

GRASS REMOVAL INCENTIVE PROGRAM

**WaterSMART Grants: Small-Scale
Water Efficiency Projects for Fiscal
Year 2020**

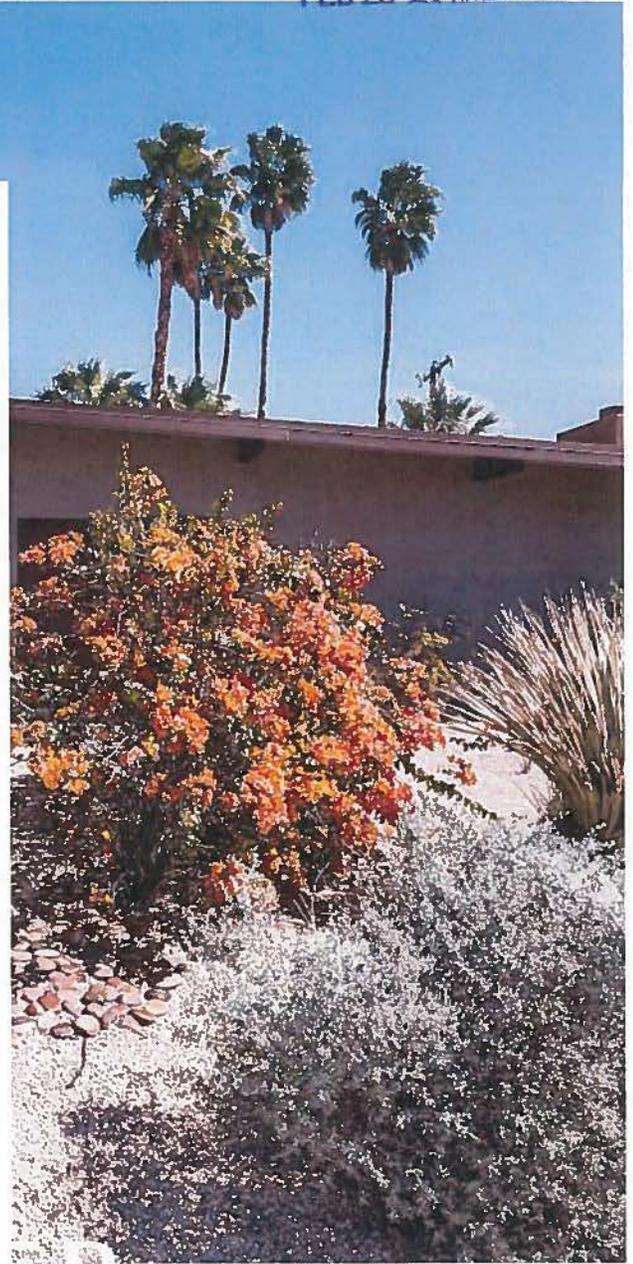
**Bureau of Reclamation
FOA No. BOR-DO-20-F006**

Applicant:

Desert Water Agency
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Project Manager:

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DESERT WATER





Table of Contents

Technical Proposal and Evaluation Criteria	1
<i>Executive Summary</i>	<i>1</i>
Project Summary	1
<i>Background Data</i>	<i>1</i>
Water Supply	1
Water Delivery System	3
Past Working Relationship with Reclamation	4
<i>Project Location</i>	<i>4</i>
<i>Technical Project Description and Milestones</i>	<i>5</i>
Problems and Needs.....	5
How the Project Addresses Problems and Needs	6
<i>Evaluation Criteria</i>	<i>8</i>
E.1.1 Evaluation Criterion A—Project Benefits (35 Points)	8
E.1.2 Evaluation Criterion B—Planning Efforts Supporting the Project (35 points)	10
E.1.3. Evaluation Criterion C—Project Implementation (10 points).....	10
E.1.4. Evaluation Criterion D—Nexus to Reclamation (10 points).....	12
E.1.5. Evaluation Criterion E—Department of the Interior and Bureau of Reclamation Priorities (10 points) 12	
Project Budget	15
<i>Funding Plan</i>	<i>15</i>
<i>Budget Proposal</i>	<i>15</i>
<i>Budget Narrative</i>	<i>16</i>
Environmental and Cultural Resources Compliance	18
Required Permits or Approvals	19
Unique Entity Identifier	19
Letters of Project Support	20
Official Resolution	23

List of Tables

Table 1. Total Water Use	2
Table 2. Implementation Plan	11
Table 3. Total Project Cost	15
Table 4. Budget Proposal	16

