



**WaterSMART Grants: Water and
Energy Efficiency Grants for Fiscal Year
2023
(NOFO No. R23AS00008)**

**CVWD Rebates for Landscape
Irrigation Measures**

Submitted by:

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TITLE PAGE

Project Title: CVWD Rebates for Landscape Irrigation Measures

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1. TECHNICAL PROPOSAL AND EVALUATION CRITERIA

1.1 Executive Summary

Date: July 28, 2022 **Applicant:** Coachella Valley Water District (CVWD)
City: Palm Desert, CA **County:** Riverside **State:** California

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

The CVWD Rebates for Landscape Irrigation Measures Project (Project) will allow CVWD to better address water shortages and drought conditions by implementing water use efficiency measures at golf courses throughout its service area. The Project will achieve water savings and provide improved operational efficiencies, energy savings, and multiple environmental benefits. The golf courses currently rely on imported Colorado River water and groundwater pumped from Coachella Valley Groundwater Basin for irrigation purposes. This Project will assist the Region's water purveyors in effectively managing groundwater by reducing demands and groundwater pumping. CVWD is applying to the WaterSMART Water and Energy Efficiency grant program for \$1,500,000 under Funding Group II to complete work under three tasks. These tasks include rebates for turf conversions, installing smart weather-based irrigation control systems, and sprinkler nozzle replacements. This Project is an extension of CVWD's existing turf removal program that has been highly effective at reducing outdoor water use and associated energy demands. CVWD will offer rebates to golf courses throughout its service area located in Coachella Valley in Riverside County, California, as shown in Figure 1. The Project is estimated to result in five-year lifetime water savings of 8,186 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 May 1, 2023 and be completed by May 1, 2026.

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

The Project is not located on a Federal facility.

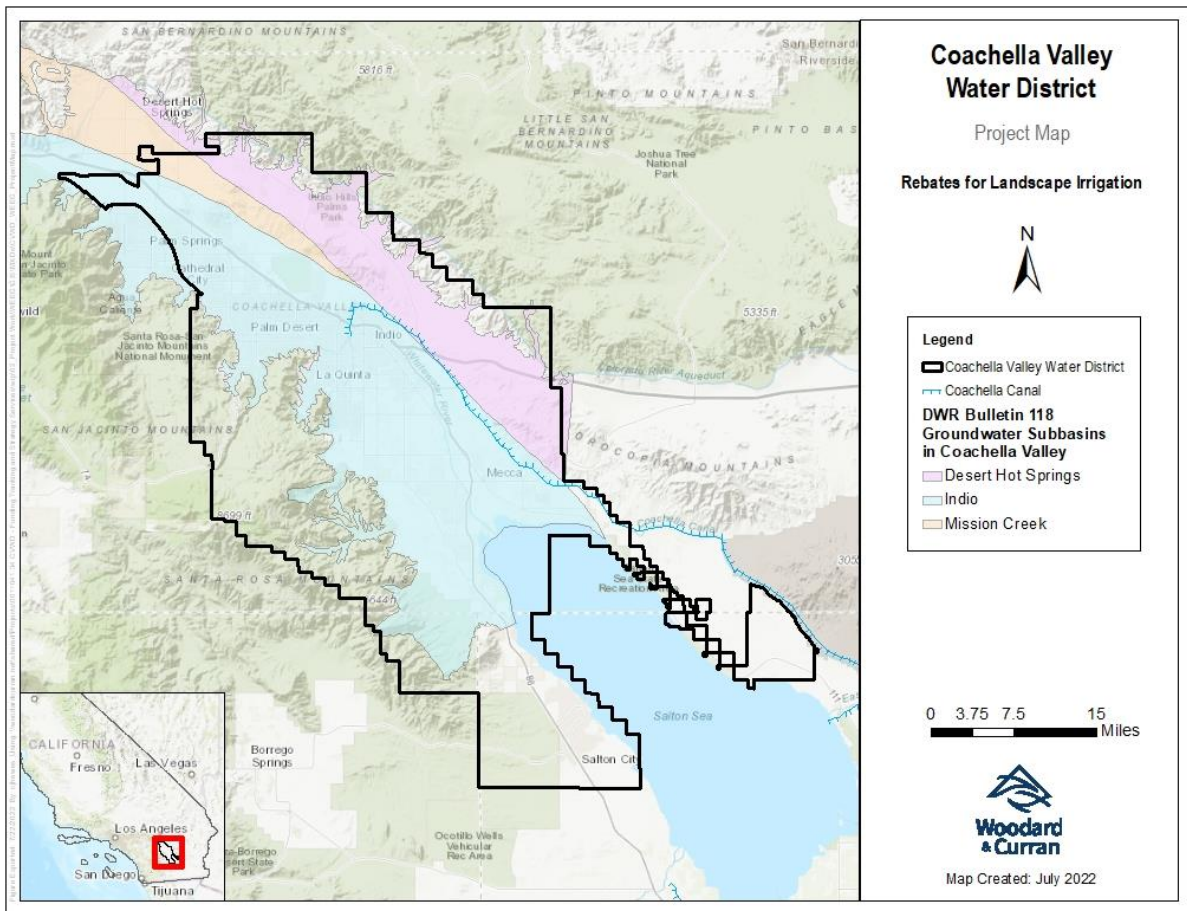


Figure 1: Project Map

1.2 Technical Project Description

1.2.1 Project Background

CVWD lies within the Whitewater River watershed in the Coachella Valley, which is located within Riverside County, California in southern California. The Coachella Valley climate is characterized by low precipitation and high summer daytime temperatures. CVWD's service area covers several incorporated cities, including Palm Springs, Cathedral City, Palm Desert, Rancho Mirage, Indian Wells, and La Quinta.

The CVWD service area is located in the Colorado River Hydrologic Region as defined by the California Department of Water Resources (DWR). Most of the Colorado River region has a subtropical desert climate with hot summers and short, mild winters. Monthly average temperature reaches as high as 108 degrees Fahrenheit (F) and monthly average low temperatures are 38 degrees F. Precipitation typically occurs during the winter months with an annual mean rainfall ranging from 3 to 5.5 inches.

Since CVWD's boundaries fall within DWR's highest climate zone (18), it takes more water to grow landscapes here than in any other portion of California. The Coachella Valley shares this highest water use designation with the Palo Verde Valley, Imperial Valley, and Death Valley.

One way to reduce landscape water demands is to use native desert plants in landscaping. Desert native plants have evolved both anatomical and physiological mechanisms that allow them to survive on annual rainfall alone. Within the Coachella Valley, which is one of the lowest annual rainfall areas in the state, desert plants from other, wetter deserts can be utilized with a minimum amount of irrigation.

1.2.2 Golf Courses in the Coachella Valley

Golf courses are an important part of the Coachella Valley and regional economy. Recognizing the nexus between water availability and long-term sustainability of the golf industry, the Southern California Golf Association and representatives of local golf course associations met with CVWD to form the Coachella Valley Golf and Water Task Force in 2013. The primary purpose of the Golf and Water Task Force is to reduce the amount of water used by golf courses in the Coachella Valley. One water-wise practice that has been implemented by the golf industry to reduce water use is removing turf and replacing turf with desert landscaping in non-play areas. This practice is an effective long-term strategy to reduce water use and falls in line with CVWD's goal of reducing golf course-related water use by 10% for existing courses and by 25% for new courses through increased conservation.

Despite efforts by the Golf and Water Task Force, local golf courses have indicated that turf replacement is not affordable because the cost of turf removal and re-landscaping is approximately \$30,000 per acre. In addition, the majority of golf courses in the Coachella Valley that use potable water sources for irrigation rely upon local groundwater pumping from private wells for irrigation needs. Groundwater pumping is comparatively inexpensive, making economic incentives to replace turf a challenge in the Coachella Valley compared to other regions where golf courses irrigate with higher-cost municipally supplied potable water. To increase turf conversion at golf courses, CVWD implemented a golf course turf rebate program with funding from a competitive grant awarded by DWR from Proposition 84 and a Reclamation Water and Energy Efficiency FY16 grant, to provide financial incentives to reduce turf grass at local golf courses. However, these grant funds have been exhausted and local funding is not currently available for the program, and therefore, CVWD is not accepting applications for the golf course turf rebate program at this time. A large portion of golf courses are private pumpers and are therefore not CVWD customers. Due to legal restrictions associated with California's Proposition 218, CVWD is not able to directly provide funding from its budget to benefit users that are not CVWD

customers. Therefore, funding for the golf course turf rebate program must come from outside grant funding.

The \$1.5 million grant that is being requested would be used exclusively to fund rebates for commercial golf courses, and matching funds would be provided by the golf courses. In summary, without grant funding, CVWD will not be able to provide rebates to the golf industry to reduce their water footprint and energy demands associated with water use and groundwater pumping.

Obtaining grant funding for this Project is a priority for CVWD due to the local and regional benefits imparted by this program. Therefore, CVWD will continue to aggressively pursue grant funding to fund this program and meet goals of the 2020 Coachella Valley Regional Urban Water Management Plan (UWMP) (Water Systems Consulting, Inc., 2020) associated with reducing golf-related water demands (refer to Section 1.3.5 for more details).

1.2.3 CVWD Water Supplies

CVWD's water supply portfolio includes groundwater, imported water, and recycled water. Imported supplies are comprised of two sources: Colorado River entitlements delivered via the Coachella Canal ("Canal water"), and State Water Project (SWP) delivered via exchange with the Metropolitan Water District of Southern California (MWD). Since there is no physical connection to bring SWP water to the Valley, CVWD has entered into exchange agreements with MWD. CVWD receives water from MWD's Colorado River Aqueduct (CRA), and in exchange MWD receives SWP water that would have gone to CVWD.

Groundwater is the largest source of water supply for the Region. The Coachella Valley Groundwater Basin, which includes several sub-basins, has an estimated storage capacity of 39 million AF of water. The two largest subbasins in the Coachella Valley Groundwater Basin used to meet municipal water demands are the Indio Subbasin and the Mission Creek Subbasin. The majority of the CVWD service area overlies the Indio Subbasin.

Water supplies used for golf course irrigation in CVWD's service area include groundwater, recycled water, and non-potable Canal water. SWP exchange water is used for groundwater replenishment and is not used to directly meet golf course demands. Over the last several decades, CVWD has constructed a non-potable water system to deliver recycled water, non-potable Canal water, or a blend of the two supplies to golf courses located in the mid-Valley area to be used in-lieu of groundwater to reduce groundwater pumping. Canal water is currently delivered to 30 golf courses and an additional 9-holes on another course in the Indio Subbasin. Golf courses served with non-potable Canal water are required to meet at least 80 percent of their water needs with non-potable Canal water. CVWD is working with one additional golf course to connect it to the non-potable water distribution system. There are approximately 105 golf courses

within the CVWD service area. The remaining 75 golf courses are primarily served by private groundwater wells or alternative non-potable water sources such as recycled water (Water Systems Consulting, Inc., 2020). In order to maximize groundwater use reductions and contribute to groundwater basin sustainability, the Project will focus on reducing groundwater use at golf courses that are still dependent on private wells. For the purposes of this proposal, it is assumed all water saved from the Project will be groundwater pumped by private users.

1.2.4 Project Description

The goal of the CVWD Rebates for Landscape Irrigation Measures Project is to reduce groundwater used by golf courses by offering rebates to support turf conversions, irrigation system upgrades, and sprinkler nozzle replacements. The grant funding that is being requested as part of this Proposal would fund and expand a previously implemented golf course turf replacement program, as well as expand the program to also include rebates for irrigation system upgrades and sprinkler nozzle replacements. This Project provides a multifaceted approach, by making rebates available to golf courses across three key conservation areas, detailed in Tasks 1 through 3 below.

- Task 1: Turf Conversions: this Task consists of an expansion of CVWD's turf reduction program to provide rebates to golf courses to replace high-water consuming turf with low water-use desert-friendly landscaping or to expand permeable surfaces such as sand traps or bunkers. The Project would provide a rebate of \$3/square foot of turf removed.
- Task 2: Irrigation System Upgrades: this Task would provide rebates to golf courses to make irrigation system upgrades, including upgrading irrigation controllers to smart weather-based controllers, installing soil moisture sensor irrigation controllers, and replacing entire irrigation system infrastructure with drip irrigation. Through the rebate made available under this Task, the Project would cover 50% of the costs of eligible upgrades, up to \$10,000 rebated per upgrade.
- Task 3: Sprinkler Nozzle Replacements: this Task would provide rebates to golf courses to replace inefficient sprinkler heads with more efficient models. The Project would provide a rebate of \$4/nozzle replaced.

The Rebates for Landscape Irrigation Measures Project will be administered by CVWD conservation staff. Golf courses interested in participating will apply. The application will be reviewed and approved by CVWD. CVWD will also conduct pre- and post-visits to customer sites, 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 the water-efficient landscape upgrades. In total, it is anticipated that \$47,510 will be required for program administration costs, which are described in further detail in the budget.

General terms and requirements of the Rebates for Landscape Irrigation Measures are:

- Applicants must submit landscape plans for all areas to be converted from turf to drought tolerant landscaping. Plans must clearly show:
 - Total project area with turf or lake removal areas clearly defined
 - Proposed landscaping
 - Proposed drip irrigation system (no overhead spray heads allowed)
 - Total estimated water savings
- Plans must be prepared in compliance with CVWD Landscape Ordinance 1302.5, which establishes effective water efficient landscape requirements for newly installed and rehabilitated landscapes
- Applicants must commit to sharing water usage data with the Golf and Water Task Force
- Applicants must keep the new landscaping and/or system upgrades in place for at least five years or will be required to pay back the rebate amount
- Rebates will be paid after the project has been completed, and CVWD has verified project implementation

1.3 Evaluation Criteria

1.3.1 Evaluation Criterion A—Quantifiable Water Savings (28 points)

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

Note that an agreement will not be awarded for an improvement to conserve irrigation water unless the applicant agrees to the terms of Public Law 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) ***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.

The Project is planned to result in 1,637 AF of water savings annually. These water savings would be the result of approximately 333,333 square feet of turf conversion, 30 irrigation

system upgrades, and 50,000 sprinkler nozzle replacements. The Project would result in decreased groundwater pumping to be made available during droughts and dry year periods. More detailed information on the water savings calculations is provided in the answer to question #3 in this section.

