwater use will remain in groundwater storage providing flexibility and resilience during periods of drought. Previous analysis for the East Coachella Valley Water Supply Project has indicated there is a need for housing, especially for disadvantaged communities. The WMPs have forecasted that the region's population will continue to rise. Conservation will assist the region in meeting the increased water demand associated with the region's growing population as indicated by the WMPs. Efficient water use can significantly contribute to securing a reliable water supply for the rising water demand in the future.

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

All of the water that is conserved through the Project will be used for the intended purpose of providing additional supply kept in storage and made available for use during droughts and dry years. The annual conserved water will be utilized to address the increasing water demand driven by the region's growing population and housing needs.

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

Conserved water is intended to remain in the groundwater basin in storage which is achieved through reduced pumping. Therefore, no mechanism is needed to put the conserved water to the intended use.

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

Colorado River water has been a major source of supply for the Coachella Valley since 1949 with the completion of the Coachella Canal. The Colorado River is managed and operated in accordance with the Law of the River, the collection of interstate compacts, federal and state legislation, various agreements and contracts, an international treaty, a U.S. Supreme Court decree, and federal administrative actions that govern the rights to use of Colorado River water within the seven Colorado River Basin states. California's apportionment of Colorado River water is allocated by the 1931 Seven Party Agreement. Reducing groundwater demands within the CVRWMG agencies' service area will leave more groundwater in the Coachella Valley Groundwater Basin and provide water managers in Coachella Valley greater flexibility in managing its supplies, including voluntary or mandatory reductions in use of Colorado River water. The Project will therefore assist States and water users in complying with interstate compacts.

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

The Project will help to prevent a water-related crisis or conflict in the Coachella Valley region by making more water available for use during drought and dry periods, when water supply is limited and there is greater opportunity for tension or litigation over water. The Coachella Valley has a history of conflict over water supplies, including disputes and litigation involving local water agencies, which can be exacerbated during drought periods. Additionally, the Project would help housing and economic development for disadvantaged community areas as the conserved water will be utilized to meet the increasing water demand driven by the projected population increase.

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

- ***Will the project benefit species (e.g., federally threatened or endangered, a federally recognized candidate species, a state listed species, or a species of particular recreational, or economic importance)? 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 Project will improve habitat for use by native species. Conventional landscaping primarily consists of monoculture non-native grasses, which are not considered to be climate-friendly for the arid Coachella Valley. These simplistic landscapes do not provide the vegetation variation and complexity necessary to attract and support native wildlife. A study titled SmartScape Design Provides Improved Avian Habitat found that landscapes planted with diverse, climate-friendly plants supported a significantly higher avian diversity, abundance, and species richness than non-native, turf dominated landscapes (Haller, 2012). A similar study demonstrates that diverse native landscapes also attract an array of pollinators, native bees, and butterflies (California Native Plant Society, 2022).

To analyze species in the project area that could potentially utilize habitat that is improved as part of the project, an analysis of the U.S. Fish and Wildlife Service's Threatened and Endangered Species List, and Candidate Species List was completed in January 2016. This analysis found that in total, there are 5 bird species and 3 insect species that are known to or believed to occur in Riverside County, and thus, could reasonably benefit from habitat improved through implementation of the Project. The five bird species that could utilize habitat improved by the project include: Southwestern Willow flycatcher (Empidonaz traillii) - endangered, California gnatcatcher (Polioptila californica californica) - threatened, Western snowy plover (Charadrius nivosus ssp. Nivosus) - threatened, Yuma

Clapper rail (Rallus longirostris yumanensis) - endangered, and Least Bell's vireo (Vireo bellii pusillus) - endangered. The three insect species include: Casey's June beetle (Dinacoma caseyi) - endangered, Quino Checkerspot butterfly (Euphydeyas editha quino) - endangered, and Delhi Sands flower-loving fly (Rhaphiomidas terminates abdominalis) - endangered. It is anticipated that the habitat benefits provided by the project will accrue once turf conversions are completed, and that benefits will continue to be provided for the life of the project.

The Project area is also a major component to the Pacific Flyway, which is one of four major migratory routes used by migratory birds in North America. Migratory birds are federally protected under the Migratory Bird Treaty Act, which is administered by the U.S. Fish and Wildlife Service. Over 400 migratory and resident bird species have been documented in the Salton Sea (located on the Eastern end of the Coachella Valley) and surrounding area, which is designated as an internationally imported staging area for shorebirds and is located within the Project area. Due to the known large-scale presence of migratory birds in the Project area, implementation of the Project could directly benefit these species by increasing potentially suitable habitat in the region.

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

Yes. As a direct result of the Project, groundwater pumping would be reduced, which will leave more water in the system available for use during droughts and dry periods. The duration of this benefit is expected to begin immediately following turf replacements, installation of high-efficiency appliances, and the replacement of inoperable valves and aging meters.

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

Yes. The species described above have an indirect relationship to local groundwater supplies. While these supplies are not directly available for use by the species, plants that directly use groundwater provide habitat, shelter, and other resources to the species. Through this indirect benefit, it is not anticipated that the Project would have a measurable impact related to reducing the likelihood of listing. However, the status of local and migratory bird species would be improved by improving the local habitat.

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

The Project will result in reduced groundwater pumping, leaving more water in the system to be available for both water supply and ecological uses during droughts and emergency situations. Further, the Project will result in more water available as storage in the groundwater aquifer to support water supply resiliency and increase resiliency of

groundwater-dependent ecosystems and interconnected surface water ecosystems as the region faces increasingly more frequent and severe droughts due to climate change as indicated by the WMPs.

Note: Projects that are intended to improve streamflows or aquatic habit, and that are requesting $500,000 or more in Federal funding, must include information about plans to monitor the benefits of the project. Please describe the plan to monitor improved streamflows or aquatic habit benefits over a five-year period once the project has been completed. Provide detail on the steps to be taken to carry out the plan.

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

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

The Coachella Valley relies on the Coachella Valley Groundwater Basin for potable water, making groundwater management a critical priority. Imported SWP and Colorado River water are used to replenish and maintain a sustainable aquifer. During drought periods, the SWP and Colorado River watersheds are impacted, which impacts the replenishment of the groundwater basin and threatens the region's water supply reliability. In March 2022, the state announced SWP allocation reductions to 5% of requested supplies, and in August 2022, the Department of Interior announced Tier 2 shortage on the Colorado River and reduced Arizona, Nevada, and Mexico's allocation. While California was not included in the Tier 2 allocation reductions, CVWD participated in USBR's voluntary cutbacks. If drought conditions were to worsen, CVWD could experience decreases in Colorado River water and SWP available for replenishment. If drought conditions resurface, there is potential for reductions in local recharge to the Coachella Valley groundwater from natural flows.