List of Figures

Figure 1. Desert Water Agency Boundary Map	4
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Technical Proposal and Evaluation Criteria

Executive Summary

Date: February 21, 2020

Applicant Name: Desert Water Agency

City: Palm Springs

County: Riverside

State: CA

Project Manager:

Ashley Metzger

Outreach & Conservation Manager

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Grant Funding Request: \$75,000

Non-Federal Matching Funds: \$76,000

Total Project Cost: \$151,000

Estimated Construction Start Date:

October 1, 2020

Estimated Project Completion Date:

January 31, 2022

Estimated Project Duration: 16 months

Located on Federal Facility: Not applicable

Project Summary

Desert Water Agency (DWA) is requesting funding to expand its existing Grass Removal Rebate Program for one year in order to reduce outdoor residential water demand and improve water supply resilience. This funding will provide rebate incentives for customers to replace approximately 75,000 square feet of turf with low water use landscaping, resulting in approximately 12.94 acre-feet of annual water savings. The request for this funding is in response to DWA's 2015 Urban Water Management Plan and 2018 Coachella Valley Integrated Regional Water Management Plan which prioritize water conservation and is based on the popularity of the Grass Removal Rebate Program among DWA customers. Funding for this program (see project description on page 5) will allow DWA to reduce water demand in its service area in order to address aquifer overdraft, increase the resilience of water supplies, and reduce future variability in the Coachella Valley Basin.

Background Data

Water Supply

DWA's water comes from groundwater produced by local potable water supply wells from the upper portion of the Whitewater River Subbasin of the Coachella Valley Groundwater Basin (this includes native groundwater and imported Colorado River supplies); surface water diverted from creeks in the San Jacinto Mountains; and recycled water for irrigation use.

Quantity of Water Supply Managed

DWA manages and supplies about 34,355 acre-feet of water per year.

Water Rights Involved

Neither the Coachella Valley Groundwater Basin, nor any of its subbasins have been



adjudicated; therefore, groundwater production is not currently legally limited. However, DWA and the Coachella Valley Water District (CVWD) continuously work to manage the groundwater basin through individual and joint programs and plans. Since 1962, DWA has secured rights to 55,750 AFY of Table A, highest priority State Water Project water to artificially recharge the groundwater basin. DWA and CVWD entered into water exchange contracts with the Metropolitan Water District of Southern California (Metropolitan) in 1967. In 2003, DWA and CVWD contracted with Metropolitan to deliver Colorado River water to the Upper Coachella Valley in exchange for SWP water delivered to Metropolitan through the California Aqueduct in San Bernardino. This exchange was required because the SWP does not have an aqueduct or other delivery infrastructure connecting to the Coachella Valley. The majority of this imported water is directed to the Whitewater River and Mission Creek Subbasin, of which 25% is allocated to DWA.

DWA possesses rights to divert surface water from Snow Creek, Falls Creek, Chino Creek North, Chino Creek West, and the Whitewater River. Surface water supplies constitute approximately 4% of total municipal water supply. Per State Water Resources Control Board Water Rights Division Licenses 2592, 3097, and 8226, DWA is permitted to divert 2,475 gallons per minute (gpm) from Snow Creek, 675 gpm from Falls Creek, and 3,150 gpm from both creeks combined. Under the 1938 Whitewater River Adjudication Decree, Case No. 18035, DWA has the right to divert 900 gpm from Chino Creek. In 2009, DWA acquired water rights for the diversion of Whitewater River from the Whitewater Mutual Water Company (WMWC) through stock purchase agreements with stockholders. These water rights entitle DWA to 10 cubic feet per second (cfs) from the Whitewater River (Whitewater River Adjudication Decree, September 28, 1938).

Current Water Uses

DWA’s water primarily serves residential and commercial users.

Water Users Served

DWA serves a total population of approximately 95,000. Population is expected to increase to approximately 113,100 by 2040.

Current & Projected Water Demand

Table 1. Total Water Use

Total Water Use (AF/YR)							
Water Use	2010	2015	2020	2025	2030	2035	2040
Total Recycled	4,050	4,045	6,100	7,000	7,000	7,000	7,000
Total Potable	36,701	29,091	36,570	38,266	40,068	41,870	43,460
Total	40,751	33,136	42,670	45,266	47,068	48,870	50,460

DWA's projected total potable and recycled water demand in 2040 will be 50,460 acre-feet per year, compared with 42,670 AFY in 2020. This is an increase of approximately 18%. Future projections of gross potable water demand are based on projections of DWA's total service area population and an estimated water use of 344 gallons per capita per day (gpcd), which is DWA's urban water use target (Desert Water Agency Urban Water Management Plan, 2015).