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 in the form of excess water applied to golf course turf. Generally, current losses from over-irrigation are lost to evapotranspiration from surface soil in the hot and arid climate of the Coachella Valley.

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, they are largely lost to evapotranspiration. Depending on where the golf course is located, a portion of losses may seep into the soil and ultimately percolate into the groundwater aquifer, and would then be suitable for reuse. The subbasins that underlie the CVWD service area, the largest of which is the Indio Subbasin, vary geologically. In the Indio Subbasin West Valley, coarse-grain sediments allow for percolation of applied water through sand and gravel directly into the groundwater aquifer for recharge and reuse, while in the Indio Subbasin East Valley, clay layers between the ground surface and the main aquifer effectively prohibit percolation.

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?

Current losses are in the form of excess water applied to golf course turf. Benefits from current losses are minimal. As described above, much of the losses evaporate from surface soil due to the hot and arid climate of the Coachella Valley. While a portion of this seepage water may percolate into the groundwater table in areas that overlie sand and gravel soils that allow for direct recharge to the groundwater aquifer, the overall volume of recharge is minimal compared to the long-term average value estimated for natural infiltration in the groundwater basin.

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, please note that the use of visual observations alone to calculate water savings, without additional documentation/data, are not sufficient to receive credit under this section. Further, the water savings must be the result of reducing or eliminating a current, ongoing loss, not the result of an expected future loss.

In 2022, the Coachella Valley Golf and Water Task Force issued a survey to local golf courses to evaluate interest in rebates for landscape irrigation measures. 17 golf courses responded with providing information on current irrigation systems, average age of the irrigation system used, and interest in turf conversion or water use reduction projects. The golf courses have an average acreage of 106 acres, an average irrigation system age of 18 years, average use of water per day in season (winter) of 759,679 gallons per day and 1,694,813 gallons per day in the off-season (summer). The golf courses are planning an average of 40-50 acres of turf removal with their renovation, in addition to other plans to reduce water usage on a permanent basis. Understanding interest in the Rebates for Landscape Irrigation Measures provides CVWD confidence that a minimum of \$1.5 million in rebates could be provided for project implementation.

Estimated water savings for each Landscape Irrigation Measure component (Tasks 1 through 3) are described below.

Task 1: Turf Conversions: Irrigation savings related to turf conversion were estimated using figures from local golf course turf removal projects that have been completed and reported data to the Golf and Water Task Force. These completed projects show an average savings of 5 AFY per acre of turf removed. With a rebate of \$3.00/SF of turf removed (and thus an assumed total cost of \$6.00/SF), the golf course turf rebate program will convert a total of 333,333 SF of turf, which equates to 7.7 acres of turf removal. Assuming the 5 AFY of water savings, the 7.7 acres of converted turf will conserve a total of 38 AFY of water. Terms of the rebate program require that turf conversions remain in place for at least five years after installation; therefore, the project is assumed to have a useful life of five years. Over the five-year useful life of the project, a total water savings of **191 AF** would accrue. The total area of turf to be removed through this Project was identified through the Project screening survey conducted by the Coachella Valley Golf and Water Task Force.

Task 2: Irrigation System Upgrades: Irrigation savings related to irrigation system upgrades were estimated using values calculated from EPA's WaterSense Water Budget Tool (EPA, 2020) and estimated water savings based on research. First, the water

requirement for the golf courses' turf irrigation was estimated using the following formula.

$$LWR_H = \frac{1}{DU_{LQ}} \times [(ET_o \times K_L) - R_a] \times A \times C_u$$

Where:

- LWR_H = Landscape water requirement for the hydrozone (gallons/year)
- DU_{LQ} = Lower quarter distribution uniformity (dimensionless, is a way of representing irrigation efficiency)
 - 0.65 is the recommended factor by EPA for fixed spray irrigation system, the assumed default existing irrigation type on golf courses.
- ET_o = Local reference evapotranspiration (in/month)
 - 72.44 inches for CVWD, based on averaging all available annual evapotranspiration data from California Irrigation Management Information System (CIMIS) stations 200, 208, 218, and 136 which are located within or adjacent to CVWD's service area.
- K_L = Landscape coefficient for the type of plant in that hydrozone (dimensionless)
 - 0.70 is the recommended factor by EPA for turf with medium (average) water requirements.
- R_a = Allowable rainfall, designated by WaterSense as 25% of average peak rainfall
 - Average rainfall is 2.54 inches, based on averaging precipitation data available 2000-2021 from CIMIS stations 200, 208, 218, and 136 which are located within or adjacent to CVWD's service area. Allowable rainfall is thus $2.54 \text{ in} * 25\% = 0.64 \text{ in}$
- A = Area of the hydrozone (square feet)
 - Entered as 43,560 square feet which is equal to one acre in order to develop a unit irrigation factor.
- C_u = Conversion factor (0.6233 for results in gallons/year)

Plugging in CVWD-specific climate values and the other assumptions above, the estimated existing as-is irrigation requirement for golf courses is 2 million gallons/ac or 6.42 AF/ac.

The subsections below describe how water savings rates were estimated for each of the pertinent project types in Task 2 - Irrigation System Upgrades.

Weather-Based Irrigation Controllers

Research suggests that on average, weather-based irrigation controllers reduce irrigation needs by 15% (Williams *et al.*, 2014), based on a 2014 study sponsored

by the EPA that compiled and aggregated results across numerous studies of irrigation controllers of various types.

6.42 AF/ac of baseline irrigation * 15% = **0.96 AF/ac** of savings expected from use of a weather-based irrigation controller.

Soil Moisture Sensor Irrigation Controllers

Research suggests that on average, soil moisture sensor irrigation controllers reduce irrigation needs by 38% (Williams, *et al.*, 2014), based on a 2014 study sponsored by the EPA that compiled and aggregated results across numerous studies of irrigation controllers of various types.

6.42 AF/ac of baseline irrigation * 38% = **2.44 AF/ac** of savings expected from use of a soil moisture sensor irrigation controller.

Replaced Irrigation System Components

EPA's WaterSense Water Budget Tool calculation described above was re-run, assuming a DU_{LQ} (lower quarter distribution uniformity) of 0.9 which is the recommended factor by EPA for a pressure compensating drip irrigation system. The estimated irrigation requirement for golf courses in CVWD's service area with pressure compensating drip irrigation systems is 1.5 million gallons/ac or 4.6 AF/ac. This represents a **1.8 AF/ac** water savings from the existing irrigation requirement.

In summary, Task 2 will cover the costs of installing Weather-Based Irrigation Controllers (0.96 AF/ac savings), soil moisture sensor irrigation controllers (2.44 AF/ac savings), and/or installation of drip irrigation (1.78 AF/ac savings). For the purpose of estimating water savings, the \$600,000 project budget for Task 2 is assumed to be allocated equally between each type of upgrade project:

- Weather-based irrigation controllers
 - Average cost per controller is \$1,408 based on 407 rebated controllers by CVWD from 2017-2021. Irrigated landscape served by each controller when averaged across the program was 1.4 ac.
 - \$200,000 budget / \$1,408 per controller = 142 controllers * 1.4 acres per controller = 200 ac * 0.96 AFY/ac savings = **192 AFY savings**
- Soil moisture sensor irrigation controllers
 - Cost per system is assumed to be double the average cost of the weather-based irrigation controller due to the need for additional equipment to measure soil moisture and run the control system.

- \$200,000 budget / \$2,816 per controller = 71 controllers * 1.4 acres per controller = 200 ac * 2.44 AFY/ac savings = **243 AFY savings**
- Drip irrigation system upgrades
 - Based on a 50% rebate of maximum \$10,000 per upgrade (meaning \$20,000 total upgrade cost), approximately 10 drip irrigation system upgrades will be accomplished.
 - Based on the local golf course survey described above, the average golf course size is 106 ac. Approximately 10% (10.6 ac) is assumed to be able to be retrofitted with drip irrigation.
 - 10 upgrades * 10.6 ac / upgrades * 1.78 AFY/ac savings = **189 AFY savings**

Total annual savings from the three components is 624 AF. Terms of the rebate program require that irrigation system upgrades remain in place for at least five years after installation; therefore, the project is assumed to have a useful life of five years. Over the five-year useful life of the project, a total water savings of **3,118 AF** would accrue (624 AFY x 5 years).

Task 3: Sprinkler Nozzle Replacements: Irrigation savings related to sprinkler nozzle replacements were estimated using values from EPA's WaterSense Water Budget Tool. The Tool calculation described above was re-run, assuming a DU_{LQ} (lower quarter distribution uniformity) of 0.7 which is the recommended factor by EPA for a more efficient microspray irrigation system compared to the inefficient fixed rotor spray method. The estimated irrigation requirement for golf courses in CVWD's service area with microspray (e.g. efficient sprinkler heads) is 1.9 million gallons/ac or 5.96 AF/ac. This represents a **0.46 AF/ac** water savings from the existing irrigation requirement (6.42 AF/ac – 5.96 AF/ac = 0.46 AF/ac).

Based on input from local golf courses, the average number of sprinkler heads per acre of irrigated golf course is between 22-25. Based on rebating 50,000 sprinkler heads, this equates to 2,128 acres of golf course irrigated more efficiently. Multiplied by a savings factor of 0.46 AFY/ac, this equates to 975 AFY.

Terms of the rebate program require that sprinkler nozzle replacements remain in place for at least five years after installation; therefore, the project is assumed to have a useful life of five years. Over the five-year useful life of the project, a total water savings of **4,877 AF** would accrue (975 AFY x 5 years). The total number and type of sprinkler nozzle replacements to be supported through this Project was identified through the Project screening survey conducted by the Coachella Valley Golf and Water Task Force.

Summary of Savings from Tasks 1 - 3

In total, the Rebates for Landscape Irrigation Measures project would result in 8,186 AF of water savings as summarized in Table 1 below.

Table 1: Rebates for Landscape Irrigation Measures

Task	Total Grant Request	Total Matching Funds	Rebate Provided	Metric	Total Water Savings (AF over 5-year lifetime)	Energy Savings (kWh over 5-year lifetime)
1: Turf Conversions	\$1,000,000	\$1,000,000	\$3.00 per square foot	333,333 square feet of turf removed	191	85,820
2: Irrigation System Upgrades	\$300,000	\$300,000	50% coverage of costs	30 upgrades to irrigation systems	3,118	1,398,721
3: Sprinkler Nozzle Replacements	\$200,000	\$200,000	\$4/nozzle	50,000 sprinkler nozzles replaced	4,877	2,187,909
Total	\$1,500,000	\$1,500,000	-	-	8,186	3,672,450

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 items a through f from the NOFO.

Not applicable as this is a Landscape Irrigation Measures 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 items a through e from the NOFO.

Not applicable as this is a Landscape Irrigation Measures project.

(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. Applicants proposing municipal metering projects should address items a through f from the NOFO.

Not applicable as this is a Landscape Irrigation Measures 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.**

Turf removal savings were estimated using figures from local golf course turf removal projects that have been completed and reported data to the Golf and Water Task Force as described in question 3 above.

- b. 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 333,333 square feet (7.7 ac) 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 6.42 AFY/ac (see answer to question 3 above for more details). In total, the turf removal element of this Project would result in water savings of 191 AF, as described in the answer to question 3 above. Although not factored into the calculations described above, it is worth noting that existing turf areas are overseeded each year: the turf is scalped, a winter species is seeded, and fertilizer is applied. During this time, irrigation is increased to several times a day, and this increased level of irrigation lasts for a couple of weeks. When turf is converted to desert-friendly landscaping, this practice would no longer occur, thus further reducing water use.

- c. 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?**

Water saving estimates are based upon historical water consumption data. The 5 AFY/ac of water savings are based upon data provided by the Coachella Valley Golf and Water Task Force, which is local data in the Coachella Valley. These water savings take into consideration local weather considerations and historical consumption data.

- d. 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 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 water-wise landscaping will be measured. CVWD conservation staff have established a detailed pre-approval inspection process that will allow water savings comparisons to be made when the once turf conversion has occurred.

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

In order to verify the water savings, water use data from CVWD will be compared pre- and post-project implementation. CVWD currently collects groundwater pumping data for the golf courses that will receive the turf reduction rebates. Furthermore, CVWD works with local golf courses that receive rebate funds to compare historical overall water use from before and after project implementation. 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.

Water savings associated with smart irrigation controllers, irrigation system upgrades to drip irrigation, and nozzle replacements are described in detail above in the answer to question #3 above.

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 include a weather adjustment component, taking into account the locally-specific climate data (evapotranspiration and precipitation) of CVWD's service area.

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

The Project would allow CVWD to offer rebates to golf courses to make irrigation system upgrades, including upgrading irrigation controllers to smart weather-based or soil moisture sensor irrigation controllers and replacing entire irrigation system infrastructure with drip irrigation. In addition, the Project would support sprinkler nozzle replacements to replace inefficient sprinkler heads with more efficient models. The types (manufacturer

and model) of devices that will be installed, and the quantity of each, are listed below in Table 2.

Table 2: Types of Landscape Irrigation Efficiency Devices to be Installed

Device Type	Manufacturer	Model	Quantity
Smart weather-based controllers	Must be Smart Water Application Technologies (SWAT) certified, Water Sense labeled, or must meet the Irrigation Association’s definition of a Smart Controller: “...monitor and use information about environmental conditions for a specific location and landscape information such as soil moisture, rain, wind, the plant’s evaporation and transpiration (I/TO) rates, and in some cases, plant type and more-that enables the device to decide when to water, and when not to, providing exactly the right amount of water to maintain lush, healthy growing conditions.”		30 systems upgraded
Soil moisture sensors			
Irrigation system infrastructure	No specifications – must be one of: subsurface/in-line drip tubing or non-adjustable, pressure compensating bubblers and emitters		
High-efficiency sprinkler nozzles	Hunter	MP Rotator (MP1000, MP2000, or MP3000)	50,000
	K-Rain	RN-100 GREEN, RN-200 BLUE, or RN-300 RED	
	Rain Bird	R13-18 Series or R17-24 Series	
	Toro	Precision Series (numerous model number variations)	

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

The devices will be installed through a rebate program. The Project rebate will cover up to 50% of the costs of eligible upgrades, including upgrading irrigation controllers to smart weather-based or soil moisture sensor irrigation controllers, replacing entire irrigation system infrastructure with drip irrigation, and replacing inefficient sprinkler nozzles with more efficient models.