The removal of water-intensive turf and replacement with low water use landscaping and installment of high-efficiency appliances throughout the Coachella Valley will bolster drought resilience by reducing water demand and groundwater pumping, resulting in more water being available for critical uses. Additionally, the replacement of inoperable valves will further reduce water waste and the replacement of AMR meters with AMI meters would encourage customers to save water by providing them with real-time and accurate water usage data, and thus, increasing drought resiliency in the area.

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

Climate change has the potential to affect the Colorado River, which is one of Coachella Valley's major sources of imported water supply. Potential effects of climate change, including increased drought and wildfire risk, could also increase water demand within the Coachella Valley which could deplete water resources available to municipal suppliers, as well as environmental resources. The Project will contribute to ecological resiliency to climate change by improving habitat for use by native species in Coachella Valley. Conventional landscaping primarily consists of monoculture non-native grasses, which are not considered to be climate-friendly for the arid Coachella Valley. These simplistic landscapes do not provide the vegetation variation and complexity necessary to attract and support native wildlife. Replacing turf with drought-tolerant and native landscapes will improve habitat and ecological residence. Additionally, water savings from the Project will allow more groundwater to remain in the Coachella Valley Groundwater Basin, resulting in more water for groundwater-dependent ecosystems.

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

CWA staff drive throughout CWA's service area to collect customer water usage from the existing AMR meters. Replacing the AMR meters with AMI meters, eliminates the need for staff to drive throughout CWA's service area to collect data from AMR meters, and thus, reduces air pollution emitted from the vehicles.

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

Not applicable. The Project does not include green or sustainable infrastructure.

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

All contributions to climate change resiliency are described above.

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

Up to 15 points may be awarded based on the extent that the project demonstrates support for the Biden-Harris Administration's priorities, including E.O. 14008: Tackling the Climate Crisis at Home and Abroad and the President's memorandum, Tribal Consultation and Strengthening Nation-to-Nation Relationships.

Please address only those priorities that are applicable to your project. It is not necessary to address priorities that are not applicable to your project. A project will not necessarily receive more points simply because multiple priorities are addressed. Points will be allocated based on the degree to which the project supports one or

more of the priorities listed, and whether the connection to the priority(ies) is well supported in the application.

1.4.4.1 Subcriterion D.1. Disadvantaged Communities

E.O. 14008 affirms the advancement of environmental justice for all through the development and funding of programs to invest in disadvantaged communities. This criterion, which is used to identify projects that advance the Justice 40 Initiative, includes all Federally recognized Tribes and Tribal entities, and any disadvantaged communities in insular areas (American Samoa, Guam, the Northern Mariana Islands, or the Virgin Islands) identified pursuant to the following criteria.

- ***Please use the White House Council on Environmental Quality's interactive Climate and Economic Justice Screening Tool (CEJST), available online at Explore the map – Climate & Economic Justice Screening Tool (screeningtool.geoplatform.gov/ en/#17.59/36.63278/-105.181329) to identify any disadvantaged communities that will benefit from your project. The CEJST developed by the White House Council on Environmental Quality is a geospatial mapping tool that utilizes publicly available, nationally consistent data sets related to climate change, the environment, health, and economic opportunity to identify disadvantaged communities. In addition to identifying specific census tracts that are disadvantaged, the CEJST includes the lands of Federally recognized Tribes as disadvantaged communities. In addition, regardless of whether a Federally recognized Tribe has land, all Federally recognized Tribal entities are considered disadvantaged communities for the purposes of the Justice40 Initiative.***

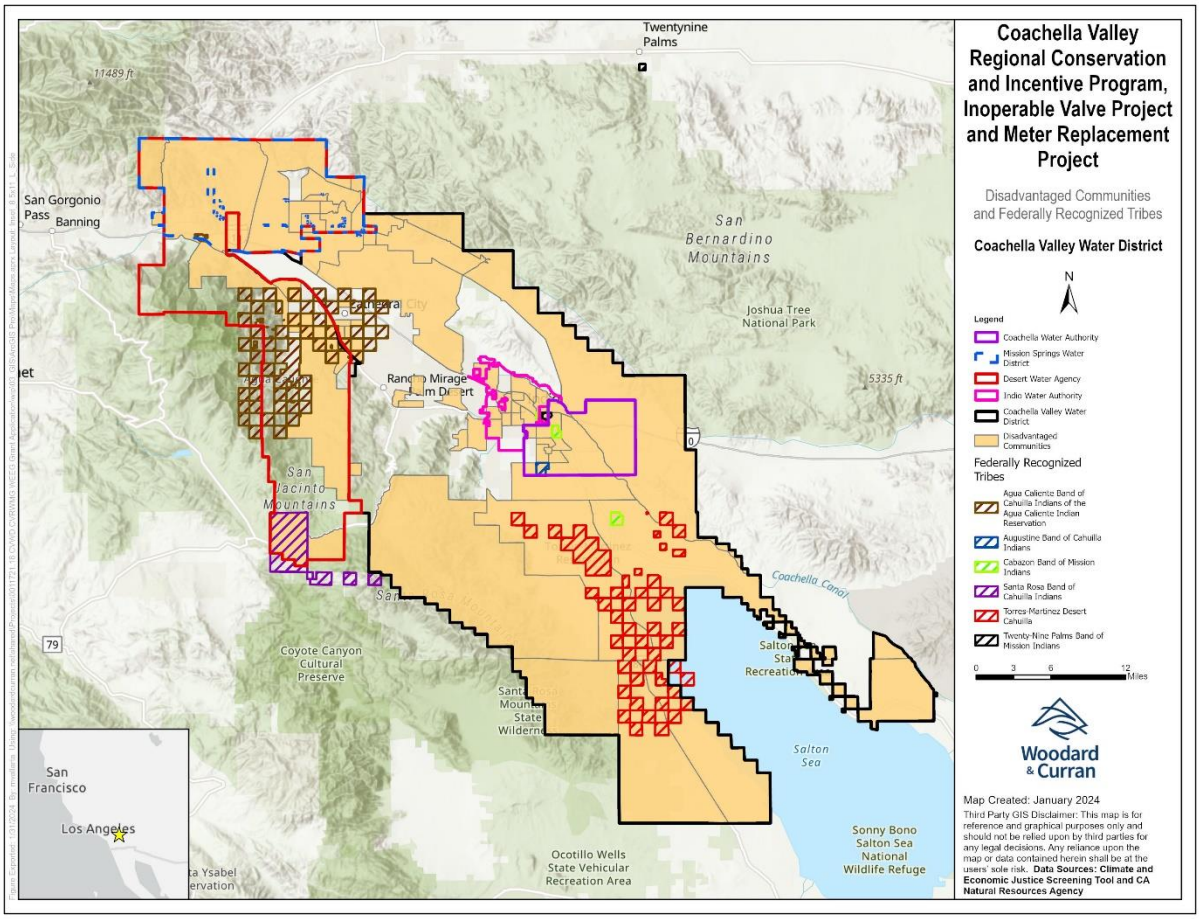
The Council on Environmental Quality's Climate and Economic Justice Screening Tool (CEJST) was used to identify disadvantaged or underserved communities in the Coachella Valley. The entire Coachella Valley will benefit from the Project through conservation of local groundwater supplies. The CEJST uses categories of burden to identify disadvantaged communities, determining a census tract as disadvantaged if it is at or above the threshold for one or more environmental, climate, at or above the threshold for an associated socioeconomic burden, or a census tract that is completely surrounded by disadvantaged communities (DACs) and is at or above the 50% percentile for low income. The burden categories are climate change, energy, health, housing, legacy pollution, transportation, water and wastewater, and workforce development. Figure 3 shows the CEJST identified disadvantaged communities as well as the State and Federal Tribes included in Coachella Valley. DACs constitute 70% of Coachella Valley, while Tribes constitute 7% of Coachella Valley based on geographic area.