Potential Shortfalls in Water Supply

The challenges that DWA's water supply faces are long-term in nature, while there is sufficient groundwater in storage to weather short-term droughts, it will not sustain the current population indefinitely due to the limited quantities of natural recharge. As a SWP recipient, DWA's water resources are susceptible to the uncertainty of supply and delivery from the SWP and the Delta due to legal, environmental, and climatic challenges.

Additionally, DWA serves as an exclusive local Groundwater Sustainability Agency (GSA) pursuant to California's Sustainable Groundwater Management Act (SGMA). SGMA requires that GSAs meet their sustainability goals and operate within the sustainable yield for their identified basin by eliminating undesirable results through projects and management practices, among other requirements. To operate within its sustainable yield, DWA may need to reduce groundwater withdrawals which could result in water supply shortfalls. Additionally, groundwater within DWA's service area may be subject to legal restrictions pursuant to an adjudication under SGMA or settlement with the Agua Caliente Band of Cahuilla Indians, which has reserved rights to the groundwater basin.

Continued aquifer recharge, water recycling, conservation, and long-range planning are necessary to meet current and future water demands without depleting the groundwater. Lastly, DWA's water supply could experience shortfalls related to water quality issues. DWA's groundwater sources have been impacted in the past by water quality challenges related to high nitrate and uranium concentrations; surface water from Snow and Falls Creeks has also been impacted by occasional high occurrences of coliform bacteria.

Water Delivery System

Total Length of Distribution Lines

The approximate length of DWA's distribution lines is 392 miles.

Number and Sizes of Storage Tanks

DWA has 28 reservoirs with a combined capacity of 59 million gallons.

Number of Pump Stations and Capacities

DWA operates 9 booster stations with a combined capacity of 19,222 gallons per minute.

Total Number of Connections

DWA has 23,000 active service connections.

Other Relevant Information

DWA pumps groundwater via 27 active wells and has a water supply system that contains up to 12 pressure zones.

Past Working Relationship with Reclamation

Not applicable.

Project Location

The grass removal sites would be located throughout DWA’s district boundary (see DWA Boundary Map below). Because the grant is for an incentive program, we do not know yet what locations will take advantage of the program to remove their grass. DWA would provide a map with all project locations along with the grant completion report.