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

Yes. Site audits will be performed both before applicants are accepted into the rebate program and after installation. Water use will be evaluated through inspections by CVWD staff or supporting staff performing pre- and post-site inspections to evaluate the water efficiency system upgrades. CVWD conservation staff have established a detailed pre-approval inspection process and post-implementation monitoring program.

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

To verify the water savings, water use data from CVWD will be compared pre- and post-project implementation. CVWD currently collects groundwater pumping data for the golf courses that will receive the turf reduction rebates. Furthermore, CVWD works with local golf courses that receive rebate funds to compare historical overall water use from before and after project implementation. Therefore, local data will be available to verify water savings after implementation takes place.

(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 items a through e from the NOFO.

Not applicable as this is a Landscape Irrigation Measures project.

(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 items a through c from the NOFO.

Not applicable as this is a Landscape Irrigation Measures project.

1.3.2 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 No. 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 No. 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 Subcriteria No.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 Subcriteria No. B.1 and B.2.

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

Up to 20 points may be awarded for projects that include constructing or installing renewable energy components (e.g., hydroelectric units, solar-electric facilities, wind energy systems, or facilities that otherwise enable the use of renewable energy). Projects such as small-scale solar resulting in minimal energy savings or production will be considered under Subcriterion No. B.2.

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.

Not applicable as this is a Landscape Irrigation Measures project. This Project increases energy efficiency through water conservation improvements that result in reduced pumping and diversions (see Subcriterion No. B.2).

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

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

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

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

By reducing demands for water for irrigation purposes, the Project will result in energy efficiencies. Energy efficiencies that would be achieved from implementation of the golf course rebates are related to reduced groundwater pumping. The golf course rebate program would prioritize reduction to groundwater use. Water savings from the project would result in energy savings associated with reduced energy required to locally and privately pump groundwater at individual golf course sites.

To estimate the associated private energy savings, calculations were based on energy intensity data provided by CVWD from 2014. Due to confidentiality requirements, formal documentation is not available from CVWD to show energy requirements of onsite golf course users. However, CVWD reports that the average energy required for onsite groundwater pumping at golf courses in the region is 448.6 kWh/AF per year; email communication from CVWD is included as Appendix A.

Given that the Project would save an average of 1,637 AFY of water and 100 percent is assumed to offset groundwater use, each year this rebate program would save 734,490 kWh of energy. Over the five-year lifetime of the project, 3,672,450 kWh of energy would be saved. Calculations for annual energy savings from reduced groundwater pumping as a result of implementation of the golf course rebate program are shown in Table 3.

Table 3: Energy Savings

Amount of Water Saved per Year (AFY)	Percent of Water Savings from Groundwater	Average Energy Use (kWh/AF)	Annual Energy Savings (kWh/year)	Total Amount of Energy Saved over Five Years (kWh)
1,637	100%	448.60	734,490	3,672,450

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

Water use reductions are expected to result in reduced groundwater pumping, with an energy savings of 734,490 kWh/yr or 3,672,450 kWh of energy over the five-year lifetime of the project.

EPA’s Greenhouse Gas Equivalencies Calculator was used to estimate the greenhouse gas emissions reduction based on “Kilowatt-hours avoided”. The rate of energy associated with reduced groundwater pumping is 448.6 kWh/AF which translates to 0.318 Metric Tons of Carbon Dioxide (CO₂) equivalent. Scaling this up to the total five-year lifetime energy saves of 3,672,450 kWh results in 2,603 Metric Tons of CO₂.

- ***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?***

CVWD’s well inventory demonstrates that each golf course generally has two groundwater pumps that pump between 500-1,000 gallons per minute (gpm). Operations on each golf course generally include the use of an onsite lake into which groundwater is pumped and held prior to being used for irrigation purposes.

Implementation of prior golf course turf removal rebates and coordination with the Golf and Water Task Force has demonstrated that with implementation of the golf course turf rebates, golf courses are able to attain the expected reduction and stay within that figure. This data also shows that pumping requirements are similarly reduced given that less water is pumped as a result of implementation of the turf rebates.

- ***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.***

The 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 program implementation (as described above in the first answer in this section). Therefore, these calculations take place at the point of diversion at the private wellhead (where groundwater leaves the basin), and not based upon an alternate site of origin.

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

The energy savings calculations do not include energy required to treat the water. The water currently applied for irrigation is untreated.

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

The Rebates for Landscape Irrigation Measures Project will not reduce or increase miles driven, thereby affecting carbon emissions. Driving to and from site visits, is currently conducted by CVWD staff. The amount of driving required for the Rebates for Landscape Irrigation Measures Project is not expected to change substantially as a result of additional funding provided by this grant.

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

The Project does not include renewable energy components, as the Project is a Landscape Irrigation Measures project that will offer rebates to golf courses for making landscape irrigation measure improvements.

1.3.3 Evaluation Criterion C—Sustainability Benefits (20 points)

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

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

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

Climate change has the potential to affect one of Coachella Valley's major source of imported water supply: the Colorado River. 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 Rebates for Landscape Irrigation Measures 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 resilience.

The Project area is also a major component of the Pacific Flyway, which is one of four major migratory routes used by migratory birds in North America. Over 400 migratory and resident bird species have been documented in the Salton Sea and surrounding area, which is designated as an internationally important staging area for shorebirds and is located within CVWD's service 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).***

Yes. As a direct result of the Rebates for Landscape Irrigation Measures Project, golf courses will pump less water from the groundwater aquifer, leaving more water in the system available for use during droughts and dry periods. The duration of this benefit is expected to begin immediately following the conversion of turf to drought-friendly landscape, implementation of upgrades to the irrigation systems, and/or replacement of sprinkler nozzle heads, and is expected to continue into the future for a period of five years. Terms of the rebate program require that landscape irrigation measures remain in place for at least five years after installation; therefore, the project is assumed to have a useful life of five years.

- ***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 Rebates for Landscape Irrigation Measures Project will not only contribute to CVWD's water and energy conservation efforts, but will also 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) 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 (*Empidonax 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 (*Euphydryas 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 as long as the landscapes are not re-converted to turf.

The project area is also a major component of 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 and surrounding area, which is designated as an internationally important staging area for shorebirds and is located within CVWD's service

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.

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 program 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.

- ***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?***

The Project will directly result in more efficient management of the water supply by providing greater flexibility to water managers in offering options and support to golf courses to help implement water efficiency projects that would otherwise be cost prohibitive. Increased water conservation, as golf courses would decrease their overall water use, will leave more water in the system for water managers to leverage during droughts and emergencies.

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.

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

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

Water supply shortages, reduced water supply reliability, and increased competition for water supplies due to continued drought in California presents specific water sustainability concerns for CVWD. Additionally, climate change has the potential to impact one of CVWD's major sources of imported water, the Colorado River, which is used to replenish the Coachella Valley Groundwater Basin. Potential effects of climate change could also increase demand within the Coachella Valley, further exacerbating supply and demand gaps.

Groundwater is the principal source of supply in the Coachella Valley. CVWD actively manages the groundwater basin in order to maintain groundwater levels and recover from the declines that occurred from the 1980s through 2009 in many portions of the groundwater basin. The Coachella Valley's annual average of 3 inches of rain, along with snowmelt from surrounding mountains, is not nearly enough to naturally replenish what is pumped from the local groundwater basin to meet water demands. Consequently, the Indio Subbasin experienced historical overdraft and CVWD began importing water into the Subbasin for replenishment. In drought years, this condition was further exacerbated leaving the Subbasin with a negative water balance aggravated by increased groundwater pumping for irrigation and drinking water supply, as well as reduced groundwater replenishment.

The Indio Subbasin is currently not in overdraft because of active management of the basin through CVWD programs to implement groundwater replenishment and offset groundwater pumping through water conservation efforts and increased recycled water use. The 2022 Indio Subbasin Water Management Plan Update and 2022 Mission Creek Subbasin Alternative Plan Update both identified water conservation, specifically turf rebates, as a key management strategy for reducing groundwater pumping and sustainably managing the groundwater supply.

In drought conditions, groundwater replenishment is reduced due to limitations on SWP exchange imports. Every year, DWR allocates a percentage of SWP allocations to SWP Contractors based on variable hydrologic conditions, environmental and operational constraints, and other factors. During dry years, SWP final allocations tend to be dramatically reduced. For example, during the recent California drought, CVWD's SWP allocations were 5% in 2014 and 25% in 2015. DWR's initial SWP allocation for the 2021 water year was set to 10% in December 2020, but the allocation was reduced and downgraded to 5% in March 2021 due to lower-than-expected precipitation. Cumulative SWP deliveries over time contribute to groundwater storage and replenishment is essential for keeping the Subbasin from overdrafting again. With the increasing variability and unreliability of SWP supplies, it's more important that CVWD reduces groundwater pumping through water conservation efforts such as the CVWD Rebates for Landscape Irrigation Measures Project.

Recent efforts to actively manage the groundwater basin have contributed significantly to the balancing of the groundwater basin. CVWD, in partnership with the five public agencies in Coachella Valley, has recently undertaken two initiatives that have helped with this management: an investment in recycled water and CV Water Counts, a regional conservation campaign. Since 1973, the agencies have imported more than 3.1 million acre-feet to replenish the aquifer which is enough water to serve the needs of 6 million families for one year. Since 2007, the CV Water Counts program has resulted in consumers reducing water use by 20% and two million square-feet of lawn has been converted to other uses. The implementation of landscape irrigation measures at golf courses further reduces the potential severe negative impacts of drought.

In drought years, the Coachella Valley region has historically experienced a negative water balance in the groundwater basin, which can be directly attributed to groundwater pumping and reduced groundwater basin replenishment.

Given the historic correlation between a negative water balance and reduced groundwater replenishment, and the fact that recent multiple-year drought conditions resulted in a severely reduced level of deliveries, programs that reduce groundwater pumping, such as the Project, are crucial to CVWD's active groundwater management efforts to mitigate these conditions that occur as a result of drought.

- ***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.***

Golf Course irrigation, which accounts for one-sixth of the overall water use in the Coachella Valley, is a focus for CVWD's large landscape conservation initiatives (Coachella Valley Regional Water Management Group, 2020). Pumping groundwater for turf irrigation at golf courses is energy intensive and depends on the use of fossil fuels.

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

The Project will reduce groundwater pumping by golf courses to 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 that reduce 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. In addition, reducing groundwater pumping will reduce energy use and diminish the use of fossil fuels.

- ***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.***

Over 75 golf courses in Coachella Valley irrigate with groundwater. Conserved water that offsets groundwater use will remain in groundwater storage resulting in reduced pumping and overdraft of the groundwater basin and leave more water available in the water system for use during drought and dry periods.

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

The Project is a Landscape Irrigation Measures Project that will result in an overall reduction of water used by golf courses. Conserved water is intended to remain in the water system as groundwater in storage in the groundwater aquifer. Therefore, no mechanism is needed to put the conserved water to the intended use.

- ***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 purposes of providing additional supply kept in storage and made available for use during droughts and dry years.

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

- (1) Combating the Climate Crisis: E.O. 14008: "Tackling the Climate Crisis at Home and Abroad", focuses on increasing resilience to climate change and supporting climate- resilient development. For additional information on the impacts of climate change throughout the western United States, see: <https://www.usbr.gov/climate/secure/docs/2021secure/2021SECUREReport.pdf>. Please describe how the project will address climate change, including:***

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

The Project will help adapt to and mitigate climate change. Climate change mitigation will be achieved through energy use reduction as a result of reduced groundwater pumping. The Project is estimated to save 734,490 kWh of energy annually, which will help to combat the climate crisis by reducing dependency on nonrenewable energy sources.

Climate change is expected to increase temperature in the Coachella Valley which will increase water demand due to higher irrigation needs. Imported water supply from the Colorado River is expected to be less available due to decreased flows. More frequent and severe droughts are also expected to occur. Climate change is anticipated to significantly impact water supplies available to CVWD. SWP and Colorado River water will be stretched to meet environmental needs and water demands, while groundwater replenishment will be decreased from reduced precipitation and associated watershed runoff, resulting in a potential negative water balance. The Project is expected to result in 1,637 AF of water savings annually, which will allow more water to remain in storage in the groundwater basin for use during drought and dry conditions expected to occur more frequently as a result of climate change.

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

Yes. The Project will strengthen water supply sustainability to increase resilience to climate change in the Coachella Valley. Climate change has the potential to impact Colorado River supplies, one of CVWD's major sources of imported water which is used to replenish the Coachella Valley Groundwater Basin. Climate change is also anticipated to increase water demands within the service area. By implementing various conservation measures, this Project will decrease the overall demand for water in the service area. This will in turn make additional supplies available as a way to strengthen water supply sustainability, particularly during drought and dry periods. The Project will therefore contribute to the Coachella Valley's increased resilience to climate change.

- ***Will the proposed project establish and utilize a renewable energy source?***

The Project is a Landscape Irrigation Measures project for golf courses. The Project will utilize the energy source available to each individual golf course.

- ***Will the project result in lower greenhouse gas emissions?***

Yes, the project is expected to result in a reduction of 2,603 Metric Tons of CO₂ over the five-year project lifetime. The greenhouse gas reductions come from 3,672,450 kWh of energy savings associated with 8,186 AF of reduced groundwater pumping from the aquifer. EPA's Greenhouse Gas Equivalencies Calculator was used to estimate the greenhouse gas emissions reduction based on "Kilowatt-hours avoided".