- ***If applicable, describe how the proposed project will serve or benefit a disadvantaged community, identified using the tool. For example, will the project improve public health and safety by addressing water quality, add new water supplies, provide economic growth opportunities, or provide other benefits in a disadvantaged community?***

70% of the combined service area of the CVRWMG agencies qualifies as DACs (see Figure 3). The 2018 Coachella Valley Integrated Regional Water Management Plan/Stormwater Resource Plan documents that DACs may be disproportionately affected by increased water costs and that is an objective for the IRWM Region to maintain water affordability. DAC residents within the Project area can apply for the incentive program and directly benefit from the water savings as well as reduced water bills. Overall, the Program will provide approximately 924 AFY of water savings to DACs and non-DAC areas.

As seen in Figure 3, the majority of CWA's service area qualifies as a DAC. Water savings from replacing the inoperable valves will benefit CWA's service area by making additional potable water available for more critical water uses. Water savings from replacing AMR meters with AMI meters will be recognized by CWA's entire service area. The ability to monitor water usage in real-time will also allow DACs to proactively save water and reduce water bills, which will reduce financial burden each month.

Figure 3: Disadvantaged Communities and Tribal Lands



1.4.5 Subcriterion D.2. Tribal Benefits

The Department 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. 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?***

As shown in Figure 3, there are federally recognized tribes in the Coachella Valley region: Torres-Martinez Desert Cahuilla, Agua Caliente Band of Cahuilla Indians of the Agua Caliente Indian Reservation, Cabazon Band of Mission Indians, Twenty-Nine Palms Band of Mission Indians, and Augustine Band of Cahuilla Indians. Residents living on Tribal lands

are customers of the water agencies and are eligible to apply for conservation rebates. Furthermore, the Project will benefit tribal communities in Coachella Valley by reducing groundwater pumping within the Coachella Valley Groundwater Basin. Reduced groundwater pumping will benefit all users of the groundwater basin but could provide additional benefits to Indian Tribes. Issues that may arise as result of groundwater overdraft (subsidence, treatment, increased well depth, etc.) could result in increased water costs to groundwater users. Given the economic pressures on Indian Tribes, increased water costs could disproportionately impact Tribes compared to other users. Therefore, by implementing long-term conservation measures, the Project could benefit Tribes by helping to reduce long-term water costs in the region. Additionally, the Project will benefit Tribes in the area because it will help conserve water supplies within CVWD, CWA, DWA, IWA, and MSWD's service area. This will in turn leave more water available in the groundwater aquifer to be used as necessary during drought, dry year, and emergency conditions. Thus, contributing to both the short- and long-term reliability of water supply for Tribes.

- ***Does the proposed project support Tribal led conservation and restoration priorities, and/or incorporate or benefit indigenous traditional knowledge and practices?***

While the Project does not directly support Tribal led conservation and restoration priorities, residents living on Tribal lands are eligible to apply for conservation rebates. The Project does not incorporate or benefit indigenous traditional knowledge and practices, but water savings from the Project will ensure that more water will be available in Coachella Groundwater Basin.

- ***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, increased renewable energy, or economic growth opportunities? Does the proposed project support Reclamation's Tribal trust responsibilities or a Reclamation activity with a Tribe?***

As a result of the Project, the tribes located in Coachella Valley will benefit from overall water conservation, which will support short- and long-term water resiliency goals and reduce both indoor and outdoor water demands during normal and dry years, and ameliorate climate change impacts.

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

Up to 8 points may be awarded for projects that describe in detail how they will complement on- farm irrigation improvements eligible for NRCS financial or technical assistance.

If the proposed project will complement an on-farm improvement eligible for NRCS assistance, please address the following:

- ***Describe any planned or ongoing projects by farmers/ranchers that receive water from the applicant to improve on-farm efficiencies.***
- ***Provide a detailed description of the on-farm efficiency improvements.***
- ***Have the farmers requested technical or financial assistance from NRCS for the on- farm efficiency projects, or do they plan to in the future?***
- ***If available, provide documentation that the on-farm projects are eligible for NRCS assistance, that such assistance has or will be requested, and the number or percentage of farms that plan to participate in available NRCS programs.***
- ***Applicants should provide letters of intent from farmers/ranchers in the affected project areas.***
- ***Describe how the proposed WaterSMART project would complement any ongoing or planned on-farm improvement.***
- ***Will the proposed WaterSMART project directly facilitate the on-farm improvement? If so, how? For example, installing a pressurized pipe through WaterSMART can help support efficient on-farm irrigation practices, such as drip-irrigation.***

Not applicable as this Project is for turf conversions and conservation incentives, evaporative coolers, inoperable valves and meter replacements. The Project does not include agricultural uses.

OR

- ***Will the proposed WaterSMART project complement the on-farm project by maximizing efficiency in the area? If so, how?***
- ***Describe the on-farm water conservation or water use efficiency benefits that are expected to result from any on-farm work.***
- ***Estimate the potential on-farm water savings that could result in acre-feet per year. Include support or backup documentation for any calculations or assumptions.***

- ***Please provide a map of your water service area boundaries. If your project is selected for funding under this NOFO, this information will help NRCS identify the irrigated lands that may be approved for NRCS funding and technical assistance to complement funded WaterSMART projects.***

Not applicable as this Project is for turf conversions and conservation incentives, evaporative coolers, inoperable valves and meter replacements. The Project does not include agricultural uses.

1.4.7 Evaluation Criterion F—Readiness to Proceed (8 points)

Up to 8 points may be awarded for this criterion.

