PROJECT INFORMATION FORM

Please complete a unique Project Information Form <u>for each project</u> in the application. There are no character limits on specific questions but the Project Information Form as a whole may not exceed <u>10 pages</u>.

1. Project Name: CV Water Counts Regional Conservation Program for Disadvantaged Community (DAC) Customers

2. Local Project Sponsor (if different than grantee): Desert Water Agency (DWA)

3. Please provide the latitude and longitude of the project site. For linear projects or those covering a large area, report the coordinates for a central point. If this information is confidential, it must be clearly labeled "confidential." You can find the latitude and longitude easily using google maps. You can find instructions at the following link: https://support.google.com/maps/answer/18539?hl=en&co=GENIE.Platform%3DDesktop.

   Latitude: 33.68985 Longitude: -116.258178

4. Please briefly describe the proposed project.

   The water agencies in the Coachella Valley have maintained a successful regional water conservation program called CV Water Counts (https://cvwatercounts.com/) for many years. The objectives of CV Water Counts are to reduce water demands, increase the region's water supply, improve regional water quality, serve as stewards of shared water resources, and improve efficiency and flexibility. The member agencies provide rebates for replacing turf with xeriscape, replacing low efficiency devices with high efficiency devices, and implementing other water conservation measures. For example, through the Proposition 84 Round 3 grant program, the CV Water Counts agencies replaced 6.2 million square feet of turf for a water conservation savings of 1,062 acre feet per year (AFY).

   Residents, businesses, and institutions within disadvantaged communities (DACs) experience barriers in water efficiency programs due to income levels. DAC customers can lack the resources needed to participate in local and regional rebates, such as the resources to provide the required cost match and the cost for installation of low-flow devices and turf removal projects. However, with the state of California recommending a 15% voluntary reduction in water use, DACs can contribute to water efficiency by taking advantage of these retrofit programs and reducing water and energy consumption.

   In order to enable DAC customers to participate in these retrofit programs, the CV Water Counts agencies have created a DAC-target program for DAC residents, businesses and institutions throughout the Coachella Valley. The project objectives will be achieved through the implementation a turf removal program and a conservation incentives program, such as installation of efficient washing machines and toilets. With the proposed program, the high efficiency devices and landscape retrofits would be very low cost or free to the DAC customer, including the cost of installation. Without this program, DACs may not be able to pay for the materials and

installation while waiting for a rebate check.

Where possible, the agencies may use California Conservation Corps labor to complete the installations in order to provide valuable job-related education to the youth participating in the Corp's programs.

5. Does this project respond to an existing emergency to humans and/or wildlife? If so, please describe the emergency and how this project is addressing it.

   The state of California is currently experiencing a drought and the Governor has asked for a 15% voluntary reduction. The program would help reduce indoor water use by 20-60% by replacing old, inefficient devices with new and efficient devices that can save water, energy, and money on water bills. The U.S. EPA estimates that a family of four can save $140 annually on their water bill by replacing their old toilets with high efficiency models and conserve up to 13,000 gallons per year (Source: https://www.epa.gov/watersense/residential-toilets). The Alliance for Water Efficiency estimates that ENERGY STAR® certified washing machines use 33% less water and 25% less energy than traditional washing machines (Source: https://home-water-works.org/indoor-use/clothes-washer). This results in a water savings of approximately 4,350 gallons per year for each device. The CV Water Counts program would help reduce outdoor water use by replacing turf with xeriscape and native landscaping, which saves approximately 55.8 gallons per year per square foot of turf removed according to the 2005 Southern Nevada Water Authority (SNWA) Xeriscape Conversion Study: Final Report.

   These retrofit projects can be implemented in a relatively short turnaround time and result in an immediate water savings. This conserved water could then be used to address other human and environmental water needs in the Coachella Valley.

   The Coachella Valley IRWM Region member agency service area is 74% DAC by area and 66% by population, serving a total of 314,318 DAC residents (see map included in Attachment 3A). Due to the large percentage of DAC residents in the region, any drought impacts on the region result in impacts to DAC customers.