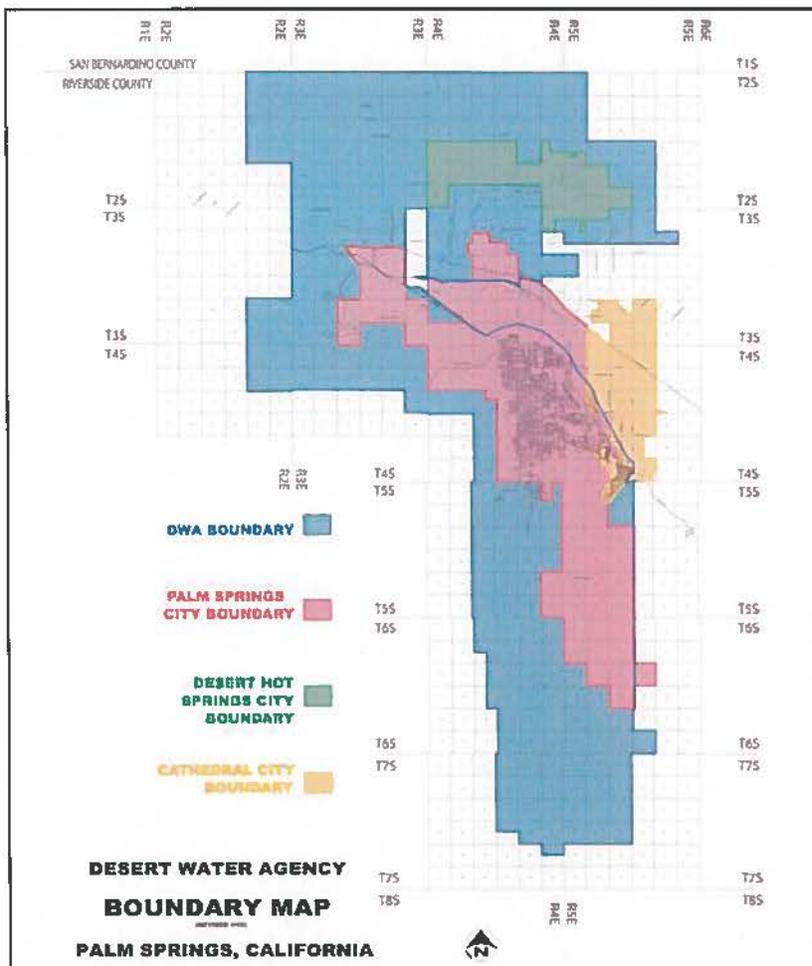


Figure 1. Desert Water Agency Boundary Map

Technical Project Description and Milestones

Problems and Needs

DWA's water supply—consisting of naturally occurring groundwater and surface water from mountain streams, recycled water, and an allocation from the State Water Project that is exchanged for Colorado River Water—is limited and vulnerable to impacts including drought, climate change, and population growth.

While the Coachella Valley Groundwater Basin is not currently experiencing drought, analyses of past climate records, based on spring snowpack and Colorado River flows, provide evidence that drought is a recurring climate characteristic of this region. The Basin experiences an arid climate characterized by low humidity, high summer temperatures, and mild dry winters. Midsummer temperatures commonly exceed 100°F, frequently reach 110°F, and periodically exceed 120°F. Given low annual rainfall and high summer temperatures, large quantities of water are required for landscape irrigation, even during the cooler winter months, when the average daytime temperature is about 60°F.

According to California's Department of Water Resources, Coachella Valley's arid climate is likely to become drier due to climate change, which could lead to an increase in both the duration and frequency of drought conditions. Drought can accelerate aquifer overdraft, causing subsidence, the permanent loss of groundwater storage capacity, and result in degraded water quality. The Coachella Valley Groundwater Basin has periodically been in overdraft since the 1930s, particularly during times of drought.

While DWA expects to have sufficient groundwater to deal with short-term droughts, it will not be able to sustain the current population during long droughts without shortfalls in water supply that will negatively impact service. Additionally, DWA's reliance on imported water from the SWP, exchanged for Colorado River Water, makes the Agency susceptible to supply and delivery uncertainty due to legal, environmental, and climatic challenges.

Furthermore, the Coachella Valley's population and urban areas are continuing to grow, with DWA's population expected to increase by more than 19% by 2040. Total water use is also predicted to increase about 18% over the same timeframe, which is likely to result in greater water supply challenges unless demand can be reduced or new sources of water can be utilized.

DWA's water supply could also experience potential shortfalls due to water quality issues. In the past, high levels of nitrate and concentrations of uranium have been detected in groundwater; additionally, high levels of coliform bacteria have been occasionally measured in surface water sources.



How the Project Addresses Problems and Needs

To address aquifer overdraft, increase the resilience of water supplies, and reduce future variability in the Coachella Valley Basin, DWA, in concert with the Coachella Valley Water District and other local cities and agencies, has been implementing sustainable water management practices including conservation since the 1970s. These conservation practices are part of DWA's proactive approach to sustainable water management and are articulated in multiple planning documents including DWA's *2015 Urban Water Management Plan*. Additionally, DWA is a partner of the Coachella Valley Integrated Regional Water Management Group, which collaborated on the *2018 Coachella Valley Integrated Regional Water Management & Stormwater Resource Plan*. Collectively, these planning documents detail water supply vulnerabilities, take a forward-looking approach to regional water management, and formulate strategies and best management practices to achieve sustainable water management.

The majority of water use in DWA's service area occurs outdoors (up to 80%), making outdoor water conservation a priority. Thus, the Agency has focused on implementing outdoor water conservation programs including replacement of water-inefficient landscaping, consumer education, smart irrigation controllers, water audits for large-volume water users, and residential and landscape water audits. These programs are encouraged regionally and well received by customers, including DWA's popular Grass Removal Incentive Program.