Points may be awarded based upon the extent to which the proposed project is capable of commencing upon entering into a financial assistance agreement. Note: If your project is selected, responses provided in this section will be used to develop the scope of work that will be included in the financial assistance agreement.

Applications that include 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: Do not repeat the more detailed technical project description provided in Section D.2.2.2 Application Content. This section should focus on a summary of the major tasks to be accomplished as part of the project.***

The Project would begin implementation as soon as funding is secured. CVRWMG agencies have implemented turf conversions and conservation incentive programs in the past, and thus, the Project is ready for implementation once funding is secured. The Inoperable Valve Replacement Project and Meter Replacement Project is currently on hold due to lack of funding. Once CWA secures funding, both projects are ready to be implemented.

Major tasks necessary to complete the Project include:

- Performing outreach related to the turf conversions and conservation incentives program
- Reviewing and accepting applications for the turf conversions and conservation incentives program
- Performing pre-and post-site audits
- Issuing rebates to qualifying customers
- Coordinating with contractor for direct install program

- Securing materials for the Inoperable Valve Replacement Project and Meter Replacement Project
- Construction related to the Inoperable Valve Replacement Project and Meter Replacement Project
- Performing project management activities

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

No permits are anticipated to be required. However, IWA will need to obtain permission from property owners to access the property for work, such as installing irrigation controllers and/or turf removal.

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

No engineering or design work will be performed for turf and conservation incentives programs. The CVRWMG agencies have implemented successful conservation programs in previous years and intend to use methodologies, design, and experiences gained from past programs. CWA has completed the design for the Inoperable Valve Replacement Project. CWA has identified the inoperable valves through operations staff knowledge and investigation. No additional design is required to implement the project. CWA has also completed the design for the Meter Replacement Project. CWA coordinated with a meter vendor to evaluate meter type and locations of associated components (e.g. base stations). No additional design is needed.

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

There are no new policies or administrative actions required to implement the Project. However, IWA may need to increase the existing landscape contract or undergo a procurement process for a larger landscape contract to cover additional direct install project sites.

The CVRWMG agencies have previously implemented turf and conservation incentive programs. The requested funding will support extending those conservation programs. CWA staff has identified the inoperable valves and associated locations through operational staff knowledge. The Inoperable Valve Project is on hold until funding is secured to replace the 30 inoperable valves across CWA's public water system. Previously CWA received a $75,000 grant from U.S. Bureau Reclamation's Small-Scale Water Efficiency Project Grant in 2018 to install AMI infrastructure. CWA was able to replace approximately 4,100 AMR meters with its capital investment funds. However, this federal

funding and capital funds were not sufficient to replace all AMR meters, so CWA had to halt meter replacement until further funding is secured.

- ***Describe the current design status of the project. If additional design work is required prior to construction, describe the planned process and timeline for completing the design work.***

The Project does not require any design. As mentioned, CVRWMG agencies have implemented successful turf and conservation incentive programs in the past and will use methodologies, design, and experiences gained from past programs. Design work is not required for the Inoperable Valve Replacement Project and the Meter Replacement Project as both projects are ready for implementation.

- ***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% complete); and construction/installation (100% complete). Was the expected timeline for environmental and cultural compliance discussed with the local Reclamation regional or area office?***

Table 4 below outlines the schedule of major tasks and milestones necessary for project completion. The expected timeline for environmental and cultural compliance has not yet been discussed with the local Reclamation regional or area office as it is anticipated that environmental and cultural compliance would be waived.

Table 8: Schedule

Milestone/Task/Activity	Planned Start Date	Planned Completion Date
Task 1 - Conversions and Conservation Incentive Program		
CVWD Component		
Perform Outreach Related to Rebate	07/1/2024	2/28/2025
Review and Accept Applications for Rebate Program	3/1/2025	2/28/2026
Perform Pre-Site Audits	3/1/2025	12/31/2025

Complete Environmental and Cultural Compliance	N/A	N/A
Finalize Agreement with Rebate Recipients	3/1/2025	2/28/2026
Landscape Conversion (50% complete)	9/1/2025	9/1/2026
Landscape Conversion (100% complete)	12/31/2025	12/31/2026
Perform Post Site Audits	4/1/2025	12/31/2026
Issue Rebates	1/1/2026	12/31/2026
Project completion	-	3/1/2027
Program monitoring	Quarterly Review	
DWA Component		
Implementation of Year 1 of 3 of rebate incentive programs for turf and HE washers	1/1/2025	12/31/2025
Implementation of Year 2 of 3 of rebate incentive programs for turf and HE washers	1/1/2026	12/31/2026
Implementation of Year 3 of 3 of rebate incentive programs for turf and HE washers	1/1/2027	12/31/2027
Program monitoring	Quarterly Review	
IWA Component		
Project Administration	7/1/2024	12/31/2028
Construction/Implementation	7/1/2024	12/31/2028
Program monitoring	Quarterly Review	
MSWD Component		
Develop Application & Internal Tracking Processes	7/1/2024	3/31/2025
Develop Communications / Marketing Plan for residents and businesses	1/1/2025	3/31/2025

Open program to residents & businesses	4/1/2024	12/31/2028
Program Monitoring	Quarterly Review	
Issue rebates to qualifying customers	4/1/2025	12/31/2028
Overall Project Duration	1/1/2025	12/31/2028
Task 2 - Evaporative Cooler Tune-up & Changeout Program		
MSWD Component		
Issue vender RFP to create a list of participating AC contractors*	1/1/2025	3/31/2025
Develop Application & Internal Tracking Processes*	1/1/2025	4/30/2025
Develop Communications / Marketing Plan for residents and commercial customers*	7/1/2024	3/31/2025
Perform General Outreach*	3/31/2025	12/31/2028
Open program to residents & businesses*	4/1/2025	12/31/2028
Business Specific Outreach*	4/1/2025	11/30/2028
Perform Pre-Site Audits for commercial accounts*	4/1/2025	12/31/2028
Perform Post-Site Audits on Commercial Accounts*	4/1/2025	12/31/2028
Issue payments to customers following tune-up / replacement of systems*	4/1/2025	12/31/2028

Issue payments to AC companies following tune-up / replacement of residential* properties	4/1/2025	12/31/2028
Program Monitoring	Quarterly Review	
Overall Project Duration	1/1/2025	12/31/2028
Task 3 – Inoperable Valve Replacement		
CWA Component		
Planning and Design	1/1/2022	5/31/2023
Construction/Implementation	1/1/2025	8/1/2026
Program Monitoring	Quarterly Review	
Task 4 – Meter Replacement Project		
CWA Component		
Planning and Design	1/1/2022	5/31/2023
Construction/Implementation	1/1/2025	8/1/2026
Program Monitoring	Quarterly Review	

1.4.8 Evaluation Criterion G—Collaboration (5 points)

Up to 5 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?***

The water agencies in the Coachella Valley have maintained a successful regional water conservation program called CV Water Counts Regional Conservation Program (CV Water Counts) for many years due to widespread support from residents, businesses, and institutions in the Coachella Valley. CV Water Counts was established by the CVRWMG in 2012. The program seeks to reduce water demand, increase the region's water supply, improve regional water quality, serve as stewards for a shared water resource, and improve efficiency and flexibility. In 2023, the CVRWMG agencies, along with Myoma Dunes Mutual Water Company, City of Palm Desert, and City of Indian Wells, implemented

the Coachella Valley Regional Turf Replacement Program – a multifaceted program that includes outreach/education effort, turf rebates, and a direct installation of desert-friendly landscaping to replace turf in the City of Indian Wells. Additionally, all conservation projects (Task 1) were integrated into the WMPs and developed through a public engagement process where community members had the opportunity to provide input and the Project has received letters of support from local, state, and federal representatives.