6. Each project must meet one of the following purposes as it relates to drought. Please select the appropriate purpose for your project.
   a. ☒ Address immediate impacts on human health and safety, including providing or improving availability of food, water, or shelter.
   b. ☐ Address immediate impacts on fish and wildlife resources.
   c. ☐ Provide water to persons or communities that lose or are threatened with the loss or contamination of water supplies.

7. Each project must enhance regional drought resilience and align with the goals and objectives of the relevant approved Integrated Regional Water Management Plan. You can find the relevant IRWM Region by using the map at the following link: https://gis.water.ca.gov/app/dacs/

   The IRWM Plans can be found at the following link: https://water.ca.gov/Work-With-Us/Grants-And-Loans/IRWM-Grant-Programs/Plan-Review-Process. If you have any questions about the IRWM region the contact list can be found at the following link: https://water.ca.gov/Work-With-Us/Grants-And-Loans/IRWM-Grant-Programs. Applicants

are encouraged to contact and coordinate with the applicable RWMG for the IRWM region in which the project is located

Please identify the IRWM objective your project addresses.
The proposed project addresses the following objectives from the 2018 Coachella Valley IRWM Plan (https://www.cvrwmg.org/irwm/irwm-plan/):

A. Provide reliable water supply for residential and commercial, agricultural community, and tourism needs. (The project will reduce water demands by removing turf, which is a water intensive plant, and replacing inefficient devices.)

B. Manage groundwater levels to reduce overdraft, manage perched water, and minimize subsidence. (By reducing overall water use, the project will decrease the pumping of groundwater, which will reduce the risk of overdraft.)

D. Maximize local supply opportunities, including water conservation, water recycling and source substitution, and capture and infiltration of runoff. (The project implements water conservation efforts in order to reduce overall water use throughout the Valley.)

F. Preserve and improve surface water quality by maintaining integrity of agricultural drainage systems, protecting the quality of natural runoff used for potable supply, and reducing pollution in storm water runoff. (Turf conversion results in less pesticide and fertilizer application and less dry weather urban runoff.)

L. Address water and sanitation needs of disadvantaged communities (DACs), including those in remote areas. (This project is exclusively for the DAC communities in Coachella Valley.)

M. Maintain affordability of water. (This project will reduce the water bills of DAC resident, business and institutional customers who participate in the program.)

8. Describe the Primary Benefit of the project.
   Quantified benefit: 21
   Units (Drop down):Acre feet per year If other please enter:
   Benefit Type: Water Conservation If other please enter:

9. Describe the Secondary Benefit of the project:
   Quantified benefit: 15
   Units (Drop down):Other If other please enter:MWh-year
   Benefit Type: Other If other please enter:

10. Please briefly describe how the project will achieve the claimed benefits.
    Estimating that 60% of the grant funding will be provided for turf removal at a cost of roughly $7 per square foot, 77,913 square feet of turf will be removed. Estimating that 40% of the grant funding will be provided for toilet and washing machine replacement at a cost of roughly $500 per device, approximately 727 devices (364 of each) will be replaced. Irrigation savings associated with turf removal are estimated to be 55.8 gallons per year per sq ft of turf (based on Southern Nevada Water Authority [SNWA]. 2005. Xeriscape Conversion Study: Final Report. Pg. 60). Therefore, 77,913 square feet of turf removal

results in a water savings of 4,347,541 gallons per year or 13.3 acre feet per year (AFY).

The CV Water Counts agencies have determined a useful project life of 15 years for turf removal projects. The National Association of Homebuilders (https://www.nahb.org/news-and-economics/industry-news/press-releases/2018/01/Potential-Home-Buyers-Sidelined-by-Availability-Affordability) estimates that average expected homeownership is 13 years. Given that drought-resistant landscapes can increase home values, coupled with the recent policy and cultural shifts to increased water use efficiency, it is unlikely that local landscapes will be converted back to turf if the houses are sold. As such, the CV Water Counts agencies conclude that the turf removal program will have a long-term water conservation benefit that exceeds 15 years. Therefore, the water savings over the life of the turf replacement project is 200 acre feet (AF).