(2) Disadvantaged or Underserved Communities: E.O. 14008 and E.O. 13985 support environmental and economic justice by investing in underserved and disadvantaged communities and addressing the climate-related impacts to these communities, including impacts to public health, safety, and economic opportunities. Please describe how the project supports these Executive Orders, including:

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

The Project will benefit economically disadvantaged communities (DACs) and historically underserved communities in CVWD's service area 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 DACs. Issues that may arise as a result of groundwater overdraft (subsidence, treatment, increased well depth, etc.) could result in increased water costs to groundwater users. Given the economic status of DACs, increased water costs could disproportionately impact DACs compared to other users. Therefore, by implementing long-term conservation measures, the program could benefit DACs by helping to reduce long-term water costs in the region. Further, the Project will benefit DACs and historically underserved communities in the Project area because it will help to conserve water supplies within the CVWD 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 DACs.

The Project will also support water and energy efficiency at golf courses, which are an important part of the Coachella Valley and regional economy. The 2018 Coachella Valley Integrated Regional Water Management (IRWM) Plan, most recently updated in 2020, states that the Coachella Valley is one of the fastest growing regions in California due in part to its destination for tourism and many local attractions, including over 100 golf courses, the CareerBuilder Challenge PGA golf tournament, and the ANA Inspiration LPGA golf tournament (Coachella Valley Regional Water Management Group, 2020). An August 2015 assessment of the Coachella Valley golf industry found that the estimated 123 golf courses in the Coachella Valley represent approximately 14% of California's golf industry. In 2014 the golf industry in the Coachella Valley generated \$476 million in gross revenue, and directly employed more than 8,000 local workers. The large presence of golf courses in the Coachella Valley attracts many tourists, who generated approximately \$745.6 million in tourism-related spending in 2014 (Tourism Economics, 2015). Given the economic benefits the golf industry has on the Coachella Valley, the economic viability of this industry is important to the regional economy. The Project will provide economic growth opportunities throughout the region, including to areas comprised of DACs.

- b. If the proposed project is providing benefits to a disadvantaged community, provide sufficient information to demonstrate that the community meets the disadvantaged community definition in Section 1015 of the Cooperative***

Watershed Act, which is defined as a community with an annual median household income that is less than 100 percent of the statewide annual median household income for the State, or the applicable state criteria for determining disadvantaged status.

Approximately 70 percent of the Coachella Valley Water District service area is comprised of disadvantaged communities (DACs) and severely disadvantaged communities (SDACs). Figure 2 shows the location of DACs and SDACs within the Project Area. DACs and SDACs are defined here to be consistent with the DWR definition: census block groups, tracts, and designated places with a median household income (MHI) of less than 80% of the average California MHI based on the U.S. Census American Community Survey (2014-2018) for DACs, and less than 60% of the California MHI for SDACs.

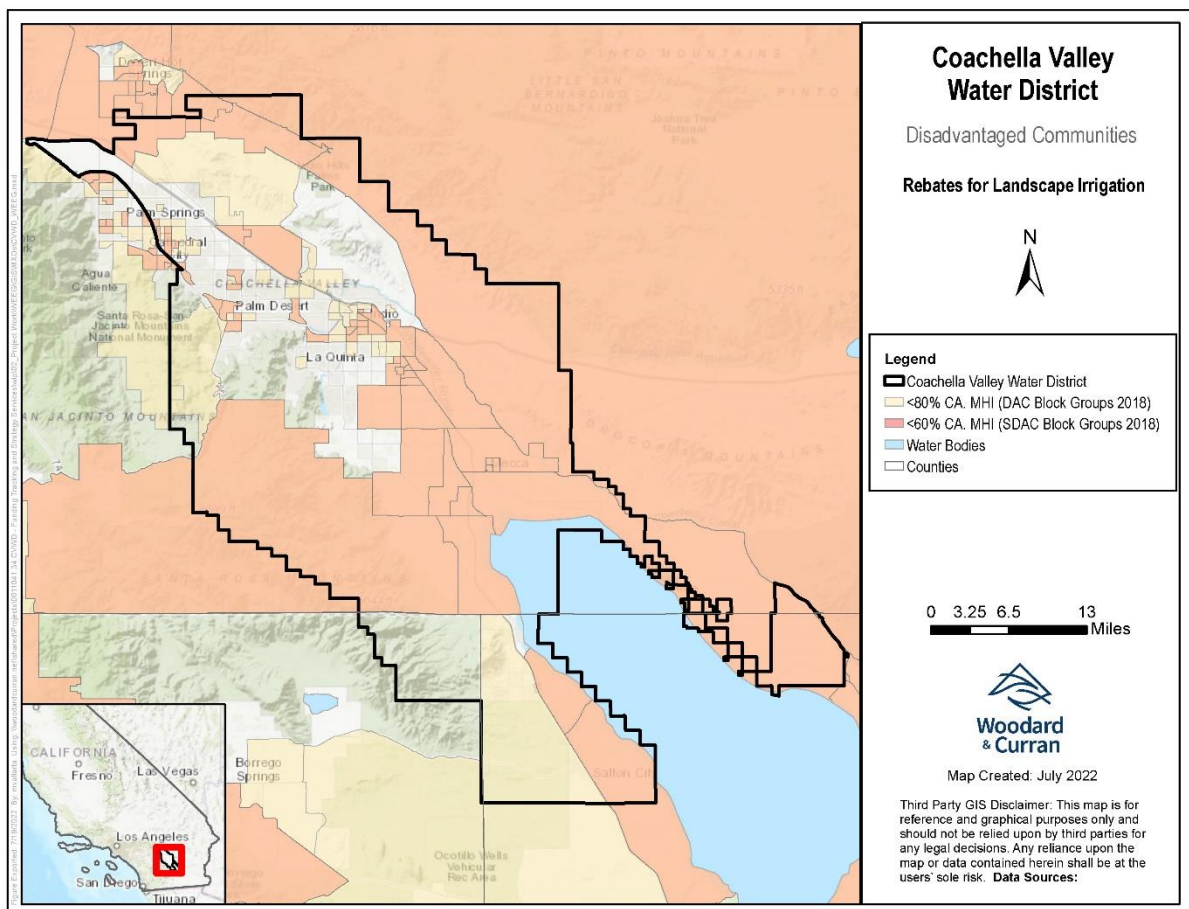


Figure 2: Disadvantaged Communities

- c. If the proposed project is providing benefits to an underserved community, provide sufficient information to demonstrate that the community meets the underserved definition in E.O. 13985, which includes populations sharing a particular characteristic, as well as geographic communities, that***

have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life.

The Project will benefit historically underserved communities, including the Coachella Valleys' large Hispanic/Latino community, by reducing groundwater pumping within the Coachella Valley Groundwater Basin. The 2020 Community Health Needs Assessment of the Coachella Valley found that 50.6% of the Coachella Valley's population is Hispanic/Latino and 49.4% non-Hispanic/Latino. However, the ethnic composition of individual cities and communities vary widely. Specifically, certain areas are predominantly Hispanic/Latino while others have a very small Hispanic/Latino presence. It is also worth noting that many of the cities and communities with high percentages of Hispanic/Latino residents are low-income areas, while many of the cities with low percentages of Hispanic/Latino residents are high-income areas. In sum, there is a close relationship between ethnicity and poverty (Desert Healthcare District and Foundation, 2020).

As stated above in Part a), reduced groundwater pumping will benefit all users of the groundwater basin, but could provide additional benefits to underserved communities, as issues that may arise as a result of groundwater overdraft could disproportionately impact these underserved communities compared to other users. Further, the Project is expected to reduce long-term water costs in the region and help to conserve water supplies within the CVWD service area, thus contributing to both the short-and long-term reliability of water supply for underserved communities.

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

a. 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 five federally recognized tribes in the region with tribally owned lands located in CVWD's service area. The Project will benefit tribal communities in the CVWD service area 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 a 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 program could benefit Tribes by helping to reduce long-term water costs in the region. Further, the Project will benefit Tribes in the Project area because it will help to conserve water supplies within the CVWD 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.

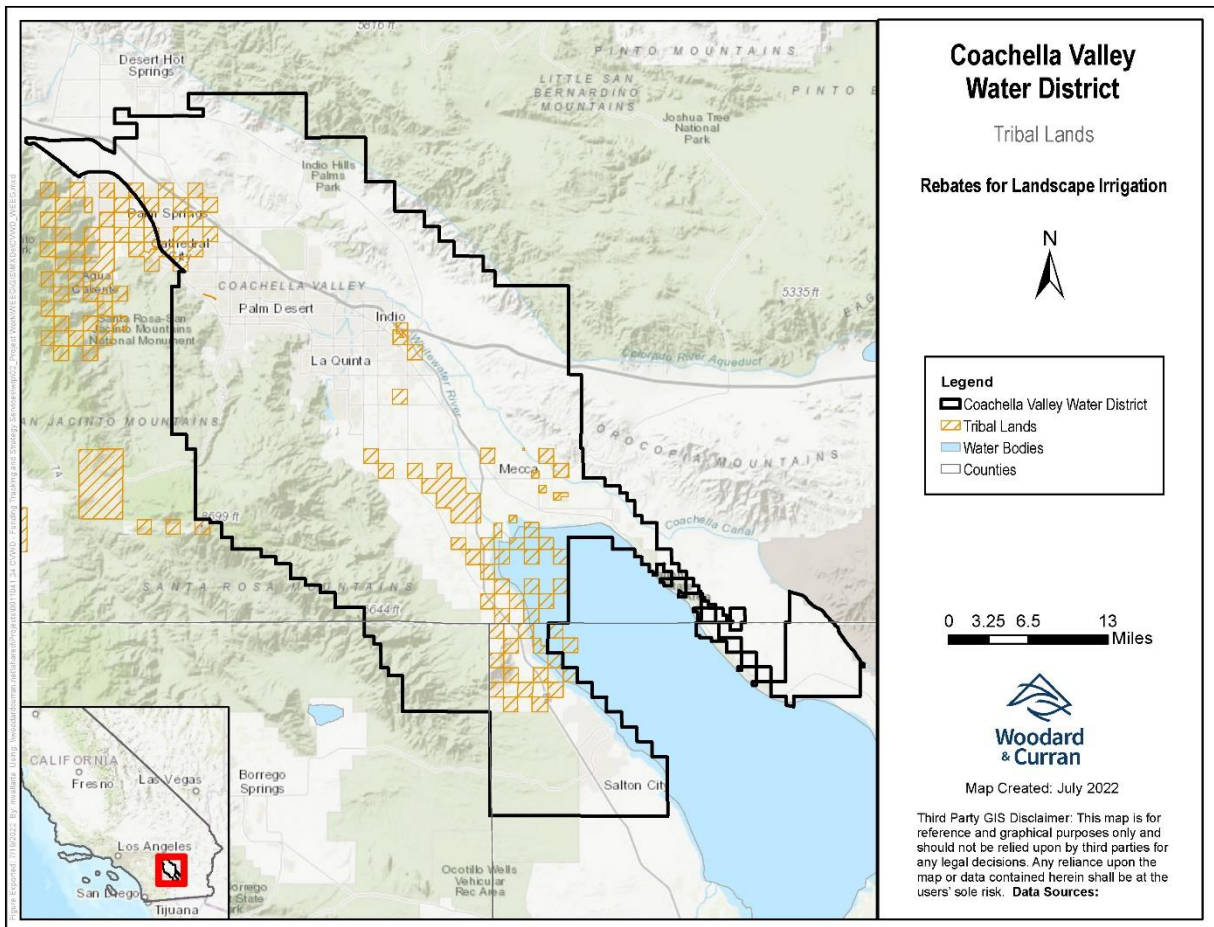


Figure 3: Tribal Lands

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

As a result of the Project, the tribes located in CVWD service area will benefit from overall water conservation, which will support short- and long-term water resiliency goals and reduce outdoor water demands during normal and dry years, and when climate change impacts are realized.

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

a. 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 CVWD's 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 the use of imported water conveyed via the Coachella Canal, thus indirectly reducing dependency on imported Colorado River supplies. The Project will therefore assist States and water users in complying with interstate compacts.

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

The Project will benefit all users within CVWD's service area which includes multiple sectors including agricultural, municipal, industrial, and environmental uses. Water efficiency improvements completed through the Project will allow golf courses 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.

c. Will the project benefit a larger initiative to address sustainability?

The Project will benefit a larger regional and State initiative to address sustainability by contributing to overall water conservation initiatives, in particular those related to the removal of high-water use turf, the transition to desert-friendly landscaping, and the installation of high-water efficiency devices.

d. 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 has dominated, which has been exacerbated by the ongoing drought.

1.3.4 Evaluation Criterion D—Complementing On-Farm Irrigation Improvements (10 points)

Up to 10 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.

Note: Scoring under this criterion is based on an overall assessment of the extent to which the WaterSMART Grant project will complement ongoing or future on-farm improvements.

Applicants should describe any proposal made to NRCS, or any plans to seek assistance from NRCS in the future, and how an NRCS-assisted activity would complement the WaterSMART Grant project. Financial assistance through EQIP is the most commonly used program by which NRCS helps producers implement improvements to irrigation systems, but NRCS does have additional technical or financial assistance programs that may be available. Applicants may receive maximum points under this criterion by providing the information described in the bullet points below. Applicants are not required to have assurances of NRCS assistance by the application deadline to be awarded the maximum number of points under this sub- criterion. Reclamation may contact applicants during the review process to gather additional information about pending applications for NRCS assistance if necessary.

Please note: On-farm improvements themselves are not eligible activities for funding under this NOFO. This criterion is intended to focus on how the WaterSMART Grant project will complement ongoing or future on-farm improvements. NRCS will have a separate application process for the on-farm components of selected projects that may be undertaken in the future, separate of the WaterSMART Grant project.

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.***

Not applicable as this is a Landscape Irrigation Measures project specific to golf courses and does not include agricultural uses.

- ***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 is a Landscape Irrigation Measures project specific to golf courses and 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?***

Not applicable as this is a Landscape Irrigation Measures project specific to golf courses and does not include agricultural uses.

- ***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.***

Not applicable as this is a Landscape Irrigation Measures project specific to golf courses and does not include agricultural uses.

- ***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 is a Landscape Irrigation Measures project specific to golf courses and does not include agricultural uses.

Note: On-farm water conservation improvements that complement the water delivery improvement projects selected through this NOFO may be considered for NRCS funding and technical assistance to the extent that such assistance is available. For more information, including application deadlines and a description of available funding, please contact your local NRCS office. See the NRCS website for office contact information, www.nrcs.usda.gov/wps/portal/nrcs/main/national/contact/states/.