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

CVWD, CWA, DWA, IWA, and MSWD have a history of collaboration through the CVRWMG. In 2008, members of the CVRWMG signed a Memorandum of Understanding (MOU) that formalized their partnership. Through the MOU, the CVRWMG agencies agreed to coordinate and share information and implement projects and programs that address issues of common interest. These projects include water supply programs and projects that improve water supply reliability or water quality, coordination of water supply planning, and development of regional approaches to problem solving and issues resolution. Historically, the CVRWMG agencies have collaborated and applied for various state grant opportunities and have implemented successful turf and conservation incentive programs throughout Coachella Valley. Additionally, CVRWMG agencies have expressed support for projects initiated by other CVRWMG agencies that align with the region's interests and overarching goals.

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

In 2022, MWD conducted a Turf Multiplier Effect and Reversion study where it analyzed how many additional homes converted landscaping as a result of living near sites that participated in a rebate program. The study found that for every 100 turf rebate participants, an additional 132 parcels converted their turf because of the program (MWD 2022). As explained in Section 1.4.8, the CVRWMG agencies have successfully implemented turf and conservation incentive programs in the past. This Project would be an extension of CV Water Counts. Based on MWD's study, the CVRWMG agencies anticipate that increased visibility of customers observing their neighbors' yards will serve as a catalyst, leading to more participation in the program.

CWA's Meter Replacement Project will replace approximately 5,000 AMR meters with AMI meters through CWA's service area. Unlike AMR systems, AMI does not require CWA staff to collect the data. The AMI system automatically provides customers with real-time and accurate water usage data. CWA will promote water conservation through accurate metering of water usage patterns, which will encourage users to save water. Additionally,

AMI meters increase the ability to identify water leaks, which allows customers to fix leaks quickly, which further reduces water waste.

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

The CVRWMG agencies provides water to multiple sectors, including single-family residential, multifamily residential, commercial, institutional, and landscape sectors. Water efficiency improvements completed through the Project will allow CVRWMG agencies to decrease groundwater pumping leaving more water in the system for use during droughts and dry periods. Benefits to environmental uses include additional groundwater stored in the groundwater aquifer, which benefits groundwater dependent ecosystems and interconnected surface water systems. In addition, the Project could benefit municipal and recreation sectors by providing funding to incentivize reduced irrigation on golf courses and other municipal spaces.

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

The Project received Letters of support from the following agencies and are included in **Appendix A**:

- City of Palm Springs
- Greg Wallis, California Legislature Assemblymember – 47th District
- City of Desert Hot Springs
- Stephen C. Padilla, California State Senate – 18th Senate District
- Raul Ruiz, Member of Congress 25th District of California
- Eduardo Garcia, California Legislature Assemblymember – 36th District
- Ken Calvert, Member of Congress 41st District of California
- V. Manuel Perez, Supervisor- 4th District of Riverside County

1.4.9 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, CVWD receives Colorado River water through a contract with Reclamation. The service area is defined as Improvement District 1. Through this contract, CVWD receives

Colorado River water through the Coachella Canal. Reclamation owns the Coachella Canal, while CVWD does operations, maintenance, and repair.

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

As noted above, CVWD is a Reclamation contractor and uses Colorado River water to replenish the Coachella Valley Groundwater Basin, benefiting all groundwater users. CVWD does not receive additional Reclamation water supplies through another contractor. CWA, DWA, IWA, and MSWD are not Reclamation contractors. However, DWA has an exchange agreement with MWD and CVWD that has allowed DWA to exchange its SWP water allocation for MWD's Colorado River.

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

Although the proposed Project is not on Reclamation project lands, it has the potential to benefit activities to conserve water on the Colorado River. Through Task 1 of the Project, CVWD non-domestic water users will replace high water-consuming turf with desert friendly landscaping, and therefore, reduce groundwater demands for groundwater. Reducing groundwater demands within CVWD's service area will leave more groundwater in the Coachella Valley Groundwater Basin, conserve Colorado River water and provide water managers in Coachella Valley greater flexibility in managing its supplies, including the use of imported Colorado River water conveyed via the Coachella Canal.

- ***Is the applicant a Tribe?***

No, CVWD is a Category A applicant, a water district in California. There are, however, multiple Native American tribes and associated Tribal lands located within the Coachella Valley Groundwater Basin. Reduced groundwater pumping from the Project would benefit all users in the basin, including Tribal groups as described in Subcriterion D.2.

2. PERFORMANCE MEASURES

The performance measures for this project will include estimates of water and energy savings as usage of both utilities will be impacted. CVWD's method of quantifying the benefits of the Project are as follows:

Water Savings:

<u>Turf Replacement</u>

CVWD, DWA, IWA, and will perform pre-inspection and post-inspection of participating customers in turf replacements to ensure that turf removals are in accordance with the

Project. Targets will be measured based on actual participation in the program and the amount of turf removed will be measured for each customer.

Conservation Incentives

DWA requires its customers to submit proof of purchase and a photo of the installed high-efficiency washing machine. IWA will perform pre-inspection and post-inspection for turf removal, installation of smart irrigation controllers and will work with the contractor to confirm installation desert tolerant landscaping. MSWD will perform pre-inspection and post-inspection and work with contractor to confirm installation of high-efficiency appliances. Verification of adherence to high-efficiency standards is a prerequisite for receiving the incentive.

Evaporative Cooler Tune-Up & Changeout Program

MSWD will work with the contractor to confirm installation or maintenance of evaporative cooler tune ups.

Inoperable Valves and Meter Replacement

CWA will perform pre-inspection and post-inspection of the valves and AMI meter replacements.

Examination of water savings post-project completion may involve comparing usage before and after completion. Any consideration for data reporting to Reclamation will be contingent on grant agreement terms.