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

The Water Research Foundation's 2016 Residential End Uses of Water Version 2 (PDF Report #4309b) estimates that washing machines use approximately 16% of an individual's total water use. ENERGY STAR® (https://www.energystar.gov/products/clothes_washers) estimates that the "average American family washes 300 loads of laundry per year". The Alliance for Water Efficiency (https://home-water-works.org/indoor-use/clothes-washer) estimates that traditional washers use 29 to 45 gallons per load and that ENERGY STAR®-certified high efficiency washers use 15 to 30 gallons per load. Using the midpoint of these two ranges, replacing a washer saves approximately 14.5 gallons per load. Assuming 300 loads per year, the savings per washing machine replaced is 4,350 gallons per year. By replacing 364 washing machines, the program will save 1.6 million gallons per year or 4.9 AFY. Assuming a 14-year useful life, the water savings over the life of the project is 69 AF based on the Equipment Expected Useful Life – Energy Audits and Improvements for Commercial Buildings report by John Wiley & Sons, Inc. (https://onlinelibrary.wiley.com/doi/pdf/10.1002/9781119174851.app17).

The secondary benefit of this project is reduction in energy usage for groundwater pumping. Coachella Valley Water District (CVWD) estimates that their wells use an estimated 550 to 850 kilowatt-hours (kWh) per (AF) with an average of 700 kWh/AF. Assuming an annual water savings of 21.5 AFY for all three project components, the energy savings is estimated at approximately 15,100 kWh per year or 15.1 megawatt-hours (MWh) per year.

11. Briefly describe how the community/area benefiting from this project is being impacted by the current drought.

The Coachella Valley IRWM Region is in Riverside County. Most of the county is in severe drought based on the latest U.S. Drought Monitor update. The Coachella Valley utilizes imported water from the State Water Project (SWP) and the Colorado River to help replenish and maintain a sustainable aquifer. Impacts from the ongoing Statewide drought in the SWP and Colorado River watersheds potentially reduce the agencies ability to replenish the basin in drought years. As both the local area, the state of California and the western states are experiencing a drought concurrently, there are potential reductions in both local mountainfront recharge to the groundwater basin and imported water for replenishment.

DWA and CVWD have contracts with the state for a maximum annual "Table A" amount of 194,100 AFY of SWP water. Typically, DWA and CVWD exchange their SWP water with Metropolitan Water District of Southern California for additional Colorado River water supply and recharge this water at the Whitewater River and Mission Creek Groundwater Recharge Facilities. SWP is currently significantly impacted by the drought in Northern California and DWR has issued two back-to-back years of 5% SWP allocation. On December 1, 2021, DWR announced that its initial SWP allocation for 2022 is 0% in anticipation of a third dry year. This 0% allocation represents a potential reduction in up to 194,100 AFY of Coachella Valley groundwater recharge in 2022.

The conservation savings provided by this proposed project, when coupled with the larger CV Water Counts conservation rebate program, will help Coachella Valley water agencies reduce water use and thus lessen the effect of the reduced local and imported recharge on the groundwater basin.

12. How will this project alleviate the impacts described in your answer to Question 11?

The proposed program will directly provide water conservation benefits to DAC customers resulting in water conservation for the region and lower water bills for DAC customers. Due to the nature of the program, these conservation retrofits can be implemented in a relatively short turnaround time, allowing for water conservation savings to also be realized in time to make a meaningful impact on water usage in the region and streching water supplies during the current and future droughts.

13. Please complete the following budget table for the project. (Identify funding sources in Question 15)

	BUDGET CATEGORY	**Grant Amount**	**All Other Cost**	**Total Cost**
(a)	Project Administration	10,000	0	**10,000**
(b)	Land Purchase / Easement	0	0	**0**
(c)	Planning / Design / Engineering / Environmental Documentation	0	0	**0**
(d)	Construction / Implementation	908,984	0	**908,984**

	TOTAL COSTS	**918,984**	**0**	**918,984**

14. Please describe why state funding is needed for this project. If state funding is not secured, what will happen to the project?

    State funding is needed due to DAC customers' inability to pay the cost-share and installation of these projects. If state funding is not secured, the water agencies will not be able to provide these conservation options to the DAC customers in Coachella Valley and DAC customers will continue to utilize low efficiency devices and continue to irrigate their turf and other inefficient landscaping.