1.3.5 Evaluation Criterion E—Planning and Implementation (8 points)

Up to 8 points may be awarded for these subcriteria.

1.3.5.1 Subcriterion E.1— Project Planning

Points may be awarded for proposals with planning efforts that provide support for the proposed project.

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

CVWD does not have a Water Conservation Plan or System Optimization Review (SOR) in place. However, the Project addresses and adaptation strategy identified in a completed WaterSMART Basin Study. The Project addresses the Energy Water Use Efficiency option adaptation strategy specifically identified in the Colorado River Basin Water Supply and Demand Study, available online at: <https://www.usbr.gov/lc/region/programs/crbstudy/finalreport/index.html>.

Provide the following information regarding project planning:

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

The six urban water suppliers in the Coachella Valley (CVWD, Coachella Water Authority, Desert Water Agency, Indio Water Authority, Mission Springs Water District, and Myoma Dunes Mutual Water Company) collaboratively prepared the 2020 Coachella Valley Regional Urban Water Management Plan (UWMP) (Water Systems Consulting, Inc., 2020). Each agency also prepared a Water Shortage Contingency Plan (WSCP) to describe the actions that could be taken during a water shortage to reduce demands. The 2020 Regional UWMP details CVWD's water saving policies including landscaping irrigation

conservation and a new landscape ordinance applicable to the water use of new developments that will allow CVWD to continue to meet its urban water demands with groundwater. Also described are CVWD's goals to reduce water use by golf course irrigation users who produce groundwater from private wells through conservation with improved irrigation systems and techniques and technology.

The WSCP includes provisions to reach the agency's conservation goals. One of the demand management measures outlined in the UWMP to meet overall conservation goals is reducing outdoor irrigation by providing financial incentives, such as rebates. The Large Landscape Conservation Programs and Incentives Program and the Water Audits for Large Water Users demand management measures from are both addressed by the Project, which aims to provide financial incentives to reduce golf course-related water use.

As noted above, all new and rehabilitated landscape sites are required to submit water conserving landscape plans to CVWD's Water Management Department for a plan check prior to construction. The plan check is conducted to ensure that the water efficiency features of the new landscape meet the provisions of CVWD's Landscape and Irrigation System Design Ordinance. In order to ensure that contractors are installing plan-checked, water efficient landscapes as approved, CVWD has implemented a random inspection program. The inspections signal to the landscape construction industry that CVWD is spot checking completed landscape irrigation systems for plan-check compliance and will require errors and omissions to be corrected or face the possibility of discontinued water service. CVWD adopted the Landscape and Irrigation System Design Criteria Ordinance in November 2009 to provide provisions for new or rehabilitated landscaping with the goal of reducing landscape irrigation. The Project supports this ordinance by incentivizing drought tolerant landscaping for golf courses.

Additionally, the Project will contribute to objectives of the IRWM Plan which identifies conservation efforts as critical to reduce water demand over the long-term, and to reduce the pressure on the groundwater supply. The IRWM Plan identifies a supply vulnerability related to limited ability to meet summer demand, as golf course irrigation demand increases substantially in the summer, causing water use to vary by more than 50% seasonally in parts of the region. The IRWM Plan further identifies support for water conservation programs currently in place, including the Model Landscape Ordinance, the Water Waste Prevention Ordinance, the Lush and Efficient Landscape Gardening Guide, landscape plan checking, water wise landscape workshops and seminars, evapotranspiration irrigation clock rebate programs and water wise landscape rebate programs (Coachella Valley Regional Water Management Group, 2020).

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

The Large Landscape Conservation Programs and Incentives Program and the Water Audits for Large Water Users demand management measures from the UWMP are both addressed by the Project which aims to provide financial incentives to reduce golf course-related water use. Therefore, the Project is supported by CVWD's WSCP and overall agency-wide conservation goals. The Coachella Valley WSCP identifies rebates for landscape efficiency as a Shortage Level 1 demand reduction action with a designated expected relative impact as "high", indicating the established need and identified benefits of this Project.

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

The Project addresses an adaptation strategy specifically identified in the Colorado River Basin Water Supply and Demand Study, a Reclamation WaterSMART Basin Study. As part of the Colorado River Basin Water Supply and Demand Study, input from Study participants, interested stakeholders, and the general public was solicited for consideration. The "Energy Water Use Efficiency" option category emerged as a demand reduction strategy. Recognizing no single option will be sufficient to resolve future projected supply and demand imbalances, groups of options, called portfolios, were developed to reflect different adaptive strategies. The "Energy Water Use Efficiency" option category is included in all portfolio options proposed to address the long-term water needs of the region. The Project results in enhances energy and water use efficiency, and therefore directly addresses the "Energy Water Use Efficiency" adaptation strategy (U.S. Department of the Interior, Bureau of Reclamation, 2021).

For more information on Basin Studies, including a list of completed basin studies and reports, please visit: www.usbr.gov/WaterSMART/bsp.

1.3.5.2 Subcriterion E.2— Readiness to Proceed

Points may be awarded based upon the extent to which the proposed project is capable of proceeding upon entering into a financial assistance agreement. Please note, if your project is selected, 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: please 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 Landscape Irrigation Measures Project would begin implementation on May 1, 2023. CVWD has previously implemented a golf course rebate program; however, there is not currently an eligible source of funding for this program, so it is currently on hold. This \$1.5 million in requested grant funding will support ongoing implementation of golf course turf rebates and the installation and upgrade of water efficient devices. Therefore, this project is considered immediately ready to proceed.

Major tasks necessary to complete the project include:

- Performing outreach related to the available golf course rebates
- Reviewing and accepting applications for the rebate program
- Performing pre-and post- site audits
- Finalizing agreements with participating golf courses
- Issuing rebates to qualifying golf courses
- Performing project management activities

The Rebates for the Project will be implemented over a three-year period from May 2023 through May 2026. Information in Table 4 explains how the budget will be allocated over the three-year implementation period.

Table 4: Implementation Schedule

Year	Grant Funding Schedule
May 2022 – December 2023	\$335,000
January 2023 – December 2024	\$500,000
January 2024 – December 2025	\$500,000
January 2025 – May 2026	\$165,000

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

The Project is based upon CVWD’s existing turf rebate programs , which are currently on hold due to lack of available funding. Through implementation of CVWD’s existing programs, CVWD has determined that additional permits or approvals are not required for implementation. As such, no permitting work is necessary for this project. Funding is not being requested for permit acquisition and costs are not included in the budget.

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

Landscape design will be conducted by the golf courses, with resources provided by CVWD. As described in the Regional UWMP, CVWD publishes a comprehensive book on water-efficient landscaping in the Coachella Valley titled *Lush and Efficient: Landscape Gardening in the Coachella Valley*. The guide draws on the expertise of local irrigation and landscaping specialists to provide users with step-by-step instructions and techniques for creating and maintaining water-efficient landscapes, plus hundreds of low-water using plants that thrive in the desert. First published in 1988, the popular book is available for free from CVWD's website. Hard copies are also readily available for free at special events and for purchase for a nominal fee. In 2016, an updated version showcasing new plant materials and the latest irrigation tools and techniques, was debuted. The measurement of interest and success of this program will be to show an increase in the number of hard copies distributed and the number of page views the online version receives. In addition, CVWD maintains two demonstration gardens, one at its headquarters in Coachella and the other at its office in Palm Desert, to provide the landscape industry and the general public an opportunity to observe the plants in a landscape setting. CVWD also hosts a Landscaper Certification Program (LCP) for professional landscapers that focuses on water use efficiency.

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. CVWD has previously implemented a golf course rebate program; however, there is not currently an eligible source of funding for this program, so it is currently on hold. This \$1.5 million in requested grant funding will support ongoing implementation of golf course turf rebates and the installation and upgrade of water efficient devices. Because no new policies or administrative actions are needed to implement the Project, it is considered immediately ready to proceed.

- ***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?***

As shown in the schedule in Table 5, it is anticipated that CVWD will complete grant-related reporting and administration from the time the grant is awarded and through the three-year grant period. Work on the rebate program will end in April 2026 to allow for an additional month to finalize grant-related reporting requirements.

Table 5: Schedule

Major Tasks	Anticipated Start Date	Anticipated End Date	Milestones
Perform outreach related to golf course rebates	May 1, 2023	June 30, 2023	Outreach initiates May 1, 2023
Review and accept applications for the rebate program	July 1, 2022	September 30, 2023	Application period opens July 1, 2023 and closes September 30, 2023
Perform pre-site audits	October 1, 2023	November 30, 2023	Pre-site audits completed by November 30, 2023
Finalize agreements with participating golf courses	December 1, 2023	December 31, 2023	Agreements with golf courses finalized by December 31, 2023
Golf courses implement landscape conversion and/or efficiency upgrades	January 1, 2024	February 1, 2026	Landscape conversion and efficiency upgrades completed by golf courses by February 1, 2026
Perform post-site audits	January 1, 2024	March 1, 2026	Post-site audits to be conducted as landscape conversion/efficiency upgrade installations are finalized. Post-site audits to be completed by March 1, 2026
Issue rebates to qualifying golf courses	February 1, 2024	April 1, 2026	Rebates to qualifying golf courses to be issued following successful conclusion of post-site audits. Rebates to be issued by April 1, 2026
Perform project management activities, including grant management and reporting	May 1, 2023	May 1, 2026	Project management activities to be performed throughout Project implementation
Overall Project Duration	May 1, 2023	May 1, 2026	Project completion May 1, 2026

1.3.6 Evaluation Criterion F—Collaboration (6 points)

Up to 6 points may be awarded for projects that promote and encourage collaboration among parties in a way that helps increase the sustainability of the water supply. Please describe how the project promotes and encourages collaboration. Consider the following:

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

The golf industry is an integral part of the Coachella Valley economy. CVWD and representatives of the golf course associations formed the Coachella Valley Golf and Water Task Force in 2013, creating a collaborative group to address water availability and long-term sustainability of the golf industry. The primary purpose of the Golf and Water Task Force is to reduce the amount of water used by golf courses in the Coachella Valley. The Project will assist CVWD in providing the needed incentive to make golf course landscape irrigation measures feasible and will further promote and encourage collaboration between CVWD and the local golf industry.

There is widespread support among the golf course community within Coachella Valley. In 2022, in support of the Project, the Coachella Valley Golf and Water Task Force issued a survey to local golf courses in CVWD's service area to identify golf courses interested in participating in the proposed CVWD Rebates for Landscape Irrigation Measures Project. 17 golf courses indicated their plan to complete turf conversions and irrigation control and sprinkler nozzle replacements between 2023 and 2026 as part of the Project.

CVWD has also implemented similar conservation programs that were highly successfully in the past due to widespread support. In particular, the CV Water Counts Regional Conservation Program (CV Water Counts) has resulted in consumers reducing water use by 20% and two million square-feet of lawn has been converted to other uses. CV Water Counts was established by the Coachella Valley Regional Water Management Group (CVRWMG) in June 2015 to conserve water. The program seeks to reduce water demand, increase the region's water supply, improve regional water quality, serve as stewards of our shared water resource, and improve efficiency and flexibility. CVRWMG agencies provide rebates for replacing turf with xeriscape, as well as replacing low efficiency devices with high efficiency devices, and implementing other water conservation measures.

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

As stated above, the Coachella Valley Golf and Water Task Force issued a survey to local golf courses in the CVWD's service area to identify golf courses interested in participating in the proposed CVWD Rebates for Landscape Irrigation Measures Project. All 17 participating facilities have stated the goal of their type of landscape irrigation measure

is to reduce water use and increase water and energy efficiencies. The support from golf courses and golf course associations within the service area indicates the high demand for turf replacement and other water efficiency rebate programs through the CVWD and demonstrates the need for grant funding. Having general information on the planned projects has helped to understand interest throughout the Coachella Valley and inform Project size, budget, and schedule. The survey results further indicate that there is enough interest to fully meet the dollar amount requested by this grant, demonstrating the potential for the program's success.

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

Following outreach by the Coachella Valley Golf and Water Task Force related to this proposed Project, the superintendents of the golf courses that responded to the survey expressed interest in this grant application and general interest for supporting the Golf and Water Task Force and CVWD. The opportunity to provide this rebate program to golf courses in the Coachella Valley will undoubtedly bring more support and collaboration amongst the superintendents and raise more interest in the Golf and Water Task Force Team for future opportunities for grants, rebates, and other initiatives, both for golf courses and within CVWD's existing commercial and residential turf rebate program.

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

Letters of support are included in Appendix B. For more information, see Section 6.

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

Up to 4 points may be awarded to proposals that provide non-Federal funding in excess of 50 percent of the project costs. State the percentage of non-Federal funding provided using the following calculation:

$$\frac{\text{Non – Federal Funding}}{\text{Total Project Cost}}$$

As explained in further detail in Section 4, Project Budget, CVWD proposes to provide a total non-Federal funding match of \$1,547,510 from third party costs (i.e., the golf courses) and from in-kind staff time. This equates to a 50.8% overall funding match for the Landscape Irrigation Measures Project.

$$\frac{\$1,547,510 \text{ CVWD Cost Share (Non – Federal Funding)}}{\$3,047,510 \text{ Total Project Cost}} = 50.8\%$$

1.3.8 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?***

CVWD's use of Colorado River water is authorized under the terms of a contract between Reclamation and CVWD, signed October 15, 1934, under which the United States built the Imperial Dam, the All American Canal and the Coachella Canal, and agreed to deliver water to CVWD in accordance with the priorities of the Seven Party Agreement and the 1934 Compromise Agreement. CVWD continues to operate and maintain the Coachella Canal and distribution system. The Coachella Canal and irrigation distribution system was constructed by Reclamation as part of the Boulder Canyon Project Act of 1928 to deliver Colorado River water into the Imperial Valley and the Coachella Valley. Colorado River water has been delivered to the Coachella Valley from the Coachella Canal since 1949, and has been used to supplement groundwater pumping.