Energy Savings: CVRWMG agencies will verify energy savings by calculating energy savings based on reduced groundwater pumping as a result from Project implementation.

3. REFERENCES

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APPENDIX B – OFFICIAL RESOLUTION

Coachella Valley Water District
Board of Directors

Resolution No: 2024-07

A RESOLUTION OF THE BOARD OF DIRECTORS OF COACHELLA VALLEY WATER DISTRICT AUTHORIZING THE GENERAL MANAGER TO ENTER INTO AGREEMENT WITH THE UNITED STATES BUREAU OF RECLAMATION FOR WATESMART: WATER AND ENERGY EFFICIENCY GRANTS FOR FISCAL YEAR 2024 AND FISCAL YEAR 2025

WHEREAS, Coachella Valley Water District (CVWD) is a county water district pursuant to California Water Code Section 3000.

WHEREAS, CVWD and other CVRWMG Agencies wish to implement rebate programs and other projects to promote water efficiency; and

WHEREAS, the United States Bureau of Reclamation (Reclamation) is soliciting applications for the WaterSMART: Water and Energy Efficiency Grants for Fiscal Year 2024 and Fiscal Year 2025 (Notice of Funding Opportunity No. R24AS00052); and

WHEREAS, CVWD is preparing a grant application under this Program on behalf of the Coachella Valley Regional Water Management Group Agencies with an application due date of February 22, 2024; and

WHEREAS, the application will request the maximum eligible grant funding of $5,000,000; and

WHEREAS, Reclamation has directed applications to include in its application an official resolution adopted by the applicant's board of directors or governing body verifying 1) the identity of the official with legal authority to enter into agreement, 2) the board of directors supports the application submission, 3) CVWD and partnering agencies can provide the required

50% match on any grant award, and 4) CVWD will work with Reclamation to meet established deadlines for entering into a grant or cooperative agreement.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of Coachella Valley Water District as follows:

1. CVWD is authorized to submit the application to Reclamation to obtain WaterSMART: Water and Energy Efficiency Grants for Fiscal Year 2024 and Fiscal Year 2025; and
2. CVWD has legal authority to enter into an agreement with Reclamation to receive a grant; and
3. The Board of Directors supports the application that will be submitted; and
4. CVWD and partnering agencies are able to provide the minimum 50 percent funding match specified in the funding plan for the application; and
5. CVWD's General Manager, or his designee, is hereby authorized and directed to prepare the necessary data, conduct investigations, file such application, and execute a grant agreement with Reclamation in association with this application process; and
6. CVWD will work with Reclamation to meet established deadlines required for entering into a cooperative agreement to obtain the aforementioned grant funding.

PASSED and ADOPTED, by the Board of Directors of the Coachella Valley Water District (CVWD) during a regular meeting on this 13th day of February 2024, by the following vote:

AYES: Powell, Nelson, Aguilar, Bianco

NOES: None

ABSENT: Estrada

Sylvia M. Bermudez, MMC
Clerk of the Board
Coachella Valley Water District

APPENDIX A – LETTERS OF SUPPORT

City of Palm Springs

Jeffrey Bernstein, Mayor

3200 E. Tahquitz Canyon Way • Palm Springs, California 92262
Tel: 760.323.8200 • Fax: 760.323.8207 • E-Mail: Jeffrey.Bernstein@palmspringsca.gov

January 17, 2024

Department of the Interior
United States Bureau of Reclamation
Water Resources and Planning Office
P.O. Box 25007
Denver, CO 80225-0007
Attn: Josh German

Dear Mr. Josh German,

I am pleased to submit this letter of support for the *2024 Coachella Valley Regional Water Management Group (RWMG) WaterSMART Water and Energy Efficiency Grant (WEEG)* for funding.

Local water suppliers in Coachella Valley have prioritized demand management efforts to address drought relief, groundwater management, and water supply sustainability objectives. Per the 2020 Coachella Valley Regional Urban Water Management Plan, the Coachella Valley is expected to see more frequent periods of prolonged drought due to climate change. These drought periods result in below-average rainfall and a subsequent decrease in natural recharge. These droughts will also have an impact on the imported water supplies being brought into the Valley from the Colorado River. Continued implementation of water efficiency programs and projects is essential to address these impacts.

The WEEG proposal includes multiple projects that will support drought response, water conservation, and the enhancement of local supply and climate resilience within the Coachella Valley including for underrepresented communities and Tribes. The suite of projects proposed includes rebate and incentive programs, a valve replacement program, and a meter replacement program. By implementing these projects, residents of the Coachella Valley will experience mitigated drought impacts, improved water supply reliability, and maintained water affordability. I urge you to fund *the 2024 Coachella Valley RWMG WaterSMART WEEG Proposal.*

Please do not hesitate to contact me if you have any questions. I can be reached at Jeffrey.Bernstein@palmspringsca.gov or 760.323.8299.

Sincerely,

Jeffrey Bernstein
Mayor, City of Palm Springs

STATE CAPITOL
P.O. BOX 942849
SACRAMENTO, CA 94249-0047
(916) 319-2047
FAX (916) 319-2147

DISTRICT OFFICE
41608 INDIAN TRAIL, SUITE D1
RANCHO MIRAGE, CA 92270
(760) 346-6342
FAX (760) 346-6506

Assemblymember.Wallis@assembly.ca.gov
https://ad47.asmrc.org/

Assembly
California Legislature

GREG WALLIS
ASSEMBLYMEMBER, FORTY-SEVENTH DISTRICT

COMMITTEES
VICE CHAIR: ARTS, ENTERTAINMENT, SPORTS, AND TOURISM
GOVERNMENTAL ORGANIZATION
JOBS, ECONOMIC DEVELOPMENT, AND THE ECONOMY
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MASTER PLAN FOR HIGHER EDUCATION IN CALIFORNIA
YOUTH HOMELESSNESS IN SAN BERNARDINO COUNTY

JOINT COMMITTEE ON THE ARTS

Department of the Interior
United States Bureau of Reclamation
Water Resources and Planning Office
P.O. Box 25007
Denver, CO 80225-0007
Attn: Josh German

Dear Mr. Josh German,

As the Assemblymember for the 47th Assembly District, I am pleased to submit this letter of support for the *2024 Coachella Valley Regional Water Management Group (RWMG) WaterSMART Water and Energy Efficiency Grant (WEEG)* for funding.

Local water suppliers in Coachella Valley have prioritized demand management efforts to address drought relief, groundwater management, and water supply sustainability objectives. Per the 2020 Coachella Valley Regional Urban Water Management Plan, the Coachella Valley is expected to see more frequent periods of prolonged drought due to climate change. These drought periods result in below average rainfall and a subsequent decrease in natural recharge. These droughts will also have an impact on the imported water supplies being brought into the Valley from the Colorado River. Continued implementation of water efficiency programs and projects is essential to address these impacts.