Grass Removal Incentive Program

The Grass Removal Incentive program started in 2014 for residential, multi-family, and commercial sites as an effective strategy to reduce water demand. The Grass Removal Incentive Program encourages customers to replace existing grass with low or no-water use landscapes. The program reimburses successful applicants at a rate of \$2 per square foot of grass replaced. The average turf replacement area for residential properties is approximately 1,500 square feet. Below are some terms and conditions of the program:

- Participants apply directly through the DWA website.
- Eligible participants include residential, commercial or HOA customers.
- Applicant must be an authorized owner/manager/landscaper for a property within DWA's service area.
- Grass must be in place and the property reviewed by DWA prior to removal (cannot be bare dirt).
- Applicants certify that square footage listed is accurate. Overestimating area may result in the denial of an application.
- Applications are awarded on a first-come first-served basis, until funding is exhausted.
- Conversions must be completed within 90 days; other conversions must be completed within 180 days.



- All irrigation in the rebate area must be low flow (.25 gpm or less). No adjustable bubblers.
- Artificial turf or trees/plants are required unless project area is less than 4 feet wide.
- DWA does not guarantee rebates until applicants complete pre-approved projects per program requirements. Customers must notify DWA when their replacement projects are completed.
- Reimbursement is issued via check, and is mailed to the participant about 45 days from the date the project is approved.

Program Effectiveness

- Among customers that have completed turf replacement projects, an average outdoor water savings of approximately 47% has been achieved.
- DWA's program estimates that 56.2 gallons of water per square foot, per year, are saved with the turf replacement program (based on the EPA's WaterSense guidance).
- Drought-resistant landscapes can increase home values and are expected to produce a long-term water conservation benefit that exceeds 15 years, resulting in a total of 194.1 AF of water savings.
- The program currently saves approximately 375 AFY.
- If DWA is awarded this grant, they expect additional water savings of 12.94 AFY.
- The secondary benefit of this project is reduction in greenhouse gasses (GHGs) due to reduced future purchases of imported water to recharge the groundwater basin, and reduced energy required to pump groundwater.

Program Implementation

This is an existing DWA program seeking grant funding to supplement the cost of expanding the Grass Removal Incentive Program for one year. DWA staff implements all aspects of the program.

Regarding environmental compliance, DWA will work with the Reclamation's Yuma Area office to issue a Categorical Exclusion Checklist (CEC). In pursuing a CEC, DWA asserts that all activities will be conducted within previously disturbed areas and that no wetland habitat will be impacted. Written permission will be requested from the Agua Caliente Band of Cahuilla Indians prior to any projects being completed on tribal lands.

For its cost-share of the project, DWA applied for state grant funding in 2019 with California's Department of Water Resources (DWR), under the Integrated Regional Water Management (IRWM) Implementation Grant Program. DWA is one of five water agencies in the Coachella Valley Regional Water Management Group that collectively applied for funding under this grant. The grant includes multiple components, with funding specifically requested for DWA's grass removal incentive program. DWA anticipates that DWR will make their grant awards by mid-2020. If DWA is not awarded this funding, the Agency will provide its cost-share of the project through a cash contribution.

Implementation of the Grass Removal Incentive Program Includes:

- Community outreach and education
- Application review and approval
- Remote site measurement via Google Earth
- Pre and post-site visits to customer sites for photo documentation and measurement confirmation
- Verification of successful project completion
- Customer support
- Incentive check processing
- Program website and application maintenance

Managing this program will also include measuring and reporting program progress and budgeted funds for materials and equipment necessary to implement the water-efficient landscape upgrades. DWA expects this project to span 16 months, with incentive checks being issued from December 2020 through November 2021.

Evaluation Criteria

E.1.1 Evaluation Criterion A—Project Benefits (35 Points)

Describe the expected benefits and outcomes of implementing the proposed project.

Water Savings

Through this grant, 12.94 AF, or approximately 56.2 gallons per square foot, is estimated to be made available each year to offset additional water demand (this estimate is based on EPA WaterSense's Landscape Water Requirement Equation). Since DWA launched its grass removal incentive program in 2014, customers see an average outdoor water savings of about 47%. Given that drought-resistant landscape can increase home values, coupled with the recent policy and cultural shifts in increase water use efficiency in California, it is unlikely that local landscapes will be converted back to turf if homes are sold. As such, DWA has concluded the grass removal program will have a long-term water conservation benefit, resulting in 194.1 AF of water savings over the first 15 years of the project. With grant funds from Reclamation, DWA will be able to encourage more conversions than is currently budgeted.

Water Supply Reliability

The challenges that DWA faces are long-term in nature. While there is sufficient groundwater to weather short-term droughts, it will not sustain the current population indefinitely due to the limited quantities of natural recharge. Continued water conservation is necessary to meet current and future water demands.