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. The parties involved include:

- Palo Verde Irrigation District (PVID)
- Imperial Irrigation District (IID)
- CVWD
- Metropolitan Water District of Southern California (MWD)
- City of Los Angeles
- City of San Diego
- County of San Diego

The service area for Colorado River water delivery under CVWD's contract with the Bureau of Reclamation is defined as Improvement District No. 1 (ID-1) which encompasses most of the East Valley and a portion of the West Valley north of Interstate 10. Under the 1931 California Seven Party Agreement, CVWD has water rights to Colorado River water as part of the first 3.85 million AFY allocated to California. CVWD is in the third priority position along with IID.

- ***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 in 1.3.8 a., CVWD is a Reclamation contractor. CVWD does not receive additional Reclamation water supplies through another contractor.

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

Although the proposed Project is not on Reclamation project lands, it is indirectly involved with the Coachella Canal. Through this Project, golf course irrigation users will replace high water-consuming turf with desert friendly landscaping, and install other water efficiency equipment, therefore reducing groundwater demands for groundwater. Reducing groundwater demands within CVWD's 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 the use of imported 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 CVWD's service area.

2. ENVIRONMENTAL AND CULTURAL RESOURCES COMPLIANCE

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

This Project will develop a water use efficiency rebate program available to nonresidential water users to support conservation efforts and improvements. This is not an infrastructure project, and no construction is anticipated. Earth-disturbing work would be minimal, and would include removing existing turf and re-landscaping those areas with water-wise landscaping. Furthermore, onsite irrigation and other retrofits that take place must not result in nuisance runoff that would result in stormwater-related issues. Given the small-scale and temporary nature of this earth-disturbing work and the fact that the program does not qualify as a project per NEPA or CEQA, impacts would not occur to the surrounding environment as a direct result of project implementation. No work completed as a part of this Project is expected to significantly affect the air, water, or animal habitat in the Project area.

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

Although there are listed species within the project area, as detailed under Evaluation Criterion B, the Project would potentially benefit those species by replacing monoculture turf with desert-friendly landscaping that could be used as habitat by local birds and insects. Given the small-scale and temporary nature of work associated with the project and the fact that it would provide habitat-related benefits, listed or proposed to be listed species or designated critical habitat would not be adversely affected by any activities associated with the project.

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

Several surface waters within CVWD's service area fall within Clean Water Act jurisdiction, including the Whitewater River Stormwater Channel and its tributaries. The Project would not adversely impact these surface water bodies. The Project does not qualify as a project under NEPA or CEQA and would be located on private lands owned by the golf courses.

When was the water delivery system constructed?

No activities as part of this Project would affect any conveyance infrastructure or portion of CVWD's water delivery system.

Will the proposed project result in any modification of or effects to, individual features of an irrigation system (e.g., headgates, canals, or flumes)? If so, state when those features were constructed and describe the nature and timing of any extensive alterations or modifications to those features completed previously.

The Project will not result in any modification of or effects to any feature of CVWD's irrigation system.

Are any buildings, structures, or features in the irrigation district listed or eligible for listing on the National Register of Historic Places? A cultural resources specialist at your local Reclamation office or the State Historic Preservation Office can assist in answering this question.

The Project would not modify or affect any buildings, structures, or features. Therefore, cultural resources would not be affected as a result of Project implementation.

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

There are multiple Native American tribes and associated Tribal Lands located within CVWD's service area. However, Project activities would not result in significant ground-disturbing activity that would pose a threat to or affect any archeological sites.

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

This Project will have no negative impact on low-income or minority populations. Instead, the Project will benefit low-income populations as described in Evaluation Criterion E2,

above. Given that the rebates would be distributed throughout CVWD's service area, any potential impacts or benefits from Project implementation would also be distributed throughout the service area. Therefore, no disproportionately high and adverse effects would occur on low income or minority populations in CVWD's service area.

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

There are sacred sites and Tribal Lands located within CVWD's service area. These lands and sites would not be impacted as a result of the Project and access to these sites would not be affected.

Will the proposed project contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area?

CVWD has established a palette of acceptable plants and desert-friendly landscaping options that may be implemented as part of the turf conversion portion of the Project. The approved plants must be used by recipients of the rebate, and do not include any noxious weed or non-native invasive species. Therefore, the Project would not contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species.

3. REQUIRED PERMITS AND APPROVALS

CVWD has determined that additional permits or approvals are not required for implementation. As such, no permitting work is necessary for this project. Funding is not being requested for permit acquisition and costs are not included in the budget. The Project is not an infrastructure project and all work will occur on the private properties of the golf courses. Earth moving activities associated with the removal of turf and the installation of drought friendly landscaping, or with the replacement of irrigation systems will be conducted to an existing use on existing commercial golf courses.

4. PERFORMANCE MEASURES

Performance measures associated with the Rebates for Landscape Irrigation Measures Project include evaluations of both water and energy savings, since the Project will save both water and energy.

CVWD has previously been awarded grant funding for a similar turf rebate program from the DWR's Proposition 84 IRWM Program and Reclamation's FY2016 WaterSMART Water and Energy Efficiency Program. As part of the funding received, CVWD was required to monitor and report benefits to DWR and Reclamation.

CVWD's proposed method of quantifying the benefits of the Project are as follows:

Water Savings: CVWD will perform pre-inspection and post-inspection of participating golf courses to ensure that the upgrades and installation occur in accordance with the

rebate program. Individual customer pre- and post-inspection reports will also include data about water use before and after upgrades take place. The difference in water use before and after work has completed will be used to track and measure overall water savings resulting from Project implementation. This data will be reported to Reclamation as required in applicable grant agreements.

Energy Savings: Pre- and post-inspection reports will include information about groundwater pumping before and after installation take place. Therefore, data in these reports will be used to determine the reduction in groundwater pumping (and associated energy use) that occurs as a result of direct implementation of the Project.

5. PROJECT BUDGET

The project budget includes the 1) budget proposal and funding plan, 2) budget narrative, and 3) letters of commitment.

5.1 Budget Proposal and Funding Plan

Table 6 shows the Budget Proposal summary, with detail on the two funded budget categories provided in the sections below.

Table 6: Budget Proposal Summary

Budget Category	Amount
Personnel	\$47,510
Fringe Benefits	\$0
Travel	\$0
Equipment	\$0
Supplies	\$3,000,000
Contractual	\$0
Construction	\$0
Other Direct Costs	\$0
Total Direct Costs	\$0
Indirect Charges	\$0
Total Costs	\$3,047,510

Table 7 and Table 8 below show the Funding Plan.

Table 7: Summary of Non-Federal and Federal Funding Sources

Funding Sources	Amount
Non-Federal Entities	
1. Golf course program participants	\$1,500,000
2. CVWD*	\$47,510
Non-Federal Subtotal	\$1,547,510
Requested Reclamation Funding	\$1,500,000

* Denotes in-kind contributions of staff time from CVWD

Table 8: Total Project Cost Table

Source	Amount
Costs to be reimbursed with the requested Federal funding	\$1,500,000
Costs to be paid by the applicant	\$47,510
Value of third-party contributions	\$1,500,000
Total Project Cost	\$3,047,510

5.2 Budget Narrative

The budget narrative corresponds to details provided in Table 6. There are two primary categories for the budget: Personnel and Supplies. Details about the budget for each category are provided in the following sections. No pre-award costs are expected to be used for the match.

5.2.1 Personnel

CVWD will conduct all necessary project administration as described in the Funding Plan. Based upon previous experience with administering turf rebate programs and with executing and administering various grants, CVWD estimates the cost of personnel to be \$47,510, as shown in Table 9.

The budget for personnel includes hours for CVWD’s Conservation Manager (Public Information Officer), Conservation Coordinator, and Conservation Staff to administer the Turf Reduction Water and Energy Efficiency Program and complete grant-related reporting requirements. The budget includes 80 hours for CVWD’s Conservation Manager (Public Information Officer) to administer the Outreach Program and 80 hours to administer the grant (reporting, etc.), at a rate of \$94/hour, for a total of \$15,107. The budget includes 160 hours for the Conservation Coordinator to administer the Rebate Program, at a rate of \$111/hour, for a total of \$17,776. The budget includes 160 hours for the Conservation Staff to administer the Rebate Program, at a rate of \$91/hour, for a total of \$14,627. Administrative work includes reviewing and approving rebate applications, conducting pre- and post-visits to customer sites, verifying successful project completion, providing customer support, and processing rebate checks.

The budget for administration of the rebate program assumes that the Conservation Manager will spend two hours per month over the 40-month project timeline and that the other two staff members will each spend four hours per month over the 40-month project timeline. These estimates are consistent with data and information provided by CVWD about requirements to administer their existing rebate programs and complete grant administration on existing grant funding from DWR.

Table 9: Personnel Budget Detail

Work Completed	Personnel	\$/Unit	Quantity	Quantity Type	Total Cost
Outreach Program Administration	Public Information Officer	\$94	80	hours	\$ 7,554
	Conservation Coordinator	\$111	80	hours	\$ 8,888
	Conservation Staff	\$91	80	hours	\$ 7,314
Rebate Program Administration	Public Information Officer	\$94	80	hours	\$ 7,554
	Conservation Coordinator	\$111	80	hours	\$ 8,888
	Conservation Staff	\$91	80	hours	\$ 7,314
Personnel Subtotal					\$ 47,510

5.2.2 Fringe Benefits

This category is not applicable; therefore, there is no associated budget.

5.2.3 Travel

This category is not applicable; therefore, there is no associated budget.

5.2.4 Equipment

This category is not applicable; therefore, there is no associated budget.

5.2.5 Supplies

Supplies-related costs are based upon CVWD’s established rebate program costs, and include costs solely for rebates for the various programs described in this application.

Rebate costs are described below for each of the programs:

- Task 1: Turf Conversions
 - A rebate of \$3 per square foot (\$6 per square foot total project cost)
- Task 2: Irrigation System Upgrades
 - A rebate of up to \$10,000 per upgrade project (\$20,000 per upgrade project total project cost)
 - Note that while each upgrade project may receive a rebate of up to \$10,000, it will likely contain multiple supply components which cost less and total up to \$10,000. For example, average irrigation controller costs in CVWD’s previously administered program have been on the order of \$1,000 - \$1,500.
- Task 3: Sprinkler Nozzle Replacements
 - A rebate of \$4 per installed nozzle (\$8 per installed nozzle total project cost)

These costs are summarized below in Table 10.

Table 10: Supplies Budget Detail

Supply Item	Quantity	Quantity Type	Unit Cost	Total Cost	Basis of Cost
Task 1: Golf Turf Conversions	333,333	square feet	\$6.00	\$2,000,000.00	Based on rebate provided of \$3/sq ft
Task 2: Irrigation System Upgrades	30	upgrades	\$20,000.00	\$600,000.00	Based on rebate provided of up to \$10,000 per upgrade project
Task 3: Sprinkler Nozzle Replacements	50,000	nozzles	\$8.00	\$400,000.00	Based on rebate provided of \$4/nozzle
Supplies Total				\$3,000,000.00	

5.2.6 Contractual

This category is not applicable; therefore, there is no associated budget.

5.2.7 Construction

This category is not applicable; therefore, there is no associated budget.

5.2.8 Other Direct Costs

This category is not applicable; therefore, there is no associated budget.

5.2.9 Indirect Costs

This category is not applicable; therefore, there is no associated budget.

6. LETTERS OF SUPPORT AND LETTERS OF PARTICIPATION

Letters of support for the Project were provided by the following entities and are included in Appendix B.

- Andalusia Country Club
- Avondale Golf Club
- The Club at Morningside
- Congressman Raul Ruiz
- Hi-Lo Desert Golf Course Superintendent’s Association
- Ironwood Country Club
- La Quinta Country Club
- The Lakes Country Club
- Palm Valley Country Club
- PGA West
- Rancho LaQuinta Country Club
- Southern California Golf Association

- The Springs Country Club
- Tri Palm Country Club

Letters of participation are not required since the applicant, CVWD, is a Category A applicant.

7. OFFICIAL RESOLUTION

The official resolution was adopted by CVWD's Board of Directors on July 26, 2022 and is included in Appendix C. The resolution is a commitment to the financial and legal obligations associated with the receipt of a financial assistance award under this funding opportunity.

8. OVERLAP OR DUPLICATION OF EFFORT STATEMENT

CVWD is implementing similar rebate programs for domestic water users, as well as some non-domestic, for which there is overlap in program type, but there is no duplication in funding requests. CVWD is also pursuing funding for a turf rebate project through Proposition 1, Round 2, but the program is focused on domestic users, thus there is no overlap or duplication in funding requests.

9. CONFLICT OF INTEREST, AUDIT, AND LOBBYING

CVWD has no conflicts of interest to disclose to Reclamation. CVWD maintains internal procedures to identify, disclose, mitigate, and eliminate conflicts of interest related to its procurement process and other activities.

CVWD was required to submit a Single Audit report for 2021 in compliance with existing funding agreements. The auditee EIN is 95-6000827.

Form SF-LLL Disclosure of Lobbying Activities, has been submitted via grants.gov.

10. REFERENCES

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California Energy Commission (2019). *Final Staff Analysis of Water Efficiency Standards for Spray Sprinkler Bodies*. 2019 Appliance Efficiency Rulemaking Docket Number 19-AAER-01.

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- Tourism Economics, An Oxford Economics Company (2015). *Economic Impact of the Coachella Valley Golf Industry*. Prepared for: Hi-Lo Desert Chapter GCSAA.
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- Water Systems Consulting, Inc. (2020). *2020 Coachella Valley Regional Urban Water Management Plan*. Prepared for: Coachella Valley Water District, Coachella Water Authority, Desert Water Agency, Indio Water Authority, Mission Springs Water District, and Myoma Dunes Mutual Water Company.
- Williams, *et al.* (2014). *Estimates of Savings Achievable from Irrigation Controller*. Berkeley, CA. Retrieved from <https://www.osti.gov/servlets/purl/1129575>.