    Some DAC customers may choose to let their inefficient landscaping die off, which results in a potential increase in stormwater runoff from these sites and lowered access to green spaces, and their associated physical and mental health benefits. From the 2017 book titled "Effects of Urban Green Space on Environmental Health, Equity and Resilience", green space is linked to health benefits including "(1) improved relaxation and restoration, (2) improved functioning of the immune system, and (3) enhanced physical activity and (4) improved social capital" (e.g. promoting social interaction and fostering sense of community), in addition to benefits related to reduction of air pollution, noise and excessive heat. The book also notes that "low-income communities often [have] less green space or [are] exposed to poorly maintained, vandalized or unsafe green areas" and that "socioeconomic inequalities in access to green space and resulting health benefits may therefore contribute to inequalities in health." Attachment 3B includes an example of a desert community promoting desert shade trees and xeriscape over allowing landscaping to revert to dirt lots in underrepresented communities experiencing heat stress and low access to green space.

15. Will the applicant provide cost share (encouraged but not required) and/or will this project require any additional funding from sources other than this solicitation? If so, please describe the funding source and indicate if the funding has been secured. If the funding has not been secured, please describe the plan to secure the necessary funding.

    Typically the CV Water Counts rebates require a match from the customer to complete the retrofits as the rebate only provides a portion of the cost to replace the devices and/or xeriscaping projects. Customers may have to pay a share of the replacement cost depending on the materials selected.

16. Is land acquisition or landowner permission required for this project? If so, please briefly describe the status of the acquisition or agreement with the landowner. If the acquisition is not complete or permission not secured at the time of application, please describe the plan to complete it.

    This program does not require land purchases or easements to implement.

17. Has planning and design for this project been completed? If not, please describe the status of planning and design.

    Planning and design is not applicable for this program. The water agencies will build off of their existing CV Water Counts successful conservation programs to develop a DAC focused program.

18. Are the CEQA (and NEPA if applicable) and permitting processes for this project complete? If not, please briefly describe the permits and CEQA (or NEPA) documents to be completed and projected schedule for completion.

    CEQA is not required for this program because it does not qualify as a "Project" under CEQA [Public Resources Code §21065]).

19. Please briefly describe the necessary construction/implementation for this project.

    Implementing the DAC conservation program will include outreach to eligible residents, businesses and institutions; application review and approval; pre- and post-site visits to customer sites; verification of successful project completion; customer support; rebate check processing (if applicable); direct payments to landscapers and plumbers as applicable for direct installation of the retrofits; and program website maintenance. This task also includes work to measure and report program progress and budgeted funds for materials and equipment necessary to implement the water-efficient landscape upgrades and device replacement program. Eligible costs for the turf removal program include, but are not limited to: water-efficient plants, mulch, rock, hardware (weather-based controllers, irrigation piping, meters, valves, etc.) and the cost to remove the turf and install the new xeriscape. Eligible costs for the device replacement program include the cost for the devices, installation, and disposal of the removed device.

    In order to implement the program, DAC-focused outreach materials will be prepared for the water agencies to raise awareness about water conservation and the program. A website page about the DAC conservation program with effort details and forms will be created. The outreach program also includes implementing tools and materials like social media handles, mailers, newsletters, and press releases.

    The water agencies will also complete outreach to professional landscapers and plumbers regarding the program and to the California Conservation Corps. Where possible, the agencies may choose to use the Conservation Corps or similar programs to complete the retrofits in order to provide valuable paid training in landscaping design and construction and plumbing to young adults in these programs.

20. Please complete the schedule below for the project. Projects must be complete by March 31, 2026, to allow time for final invoice processing and retention payment before the State funds expire on June 30, 2026. Project administration should end at least three months after construction.

	Categories	**Start Date**	**End Date**
(a)	Project Administration	3/1/2022	3/31/2026
(b)	Land Purchase / Easement		
(c)	Planning/ Design / Engineering / Environmental Documentation		
(d)	Construction/ Implementation	3/1/2022	3/31/2026