Geographic Scope

Given DWA's shared use of the Whitewater River and Mission Creek Sub-basins of the Coachella Valley Groundwater Basin, reductions in DWA's groundwater withdrawals related to water



conservation can improve water quality and reduce the risk of overdraft and subsidence throughout the sub-basins.

Increased Information Sharing

DWA actively collaborates on water resources management projects and shares information with the other water managers in the region including the City of Coachella, Coachella Valley Water District, Indio Water Authority, Mission Springs Water District, and Valley Sanitary District. Each of these partner agencies has an interest in solving the problem of high water-use and urban runoff caused by excessive landscape irrigation. DWA will share data from this project with other water managers throughout the region to inform their landscape efficiency rebate programs.

Increased Public Awareness

Participants in the grass removal incentive program will learn better water management practices for their properties. One of DWA's most effective outreach tactics for the existing grass removal program has been "word of mouth" between neighbors and other community members. The Agency also promotes the program at community events, neighborhood meetings, workshops, via social media and through advertising. DWA frequently mentions the program on TV and radio interviews and various public service announcements. The program is highlighted to customers in DWA billing materials and newsletters. It is also targeted to homeowners' associations and professional landscape companies.

Water Quality

Multiple benefits will result from the implementation of the proposed Project including the reduction of non-point source runoff containing topsoil, chemical fertilizer and bacteria into impacted water bodies.

Greenhouse Gas Emission Reductions

Conserving 194.1 AF of water throughout the life span of the project avoids 58.2 tons of CO₂e in GHGs from purchase and recharge of Colorado River water. This assumes that the energy requirements associated with delivering Colorado River water (including Canal water) are 2.3 megawatt hours per acre foot (MWh/AF) and 600 pounds of CO₂e/AF (WaterReuse Association, 2011).

E.1.2 Evaluation Criterion B—Planning Efforts Supporting the Project (35 points)

Describe how your project is supported by an existing planning effort.

The *2018 Coachella Valley IRWM/SWR Plan* explains that “water is a limited resource and that water conservation and use efficiency should be actively pursued”. Turf replacement programs are specifically referenced in the IRWM Plan in “Region Description and Resource Management Strategies”. The project contributes to IRWM Plan objectives in the following ways:

Objective A: Provide reliable water supply. This project is reducing water demands by removing grass, which is a high-water use plant. Removing grass and converting to desert landscaping, or artificial turf, will reduce pumping for irrigation and therefore protect existing groundwater supplies.

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

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

Objective F: Preserve and improve surface water quality. Grass removal results in less pesticide and fertilizer application and less dry weather urban runoff.

DWA’s *2015 Urban Water Management Plan* reiterates this water conservation ethos by stating, “water conservation is one of several high-priority policies actively implemented within DWA, and programs such as water audits for large-volume water users, residential water audits, landscape water audits, and water-efficient landscape gardens are encouraged and well received”. The UWMP also states that since most water use within DWA’s service area (up to 80 percent) is used outdoors, DWA has focused conservation efforts on developing outdoor water conservation measures.

E.1.3. Evaluation Criterion C—Project Implementation (10 points)

Implementation Plan

DWA expects this project to span 16 months, from October 2020 through January 2022. Pre-installation is expected to occur during an 8-month window. Post-installation is a 12-month window that is partly concurrent with pre-installation. The project will culminate with a one month monitoring and reporting period.

Table 2. Implementation Plan

Project Stage	Duration	Milestones	Start Date	Completion Date
Funding Award	4-8 weeks	<ul style="list-style-type: none"> • Receive award letter • Respond to request for information • Final signatures 	October 2020	December 2020
Phase 1: Pre-Installation	8 months	<ul style="list-style-type: none"> • Application Review & Approval • Pre- installation site visits 	December 2020	July 2021
Phase 2: Post-Installation	12 months	<ul style="list-style-type: none"> • Post-installation site visits • Verification of successful project completion • Rebate check processing 	December 2020	November 2021
Phase 3: Monitor & Report	1 month	<ul style="list-style-type: none"> • Submit progress & final report • Monitor water savings 	December 2021	January 2022

Required Permits

No permits will be required for the implementation of this project.

Project Engineering & Design Work

No engineering or design work will be performed specifically in support of this project.

Policies & Administrative Actions

No new policies or administrative actions will be required to implement this project. DWA will implement the proposed Project following established policies and administrative procedures.