Appendix A – Energy Use Email Documentation

Appendix A: CVWD Energy Calculations

Lindsey Wilcox

From: Lindsey Wilcox
Sent: Monday, December 01, 2014 12:43 PM
To: Lindsey Wilcox
Subject: FW: Water and energy Savings

From: Patti Reyes [<mailto:PReyes@cvwd.org>]
Sent: Friday, November 14, 2014 3:23 PM
To: Dan Farris; Crystal Mohr
Cc: Olivia Bennett
Subject: RE: Water and energy Savings

Thank you, Dan.

From: Dan Farris
Sent: Friday, November 14, 2014 3:20 PM
To: Patti Reyes; Crystal Mohr
Cc: Olivia Bennett
Subject: RE: Water and energy Savings

Hi,

You may notice the higher KWH value for domestic water use compared to golf courses. This is chiefly because golf courses use the water right on site, and for domestic use, the district maintains booster pumps at higher pressures moving the water around the valley. The golf course KWH value used here is only the well. If golf courses pump the water within the course, that cost is excluded from the value. This is because if we were to put nonpotable water into their lake system, they would still have their internal booster pumps to operate above and beyond the value used to set the nonpotable water price.

Hope this made sense.

Thanks,
Dan

From: Patti Reyes
Sent: Friday, November 14, 2014 3:13 PM
To: Crystal Mohr
Cc: Dan Farris; Olivia Bennett
Subject: FW: Water and energy Savings

Hi Crystal,

Staff asked me not to share their spreadsheet data because of it's confidential nature relative to our pending lawsuit over golf course water data. However the bottom line is that they calculated that 448.6 KWH per af is the average energy use for golf courses to pump from their wells. And the average cost over our service area is \$0.13 per kwh.

For domestic water, our total power bill last year (2013) was \$9.470 million. Using a cost of \$0.13 per kwh, this represents about 72.8 million kwh's. Our total domestic water production was about 115,000 afy. So the result is 633 kwh per af. I am not sure why the domestic water cost is higher however, my guess is that if you averaged the pumping depth of all our DW wells. The average depth to water would be greater than the average depth to water for golf

Appendix A: CVWD Energy Calculations

courses. This is because there are more DW wells than GC in the west valley – especially toward Cathedral city and Desert Hot Springs, and there are more GC wells in the East Valley.

I hope this helps.

Please let me know if you need additional data.

Patti

Appendix B – Letters of Support

July 26, 2022

To Whom It May Concern,

Andalusia Country Club is pleased to submit this letter of support for Coachella Valley Water District's (CVWD) FY2023 WaterSMART Water and Energy Efficiency Grant application for the development of a water use efficiency rebate program for non-residential water users (Project).

This Project is vital to support large water use efficiency improvements within the CVWD service area. Water use efficiency programs, including for non-residential users, are important conservation tools that help CVWD meet local water needs and sustainably manage water supplies in the short- and long-term.

The Project will result in a program to support the following efforts:

- Conversion of turf to desert friendly landscape
- Upgrades to irrigation systems, including upgrading irrigation controllers to smart weather-based controllers, installing soil meter sensors, and replacing entire irrigation system infrastructure
- Replacement of sprinkler nozzles with more efficient models, including the conversion of overhead spray to drip irrigation.

This Project will allow CVWD to better address water shortages and drought conditions by providing funding for the implementation of water use efficiency projects to achieve water savings and provide improved operational efficiencies, energy savings, and multiple environmental benefits. As population grows and the climate changes, the implementation of water use efficiency programs is an integral step CVWD is taking to support local business and institutions with conservation efforts that help improve water supply reliability for users throughout the service area.

In conclusion, Andalusia Country Club supports CVWD's FY2023 WaterSMART Water and Energy Efficiency Grant application and encourages the U.S. Bureau of Reclamation to fully fund the grant request.

Sincerely,



John Cummings
jcummings@andalusiacc.com
General Manager
Andalusia Country Club



Tyler Clark
tclark@andalusiacc.com
Director of Agronomy
Andalusia Country Club

7/26/22

July 26, 2022

To Whom It May Concern,

Avondale Golf Club is pleased to submit this letter of support for Coachella Valley Water District's (CVWD) FY2023 WaterSMART Water and Energy Efficiency Grant application for the development of a water use efficiency rebate program for non-residential water users (Project).

This Project is vital to support large water use efficiency improvements within the CVWD service area. Water use efficiency programs, including for non-residential users, are important conservation tools that help CVWD meet local water needs and sustainably manage water supplies in the short- and long-term.

The Project will result in a program to support the following efforts:

- Conversion of turf to desert friendly landscape
- Upgrades to irrigation systems, including upgrading irrigation controllers to smart weather-based controllers, installing soil meter sensors, and replacing entire irrigation system infrastructure
- Replacement of sprinkler nozzles with more efficient models, including the conversion of overhead spray to drip irrigation.

This Project will allow CVWD to better address water shortages and drought conditions by providing funding for the implementation of water use efficiency projects to achieve water savings and provide improved operational efficiencies, energy savings, and multiple environmental benefits. As population grows and the climate changes, the implementation of water use efficiency programs is an integral step CVWD is taking to support local business and institutions with conservation efforts that help improve water supply reliability for users throughout the service area.

In conclusion, Avondale Golf Club supports CVWD's FY2023 WaterSMART Water and Energy Efficiency Grant application and encourages the U.S. Bureau of Reclamation to fully fund the grant request.

Sincerely,



Richard Bauer
RBauer@avgclub.com
General Manager
Avondale Golf Club



Tyson Holm
tysonsfastgreens@hotmail.com
Director of Agronomy
Avondale Golf Club

July 26, 2022

To Whom It May Concern,

The Club at Morningside is pleased to submit this letter of support for Coachella Valley Water District's (CVWD) FY2023 WaterSMART Water and Energy Efficiency Grant application for the development of a water use efficiency rebate program for non-residential water users (Project).

This Project is vital to support large water use efficiency improvements within the CVWD service area. Water use efficiency programs, including for non-residential users, are important conservation tools that help CVWD meet local water needs and sustainably manage water supplies in the short- and long-term.

The Project will result in a program to support the following efforts:

- Conversion of turf to desert friendly landscape
- Upgrades to irrigation systems, including upgrading irrigation controllers to smart weather-based controllers, installing soil meter sensors, and replacing entire irrigation system infrastructure
- Replacement of sprinkler nozzles with more efficient models, including the conversion of overhead spray to drip irrigation.

This Project will allow CVWD to better address water shortages and drought conditions by providing funding for the implementation of water use efficiency projects to achieve water savings and provide improved operational efficiencies, energy savings, and multiple environmental benefits. As population grows and the climate changes, the implementation of water use efficiency programs is an integral step CVWD is taking to support local business and institutions with conservation efforts that help improve water supply reliability for users throughout the service area.

In conclusion, The Club at Morningside supports CVWD's FY2023 WaterSMART Water and Energy Efficiency Grant application and encourages the U.S. Bureau of Reclamation to fully fund the grant request.

Sincerely,

Greg Harris
GHarris@clubatmorningside.org
General Manager
The Club at Morningside



Tyler Tang
ttang@clubatmorningside.org
Director of Agronomy
The Club at Morningside





RAUL RUIZ, M.D.
Member of Congress
36th District of California

Washington, D.C. Office:
2342 Rayburn House
Office Building
Washington, D.C. 20515
Phone: [202-225-5330](tel:202-225-5330)

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

July 27, 2022

James Keiffer
Bureau of Reclamation
Financial Assistance Support Section
PO Box 25007 MS 84-27815
Denver, CO 80225

**RE: Bureau of Reclamation WaterSMART Water and Energy Efficiency Grant
Application - Coachella Valley Water District**

Dear Mr. Keiffer,

I write in strong support of Coachella Valley Water District's (CVWD) application to the FY2023 WaterSMART Water and Energy Efficiency Grant. This project will allow for the development of a water use efficiency rebate program for non-residential water users, which will dramatically improve water efficiency throughout the Coachella Valley.

The Coachella Valley is a popular tourist destination and houses a growing population, so water use by residents and non-residents continues to grow. Water use efficiency programs are needed to meet local water needs and manage water supplies sustainably in both the short- and long-term.

As the Representative of California's 36th Congressional District, I understand the urgent need for water conservation in the Coachella Valley area. CVWD would use this project to support the conversion of turf to desert friendly landscape, needed upgrades to irrigation systems, and the replacement of sprinkler nozzles with more efficient models. Through these programs, local businesses and residents in CVWD's service area will be granted improved water supply reliability and sustainability for years to come.

Coachella Valley Water District is a deserving candidate for your WaterSMART Water and Energy Efficiency Grant program. I support their efforts and urge full and fair consideration of

their application, consistent with all relevant program rules and regulations. If you have any additional questions, please feel free to contact my congressional office at 760-424-8888.

Sincerely,

A handwritten signature in black ink that reads "Raul Ruiz". The signature is written in a cursive, flowing style with a prominent initial "R".

Raul Ruiz, M.D.
Member of Congress



July 26, 2022

Attention: United States Bureau of Reclamation

The Hi-Lo Desert Golf Course Superintendent's Association (GCSA) has been working closely with the Coachella Valley Water District (CVWD) in supporting large water use efficiency improvements in the past, the present and will continue to in the future. Our Coachella Valley is home to over 100 golf courses. Our golf courses are vital to keeping the Coachella Valley economy strong and with the water shortages and drought conditions on the western region being of concern, we as the Hi-Lo Desert GCSA, are making every effort to insure we are in front of any potential hazards that may come our way and do our utmost to prevent any problems that we may see in the future. Therefore, I am writing to support the Coachella Valley Water District's FY2023 WaterSMART Water and Energy Efficiency Grant application for the development of water use efficiency rebate program for non-residential water users.

This Project is essential to support large water use efficiency improvements within the CVWD service area. Water use efficiency programs, including for non-residential users, are important conservation tools that help CVWD meet local water needs and sustainably manage water supplies in the short- and long-term.

This Project will result in a program to support the following efforts: conversion of turf to desert friendly landscape, upgrades to irrigation systems, including upgrading irrigation controllers to smart weather-based controllers, installing soil meter sensors, and replacing entire irrigation system infrastructure, replacement of sprinkler nozzles with more efficient models, including the conversion of overhead spray to drip irrigation.

Numerous members of our Hi-Lo Desert GCSA are running facilities with 30+ year old irrigation systems and are in desperate need to improve efficiencies. This Project will allow CVWD to better address water shortages and drought conditions by providing funding for the implementation of water use efficiency projects to achieve water savings and provide improved operational efficiencies, energy savings, and multiple environmental benefits. As population grows and the climate changes, the implementation of water use efficiency programs is an integral step CVWD is taking to support local business and institutions with conservation efforts that help improve water supply reliability for users throughout the service area.

The Hi-Lo Desert Golf Course Superintendents Association (GCSA) more than supports CVWD's FY2023 WaterSMART Water and Energy Efficiency Grant application and encourages the U.S. Bureau of Reclamation to fully fund the grant request to ensure the quality, safety and forwardness needed to make the Coachella Valley be more efficient and thrive moving forward.

Courteously,

A handwritten signature in black ink that reads "Molly DuVall".

Molly DuVall

molly@duvallmanagement.com

Executive Director

Hi-Lo Desert GCSA

July 26, 2022

To Whom It May Concern,

Ironwood Country Club is pleased to submit this letter of support for Coachella Valley Water District's (CVWD) FY2023 WaterSMART Water and Energy Efficiency Grant application for the development of a water use efficiency rebate program for non-residential water users (Project).

This Project is vital to support large water use efficiency improvements within the CVWD service area. Water use efficiency programs, including for non-residential users, are important conservation tools that help CVWD meet local water needs and sustainably manage water supplies in the short- and long-term.

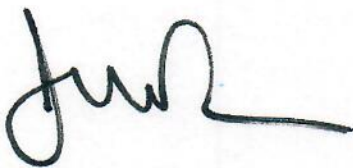
The Project will result in a program to support the following efforts:

- Conversion of turf to desert friendly landscape
- Upgrades to irrigation systems, including upgrading irrigation controllers to smart weather-based controllers, installing soil meter sensors, and replacing entire irrigation system infrastructure
- Replacement of sprinkler nozzles with more efficient models, including the conversion of overhead spray to drip irrigation.

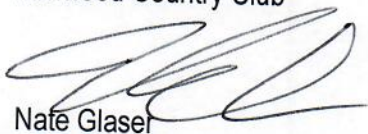
This Project will allow CVWD to better address water shortages and drought conditions by providing funding for the implementation of water use efficiency projects to achieve water savings and provide improved operational efficiencies, energy savings, and multiple environmental benefits. As population grows and the climate changes, the implementation of water use efficiency programs is an integral step CVWD is taking to support local business and institutions with conservation efforts that help improve water supply reliability for users throughout the service area.

In conclusion, Ironwood Country Club supports CVWD's FY2023 WaterSMART Water and Energy Efficiency Grant application and encourages the U.S. Bureau of Reclamation to fully fund the grant request.

Sincerely,



General Manager
Ironwood Country Club



Nate Glaser
Nate.glaser@icc.club
Director of Agronomy
Ironwood Country Club

July 26, 2022

To Whom It May Concern,

LaQuinta Country Club is pleased to submit this letter of support for Coachella Valley Water District's (CVWD) FY2023 WaterSMART Water and Energy Efficiency Grant application for the development of a water use efficiency rebate program for non-residential water users (Project).

This Project is vital to support large water use efficiency improvements within the CVWD service area. Water use efficiency programs, including for non-residential users, are important conservation tools that help CVWD meet local water needs and sustainably manage water supplies in the short- and long-term.

The Project will result in a program to support the following efforts:

- Conversion of turf to desert friendly landscape
- Upgrades to irrigation systems, including upgrading irrigation controllers to smart weather-based controllers, installing soil meter sensors, and replacing entire irrigation system infrastructure
- Replacement of sprinkler nozzles with more efficient models, including the conversion of overhead spray to drip irrigation.

This Project will allow CVWD to better address water shortages and drought conditions by providing funding for the implementation of water use efficiency projects to achieve water savings and provide improved operational efficiencies, energy savings, and multiple environmental benefits. As population grows and the climate changes, the implementation of water use efficiency programs is an integral step CVWD is taking to support local business and institutions with conservation efforts that help improve water supply reliability for users throughout the service area.