The WEEG proposal includes multiple projects that will support drought response, water conservation, and the enhancement of local supply and climate resilience within the Coachella Valley including for underrepresented communities and Tribes. The suite of projects proposed includes rebate and incentive programs, a valve replacement program, and a meter replacement program. By implementing these projects, residents of the Coachella Valley will experience mitigated drought impacts, improved water supply reliability, and maintained water affordability. I urge you to fund *the 2024 Coachella Valley RWMG WaterSMART WEEG Proposal.*

Please do not hesitate to contact me if you have any questions. I can be reached at Assmblymember.Wallis@assembly.ca.gov or (760) 346-6342.

Sincerely,

GREG WALLIS
Assemblymember, 47th District

CITY OF DESERT HOT SPRINGS
CITY MANAGER'S OFFICE
11999 Palm Drive • Desert Hot Springs • CA • 92240
(760) 329-6411 • www.cityofdhs.org

January 22, 2024

Department of the Interior
United States Bureau of Reclamation
Water Resources and Planning Office
P.O. Box 25007
Denver, CO 80225-0007
Attn: Josh German

Dear Mr. Josh German,

On behalf of the City of Desert Hot Springs, we are pleased to submit this letter of support for the *2024 Coachella Valley Regional Water Management Group (RWMG) WaterSMART Water and Energy Efficiency Grant (WEEG)* for funding.

Local water suppliers in Coachella Valley have prioritized demand management efforts to address drought relief, groundwater management, and water supply sustainability objectives. Per the 2020 Coachella Valley Regional Urban Water Management Plan, the Coachella Valley is expected to see more frequent periods of prolonged drought due to climate change. These drought periods result in below average rainfall and a subsequent decrease in natural recharge. These droughts will also have an impact on the imported water supplies being brought into the Valley from the Colorado River. Continued implementation of water efficiency programs and projects is essential to address these impacts.

The WEEG proposal includes multiple projects that will support drought response, water conservation, and the enhancement of local supply and climate resilience within the Coachella Valley including for underrepresented communities and Tribes. The suite of projects proposed includes rebate and incentive programs, a valve replacement program, and a meter replacement program. By implementing these projects, residents of the Coachella Valley will experience mitigated drought impacts, improved water supply reliability, and maintained water affordability. The City of Desert Hot Springs urges you to fund *the 2024 Coachella Valley RWMG WaterSMART WEEG Proposal.*

Please do not hesitate to contact me if you have any questions. I can be reached at fluckino@cityofdhs.org or (760) 329-6411.

Sincerely,

Frank J. Luckino, MPA, ICMA-CM
City Manager
City of Desert Hot Springs

CAPITOL OFFICE
1021 O STREET, SUITE 6640
SACRAMENTO, CA 95814
TEL (916) 651-4018
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CHULA VISTA, CA 91910
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EL CENTRO DISTRICT OFFICE
1224 STATE STREET, SUITE D
EL CENTRO, CA 92243
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SENATOR.PADILLA@SENATE.CA.GOV

California State Senate

SENATOR
STEPHEN C. PADILLA
EIGHTEENTH SENATE DISTRICT

COMMITTEES
BUDGET SUBCOMMITTEE #4 ON STATE ADMINISTRATION AND GENERAL GOVERNMENT
CHAIR

MEMBER
AGRICULTURE
BUDGET
GOVERNMENTAL ORGANIZATION
HOUSING
NATURAL RESOURCES AND WATER

February 6, 2024

Department of the Interior
United States Bureau of Reclamation
Water Resources and Planning Office
P.O. Box 25007
Denver, CO 80225-0007
Attn: Josh German

Dear Mr. Josh German,

As State Senator of the 18th District, I am pleased to submit this letter of support for the 2024 Coachella Valley Regional Water Management Group (RWMG) WaterSMART Water and Energy Efficiency Grant (WEEG).

Local water suppliers in Coachella Valley have prioritized demand management efforts to address drought relief, groundwater management, and water supply sustainability objectives. Per the 2020 Coachella Valley Regional Urban Water Management Plan, the Coachella Valley is expected to see more frequent periods of prolonged drought due to climate change. These drought periods result due to below average rainfall and a subsequent decrease in natural recharge. These droughts will also have an impact on the imported water supplies being brought into the Valley from the Colorado River. Continued implementation of water efficiency programs and projects is essential to address these impacts.

The WEEG proposal includes multiple projects that will support drought response, water conservation, and the enhancement of local supply and climate resilience within the Coachella Valley including underrepresented communities and Tribes. The suite of projects proposed includes rebate and incentive programs, a valve replacement program, and a meter replacement program. By implementing these projects, residents of the Coachella Valley will experience mitigated drought impacts, improved water supply reliability, and maintained water affordability.

For these reasons, I urge your support for the 2024 Coachella Valley RWMG WaterSMART WEEG Proposal. Thank you for your consideration.

Sincerely,

Senator Stephen C. Padilla
18th Senate District

RAUL RUIZ, M.D.
Member of Congress
25th District of California

Congress of the United States
House of Representatives
Washington, DC 20515-3605

Washington, D.C. Office:
2342 Rayburn House Office Building
Washington, D.C. 20515
Phone: 202-225-5330

February 15, 2024

Mr. Josh German
Department of the Interior
United States Bureau of Reclamation
Water Resource and Planning Office
P.O. Box 25007
Denver, CO 80225-0007

Dear Mr. Josh German:

I write in support of 2024 Coachella Valley Regional Water Management Group (RWMG) and their application for the United State Bureau Reclamation (USBR) WaterSMART Water and Energy Efficiency Grant (WEEG) program. If awarded, this funding would enable RWMG to support drought response, water conservation, and the enhancement of local supply and climate resilience within the Coachella Valley including underrepresented communities and Tribes.

RWMG's multiple projects including Turf Removal for Domestic and Private Pumping Water Users; Inoperable Valve Replacement and Meter Replacement; Turf Rebates and High Efficiency Washing Machines; Turf Removal Which May Include Direct Installation; and Evaporative Cooler Tune Ups and Indoor Water Saving Appliances projects would address drought relief, groundwater management, and water supply sustainability objectives. WEEG funding would mitigate drought impacts, improve water supply reliability, and maintain water affordability.

As the Representative of California's 25th Congressional District, I understand the impact that RWMG's water conservation and supply projects would have on the lives of the individuals I serve and represent. Efforts to mitigate drought would ensure environmental and water supply protection of the Coachella Valley region. Addressing drought impacts and working toward the continued implementation of water efficiency programs and projects is essential.