Environmental Compliance Estimate

The environmental compliance estimate for this project was developed through correspondence with BOR-Yuma Area Office (YAO) and they have indicated their office will issue a NEPA Categorical Exclusion for this project. CEC costs have been discussed with the YAO.

E.1.4. Evaluation Criterion D—Nexus to Reclamation (10 points)

Is the proposed project connected to a Reclamation project or activity? If so, how?

Does the applicant receive Reclamation project water?

DWA has water rights to 55,750 AFY of State Water Project water, with actual delivery impacted by weather-related and structural factors. However, there is no pipeline or aqueduct from the SWP proximal to DWA. Therefore, DWA and neighboring CVWD have an agreement in place to exchange their SWP water with the Metropolitan Water District for Colorado River water, which comes through the Coachella Valley in an aqueduct. Metropolitan Water District is a holder of a Water Delivery Contract with Reclamation.

Is the project on Reclamation project lands or involving Reclamation facilities?

No, the incentive program is not on Reclamation land nor does it involve Reclamation facilities.

Is the project in the same basin as a Reclamation project or activity?

Yes, there are multiple Reclamation projects in the Coachella Valley Water Basin, including other WaterSMART projects.

Will the proposed work contribute water to a basin where a Reclamation project is located?

DWA's grass removal incentive program will reduce demand for water, thereby reducing groundwater pumping in the Coachella Valley Water Basin and leaving more water in this aquifer. The proposed project will save an estimated 194.1 AFY of water from being pumped.

Will the project benefit any tribe(s)?

DWA is a service provider for a large swath of the checkerboard Agua Caliente Band of Cahuilla Indian (a federally recognized tribe) reservation. Assuming the Agua Caliente Band of Cahuilla Indians provide a letter of permission, the grass removal incentive will be open to all DWA customers, benefitting the Agua Caliente Band of Cahuilla Indians tribe, allottees and lessees.

E.1.5. Evaluation Criterion E—Department of the Interior and Bureau of Reclamation Priorities (10 points)

Department Priorities

1. Creating a conservation stewardship legacy second only to Teddy Roosevelt
 - a. Utilize science to identify best practices to manage land and water resources and adapt to changes in the environment

DWA has championed water conservation since the 1970's, recognizing early on the need to sustainably manage its limited water resources in an arid region through seasonal or climatic shortages. Today, DWA's goal is still to provide its customers with an adequate and reliable



supply of high-quality water to meet present and future needs in an environmentally and economically responsible manner.

In order to help sustain its current population and support projected growth, DWA relies on quantitatively evaluated best management water conservation practices. Conservation efforts are critical to reduce water demand over the long-term, and to reduce the pressure on the groundwater supply in DWA's service area and the surrounding region. The majority of water use in DWA's service area occurs outdoors (up to 80%), making outdoor water conservation one of several high-priority policies actively implemented within DWA.

DWA's conservation related practices and programs are manifold, including: water-efficient landscaping, consumer education, utilization of new technologies such as "smart" irrigation controllers, water audits for large-volume water users, residential and landscape water audits, leak detection and repairs, water waste prevention ordinances, and residential ultra-low flush toilet replacement. Additionally, DWA will continue to import water for aquifer recharge and recycle water as part of its long-term water management plan.

The aforementioned practices and their implementation are guided by two primary planning documents, DWA's *Urban Water Management Plan* and the *Coachella Valley Integrated Regional Water Management & Stormwater Resource Plan (CVIRWMP)*. Collectively, these planning documents detail water supply vulnerabilities, take a forward-looking approach to regional water management, and formulate strategies and best management practices to achieve sustainable water management.

By implementing these best practices, DWA achieved the 2020 water use target set forth in its 2010 *Urban Water Management Plan* five years ahead of schedule (2015), reducing per capita water use by more than 20 percent. In particular, DWA's data on its Grass Removal Incentive Program show an average outdoor water savings of approximately 47% has been achieved by participating customers.

In sum, DWA's Grass Removal Incentive Program supports the DOI priority of conservation stewardship by employing a BMP that empirically reduces water demand in the long-term, and is essential to aiding DWA in adapting to climate variability.

3. Restoring Trust with Local Communities?

DWA's incentive program invites the community to be part of the solution in water conservation by applying to remove grass at residential, commercial or government properties. When the community has the ability to participate in and benefit from the program there is more buy-in and long-term commitment. This also leads to a stronger awareness of DWA's strong commitment to protecting our region's valuable water resources.