In conclusion, LaQuinta Country Club supports CVWD's FY2023 WaterSMART Water and Energy Efficiency Grant application and encourages the U.S. Bureau of Reclamation to fully fund the grant request.

Sincerely,

[Name]
[Email]
General Manager
LaQuinta Country Club



Tim Putnam
tputnam@lqcc.com
Director of Agronomy
LaQuinta Country Club



July 26, 2022

To Whom It May Concern,

The Lakes Country Club is pleased to submit this letter of support for Coachella Valley Water District's (CVWD) FY2023 WaterSMART Water and Energy Efficiency Grant application for the development of a water use efficiency rebate program for non-residential water users (Project).

This Project is vital to support large water use efficiency improvements within the CVWD service area. Water use efficiency programs, including for non-residential users, are important conservation tools that help CVWD meet local water needs and sustainably manage water supplies in the short- and long-term.

The Project will result in a program to support the following efforts:

- Conversion of turf to desert friendly landscape
- Upgrades to irrigation systems, including upgrading irrigation controllers to smart weather-based controllers, installing soil meter sensors, and replacing entire irrigation system infrastructure
- Replacement of sprinkler nozzles with more efficient models, including the conversion of overhead spray to drip irrigation.

This Project will allow CVWD to better address water shortages and drought conditions by providing funding for the implementation of water use efficiency projects to achieve water savings and provide improved operational efficiencies, energy savings, and multiple environmental benefits. As population grows and the climate changes, the implementation of water use efficiency programs is an integral step CVWD is taking to support local business and institutions with conservation efforts that help improve water supply reliability for users throughout the service area.

In conclusion, The Lakes Country Club supports CVWD's FY2023 WaterSMART Water and Energy Efficiency Grant application and encourages the U.S. Bureau of Reclamation to fully fund the grant request.

Sincerely,

Ron Phipps, Chief Operating Officer / General Manger

rhipps@thelakescc.com

July 26, 2022

To Whom It May Concern,

Palm Valley Country Club is pleased to submit this letter of support for Coachella Valley Water District's (CVWD) FY2023 WaterSMART Water and Energy Efficiency Grant application for the development of a water use efficiency rebate program for non-residential water users (Project).

This Project is vital to support large water use efficiency improvements within the CVWD service area. Water use efficiency programs, including for non-residential users, are important conservation tools that help CVWD meet local water needs and sustainably manage water supplies in the short- and long-term.

The Project will result in a program to support the following efforts:

- Conversion of turf to desert friendly landscape
- Upgrades to irrigation systems, including upgrading irrigation controllers to smart weather-based controllers, installing soil meter sensors, and replacing entire irrigation system infrastructure
- Replacement of sprinkler nozzles with more efficient models, including the conversion of overhead spray to drip irrigation.

This Project will allow CVWD to better address water shortages and drought conditions by providing funding for the implementation of water use efficiency projects to achieve water savings and provide improved operational efficiencies, energy savings, and multiple environmental benefits. As population grows and the climate changes, the implementation of water use efficiency programs is an integral step CVWD is taking to support local business and institutions with conservation efforts that help improve water supply reliability for users throughout the service area.

In conclusion, Palm Valley Country Club supports CVWD's FY2023 WaterSMART Water and Energy Efficiency Grant application and encourages the U.S. Bureau of Reclamation to fully fund the grant request.

Sincerely,



Hale Kelly
hkelly@palmvalley-cc.com
General Manager/Regional Manager
Palm Valley Country Club



Jacob Heck
jheck@palmvalley-cc.com
Director of Agronomy
Palm Valley Country Club

July 26, 2022

To Whom It May Concern,

PGA West is pleased to submit this letter of support for Coachella Valley Water District's (CVWD) FY2023 WaterSMART Water and Energy Efficiency Grant application for the development of a water use efficiency rebate program for non-residential water users (Project).

This Project is vital to support large water use efficiency improvements within the CVWD service area. Water use efficiency programs, including for non-residential users, are important conservation tools that help CVWD meet local water needs and sustainably manage water supplies in the short- and long-term.

The Project will result in a program to support the following efforts:

- Conversion of turf to desert friendly landscape
- Upgrades to irrigation systems, including upgrading irrigation controllers to smart weather-based controllers, installing soil meter sensors, and replacing entire irrigation system infrastructure
- Replacement of sprinkler nozzles with more efficient models, including the conversion of overhead spray to drip irrigation.

This Project will allow CVWD to better address water shortages and drought conditions by providing funding for the implementation of water use efficiency projects to achieve water savings and provide improved operational efficiencies, energy savings, and multiple environmental benefits. As population grows and the climate changes, the implementation of water use efficiency programs is an integral step CVWD is taking to support local business and institutions with conservation efforts that help improve water supply reliability for users throughout the service area.

In conclusion, PGA West supports CVWD's FY2023 WaterSMART Water and Energy Efficiency Grant application and encourages the U.S. Bureau of Reclamation to fully fund the grant request.

Sincerely,



Chris May

Director of Agronomy

PGA WEST and The Citrus Club

79-811 Ave 54, La Quinta, CA 92253

Ph: (760) 564-4463

cmay@pgawest.com

pgawest.com • thecitrusclub.com



July 26, 2022

To Whom It May Concern,

Rancho LaQuinta Country Club is pleased to submit this letter of support for Coachella Valley Water District's (CVWD) FY2023 WaterSMART Water and Energy Efficiency Grant application for the development of a water use efficiency rebate program for non-residential water users (Project).

This Project is vital to support large water use efficiency improvements within the CVWD service area. Water use efficiency programs, including for non-residential users, are important conservation tools that help CVWD meet local water needs and sustainably manage water supplies in the short- and long-term.

The Project will result in a program to support the following efforts:

- Conversion of turf to desert friendly landscape
- Upgrades to irrigation systems, including upgrading irrigation controllers to smart weather-based controllers, installing soil meter sensors, and replacing entire irrigation system infrastructure
- Replacement of sprinkler nozzles with more efficient models, including the conversion of overhead spray to drip irrigation.

This Project will allow CVWD to better address water shortages and drought conditions by providing funding for the implementation of water use efficiency projects to achieve water savings and provide improved operational efficiencies, energy savings, and multiple environmental benefits. As population grows and the climate changes, the implementation of water use efficiency programs is an integral step CVWD is taking to support local business and institutions with conservation efforts that help improve water supply reliability for users throughout the service area.

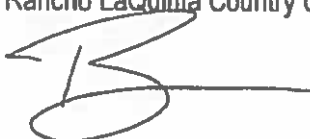
In conclusion, Rancho LaQuinta Country Club supports CVWD's FY2023 WaterSMART Water and Energy Efficiency Grant application and encourages the U.S. Bureau of Reclamation to fully fund the grant request.

Sincerely,



Monica Davis
Mdavis@rancholaquinta.com
General Manager
Rancho LaQuinta Country Club

Brian DuVall
bduvall@rancholaquinta.com
Director of Agronomy
Rancho LaQuinta Country Club





Southern California Golf Association
3740 Cahuenga Blvd., Studio City CA 91604 / (818) 980-3630 / www.scga.org

July 26, 2022

Attention: United States Bureau of Reclamation

Subject: Letter of Support for CVWD's Water and Energy Efficiency Grant application for the development of a water use efficiency rebate program for non-residential water users (Project). **[WaterSMART Program]**

On behalf of the 187,000 members of the Southern California Golf Association (SCGA), particularly those who work, live, and recreate in California's Coachella Valley, I am writing to support the Coachella Valley Water District's (CVWD) FY2023 WaterSMART Water and Energy Efficiency Grant application for the development of a water use efficiency rebate program for non-residential water users.

This Project is vital to support large water use efficiency improvements within the CVWD service area. Water use efficiency programs, including for non-residential users, are important conservation tools that help CVWD meet local water needs and sustainably manage water supplies in the short- and long-term.

The Project will result in a program to support the following efforts:

Conversion of turf to desert friendly landscape

Upgrades to irrigation systems, including upgrading irrigation controllers to smart weather-based controllers, installing soil meter sensors, and replacing entire irrigation system infrastructure

Replacement of sprinkler nozzles with more efficient models, including the conversion of overhead spray to drip irrigation.

This Project will allow CVWD to better address water shortages and drought conditions by providing funding for the implementation of water use efficiency projects to achieve water savings and provide improved operational efficiencies, energy savings, and multiple environmental benefits. As population grows and the climate changes, the implementation of water use efficiency programs is an integral step CVWD is taking to support local business and institutions with conservation efforts that help improve water supply reliability for users throughout the service area.

To reiterate, the Southern California Golf Association (SCGA) supports CVWD's FY2023 WaterSMART Water and Energy Efficiency Grant application and encourages the U.S. Bureau of Reclamation to fully fund the grant request.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Craig Kessler".

Craig Kessler, Director of Public Affairs



July 26, 2022

To Whom It May Concern,

The Springs Country Club is pleased to submit this letter of support for Coachella Valley Water District's (CVWD) FY2023 WaterSMART Water and Energy Efficiency Grant application for the development of a water use efficiency rebate program for non-residential water users (Project).

This Project is vital to support large water use efficiency improvements within the CVWD service area. Water use efficiency programs, including for non-residential users, are important conservation tools that help CVWD meet local water needs and sustainably manage water supplies in the short- and long-term.

The Project will result in a program to support the following efforts:

- Conversion of turf to desert friendly landscape
- Upgrades to irrigation systems, including upgrading irrigation controllers to smart weather-based controllers, installing soil meter sensors, and replacing entire irrigation system infrastructure
- Replacement of sprinkler nozzles with more efficient models, including the conversion of overhead spray to drip irrigation.

This Project will allow CVWD to better address water shortages and drought conditions by providing funding for the implementation of water use efficiency projects to achieve water savings and provide improved operational efficiencies, energy savings, and multiple environmental benefits. As population grows and the climate changes, the implementation of water use efficiency programs is an integral step CVWD is taking to support local business and institutions with conservation efforts that help improve water supply reliability for users throughout the service area.

In conclusion, The Springs Country Club supports CVWD's FY2023 WaterSMART Water and Energy Efficiency Grant application and encourages the U.S. Bureau of Reclamation to fully fund the grant request.

Sincerely,

Frank Melon
fmelon@thespringsrm.com
General Manager
The Springs Country Club

James T. Pogue
jpogue@thespringsrm.com
Director of Agronomy
The Springs Country Club

July 26, 2022

To Whom It May Concern,

Tri Palm Country Club is pleased to submit this letter of support for Coachella Valley Water District's (CVWD) FY2023 WaterSMART Water and Energy Efficiency Grant application for the development of a water use efficiency rebate program for non-residential water users (Project).

This Project is vital to support large water use efficiency improvements within the CVWD service area. Water use efficiency programs, including for non-residential users, are important conservation tools that help CVWD meet local water needs and sustainably manage water supplies in the short- and long-term.

The Project will result in a program to support the following efforts:

- Conversion of turf to desert friendly landscape
- Upgrades to irrigation systems, including upgrading irrigation controllers to smart weather-based controllers, installing soil meter sensors, and replacing entire irrigation system infrastructure
- Replacement of sprinkler nozzles with more efficient models, including the conversion of overhead spray to drip irrigation.

This Project will allow CVWD to better address water shortages and drought conditions by providing funding for the implementation of water use efficiency projects to achieve water savings and provide improved operational efficiencies, energy savings, and multiple environmental benefits. As population grows and the climate changes, the implementation of water use efficiency programs is an integral step CVWD is taking to support local business and institutions with conservation efforts that help improve water supply reliability for users throughout the service area.

In conclusion, Tri Palm Country Club supports CVWD's FY2023 WaterSMART Water and Energy Efficiency Grant application and encourages the U.S. Bureau of Reclamation to fully fund the grant request.

Sincerely,



Dan Griffin
dgriffin@wgolfp.com
General Manager
Tri Palm Country Club



Mark Cote
mcote@wgolfp.com
Golf Course Superintendent
Tri Palm Country Club

Appendix C – Official Resolution



**Coachella Valley Water District
Board of Directors**

Resolution No: 2022-41

**AUTHORIZING RESOLUTION FOR FY 2023 WaterSMART – Water and Energy
Efficiency Grant (WEEG) Program**

WHEREAS, Coachella Valley Water District (the “District”) is pursuing funding for multiple community water conservation projects (the “Project”) through the United States Bureau of Reclamation (USBR) Water and Energy Efficiency Grant (WEEG);

WHEREAS, the U.S. Bureau of Reclamation (Reclamation) is soliciting applications for the FY 2023 WaterSMART – Water and Energy Efficiency Grant (WEEG) program per Notice of Funding Opportunity No. R23ASA00008, and

WHEREAS, the District is preparing a grant application under this Program for the Project with an application due date of August 28, 2022 with a request of \$1,500,000 in grant funding, and

WHEREAS, Reclamation has directed applicants to include in its application an official resolution adopted by the applicant’s Board of Directors to: (1) identify the official with legal authority to enter an agreement, (2) confirm the application has been reviewed and supported by the Board, (3) CVWD will work with Reclamation to meet established deadlines for entering into this grant agreement.

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

The General Manager (the “Authorized Representative”) or designee is hereby authorized and directed to sign and file, for and on behalf of the District, an Application for Federal Assistance for grant funding from the United States Bureau of Reclamation, for water conservation efforts.

**Coachella Valley Water District
Board of Directors**

Resolution No: 2022-41

This Authorized Representative, or his/her designee, is designated to provide the assurances, certifications, and commitments required for the financial assistance application, including executing a financial assistance agreement from the United States Bureau of Reclamation and any amendments or changes thereto.

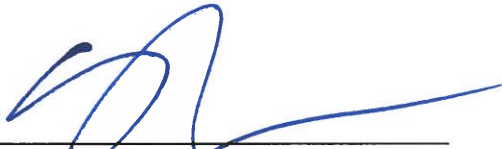
The Authorized Representative, or his/her designee, is designated to represent the District in carrying out the District's responsibilities under the financing agreement, including certifying disbursement requests on behalf of the District and compliance with applicable state and federal laws.

PASSED and ADOPTED by the Coachella Valley Water District Board of Directors during a regular meeting on this 26th day of July 2022, 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