I believe RWMG has the capacity to successfully implement these projects, and I urge full and fair consideration, consistent with all relevant program rules and regulations. If you have any additional questions, please feel free to contact my Washington, D.C. office at (202) 225-5330.

Sincerely,

Raul Ruiz, M.D.
Member of Congress

STATE CAPITOL
P.O. BOX 942849
SACRAMENTO, CA 94249-0036
(916) 319-2036
FAX (916) 319-2136

Assembly
California Legislature

EDUARDO GARCIA
ASSEMBLYMEMBER, THIRTY-SIXTH DISTRICT

02/12/2024

Department of the Interior
United States Bureau of Reclamation
Water Resources and Planning Office
P.O. Box 25007
Denver, CO 80225-0007
Attn: Josh German

Dear Mr. German,

As the Assemblymember for the 36th Assembly District, encompassing a portion of Coachella Valley Water District's service area, I am pleased to submit this letter of support for the *2024 Coachella Valley Regional Water Management Group (RWMG) WaterSMART Water and Energy Efficiency Grant (WEEG)*.

Water suppliers in the Coachella Valley are prioritizing managing demand to combat drought, groundwater depletion, and ensure water sustainability. According to the 2020 Coachella Valley Regional Urban Water Management Plan, the region anticipates more frequent and prolonged droughts due to climate change, resulting in decreased rainfall, reduced natural recharge and water importation from the Colorado River.

The proposed WEEG projects aim to tackle these challenges by enhancing drought response, promoting water conservation, and strengthening local supply resilience with a focus on inclusivity for underrepresented communities and tribes. The initiatives encompass rebate programs, valve replacements, and meter upgrades, ultimately reducing drought impacts and enhancing water reliability and ensuring reliability. For these reasons and many others, I respectfully urge you to fund *the 2024 Coachella Valley RWMG WaterSMART WEEG Proposal.*

Please do not hesitate to contact me if you have any questions. I can be reached at my district office at 760-347-2360.

Sincerely,

Eduardo Garcia
Assemblymember
California Assembly District 36

KEN CALVERT
41ST DISTRICT, CALIFORNIA

2205 RAYBURN HOUSE OFFICE BUILDING
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400 SOUTH VICENTIA AVENUE
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73-710 FRED WARING DRIVE
SUITE 129
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UNITED STATES
HOUSE OF REPRESENTATIVES

COMMITTEE ON APPROPRIATIONS

SUBCOMMITTEES:

CHAIRMAN
DEFENSE

ENERGY AND WATER DEVELOPMENT

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INSTAGRAM: REPKENCALVERT

February 16, 2024

Josh German
United States Bureau of Reclamation
Water Resources and Planning Office
U.S. Department of the Interior
P.O. Box 25007
Denver, CO 80225-0007

Dear Josh German:

On behalf of California's 41st congressional district, I am pleased to submit this letter of support for the *2024 Coachella Valley Regional Water Management Group (RWMG) WaterSMART Water and Energy Efficiency Grant (WEEG).*

Local water suppliers in Coachella Valley have prioritized demand management efforts to address drought relief, groundwater management, and water supply sustainability objectives. Per the 2020 Coachella Valley Regional Urban Water Management Plan, the Coachella Valley is likely to experience more frequent periods of prolonged drought resulting in below-average rainfall and a subsequent decrease in natural recharge. These droughts will also impact the imported water supplies being brought into the Valley from the Colorado River. Continued implementation of water efficiency programs and projects is essential to address these impacts.

The WEEG proposal includes multiple projects that will support drought response, water conservation, and the availability of local supply within the Coachella Valley. The suite of projects proposed includes rebate and incentive programs, a valve replacement program, and a meter replacement program. By implementing these projects, residents of the Coachella Valley will experience improved water supply reliability and water affordability.

Thank you for your consideration of this application. Please contact my staff at 202-225-1986 or Jack.Lincoln@mail.house.gov with any questions you may have.

Sincerely,

Ken Calvert

KEN CALVERT
Member of Congress

County of Riverside

RIVERSIDE OFFICE:
4080 Lemon Street, 5th Floor
Riverside, CA 92502-1647
(951) 955-1040
Fax (951) 955-2194

DISTRICT OFFICE/MAILING ADDRESS
78015 Main Street, Ste. 205
La Quinta, CA 92253-3420
(760) 863-8211
Fax (760) 863-8905

SUPERVISOR V. MANUEL PEREZ
FOURTH DISTRICT

February 15, 2024

Department of the Interior
United States Bureau of Reclamation
Water Resources and Planning Office
P.O. Box 25007
Denver, CO 80225-0007
ATTN: Mr. Josh German

Dear Mr. German:

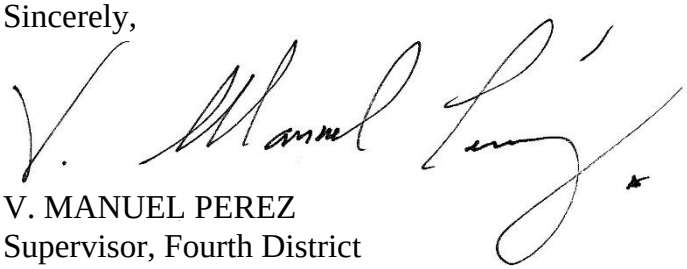
I write in support of the funding proposal submitted by the 2024 Coachella Valley Regional Water Management Group (RWMG) to the U.S. Bureau of Reclamation's WaterSMART Water and Energy Efficiency Grant (WEEG) program.

Local water suppliers in Coachella Valley have prioritized demand management efforts to address drought relief, groundwater management, and water supply sustainability objectives. Per the 2020 Coachella Valley Regional Urban Water Management Plan, the Coachella Valley is expected to see more frequent periods of prolonged drought due to climate change. These drought periods result in below average rainfall and a subsequent decrease in natural recharge. These droughts will also have an impact on the imported water supplies being brought into the Coachella Valley from the Colorado River. Continued implementation of water efficiency programs and projects is essential to address these impacts.

The WEEG proposal includes multiple projects across the entire Coachella Valley region that would support drought response, water conservation, and the enhancement of local supply and climate resilience within the communities of the Coachella Valley including for underrepresented communities and Tribes. The suite of projects proposed includes rebate and incentive programs, valve replacement and meter replacement programs. By implementing these projects, residents of the Coachella Valley will experience mitigated drought impacts, improved water supply reliability, and maintained water affordability.

As supervisor for Riverside County's Fourth District, representing eastern Riverside County and the mountain communities, I support the efforts in the 2024 Coachella Valley RWMG WaterSMART WEEG proposal to conserve water resources. If you have any questions about my support for this application, please don't hesitate to contact me at (760) 863-8211. Thank you for your consideration.

Sincerely,



V. MANUEL PEREZ
Supervisor, Fourth District

VMP:das