Grass removal, and the availability of the program, also has the benefit of being a highly visible demonstration of DWA's commitment to water conservation and sustainability. Grass removal projects also appear to occur in pockets. Neighbors may see a home on a street transitioning to desert landscape and decide to make a similar investment. DWA places signs in yards as they are inspected for conversion. This signage, along with a robust outreach plan, brings awareness to the program.

Reclamation Priorities

4. Address Ongoing Drought

Drought is a recurring characteristic in the Coachella Valley region. According to California's Department of Water Resources, Coachella Valley's arid climate is likely to become drier due to climate change, which could lead to an increase in both the duration and frequency of drought conditions.

Drought can accelerate aquifer overdraft, causing subsidence, the permanent loss of groundwater storage capacity, and result in degraded water quality. The Coachella Valley Groundwater Basin has periodically been in overdraft since the 1930s, particularly during times of drought.

While DWA expects to have sufficient groundwater to deal with short-term droughts, it will not be able to sustain the current population during long droughts without shortfalls that will negatively impact service. Additionally, DWA's reliance on imported water from the Colorado River makes the Agency susceptible to supply and delivery uncertainty due to legal, environmental, and climatic challenges.

Furthermore, the Coachella Valley's population and urban areas are continuing to grow, with DWA's population expected to grow more than 19% by 2040. Total water use is also predicted to increase about 18% over the same timeframe, which is likely to result in greater water supply challenges unless demand can be reduced or new sources of water can be utilized.

Project Budget

Funding Plan

How Non-Federal Funds Will Be Obtained

DWA applied for in state grant funding in 2019 with California’s Department of Water Resources (DWR), under the Integrated Regional Water Management (IRWM) Implementation Grant Program. DWA is one of five water agencies in the Coachella Valley Regional Water Management Group that collectively applied for funding under this grant. The grant includes multiple components, with \$385,000 in funding specifically requested for DWA’s grass removal incentive program. DWA anticipates that DWR will make their grant awards by mid-2020. DWA would have through 2024 to expend the DWR grant funds. If DWA is not awarded this funding, the Agency will provide its cost-share of the project through a cash contribution via its fiscal year 2020-2021 and 2021-2022 water conservation program budgets, which are funded by the Agency’s operating and general funds. Desert Water Agency anticipated providing the commitment letter within one month of award.

Project Costs Incurred Before the Project Start Date

No project costs will be incurred prior to the project start date.

Budget Proposal

Table 3. Total Project Cost

SOURCE	AMOUNT
Costs to be reimbursed with the requested Federal funding	\$75,000
Costs to be paid by the applicant	\$76,000
Value of third-party contributions	
TOTAL PROJECT COST	\$ 151,000.00

Table 4. Budget Proposal

BUDGET ITEM DESCRIPTION	COMPUTATION		Quantity Type	TOTAL COST
	\$/UNIT	Quantity		
Salaries and Wages				
Employee 1	<i>Not applicable</i>			\$ 0
Fringe Benefits				
Full-Time Employees	<i>Not applicable</i>			\$ 0
Part-Time Employees	<i>Not applicable</i>			\$ 0
Equipment				
Item A	<i>Not applicable</i>			\$ 0
Supplies and Materials				
Item A	<i>Not applicable</i>			\$ 0
Contractual/Construction				
Grass Removal Incentive	\$2 per FT ²	75,000	FT ²	\$ 150,000
Third-Party Contributions				
Contributor A	<i>Not applicable</i>			\$ 0
Other				
NEPA CEC	\$1,000			\$ 1,000
TOTAL DIRECT COSTS				\$ 151,000
Indirect Costs				
Type of rate	<i>Not applicable</i>			\$ 0.00
TOTAL ESTIMATED PROJECT COSTS				\$ 151,000

Budget Narrative

If awarded, Desert Water Agency will use USBR funds in conjunction with its own budget or with Department of Water Resources funding from the Integrated Regional Water Management grant program to cover the cost of incentives paid to customers. The program will be administered entirely at the cost of Desert Water Agency.

Salaries and Wages

Not applicable.

Fringe Benefits

Not applicable.

Travel

Not applicable.

Equipment

Not applicable. No new equipment is anticipated to complete this project.

Materials and Supplies

Not applicable. No new materials or supplies are anticipated in order to complete this project.

Contractual

Each grass removal program applicant is required to complete an application for reimbursement. Applicants are reimbursed based on the square footage of turf replaced, \$2 per square foot.

Third-Party In-Kind Contributions

Program participants that remove their grass typically pay more than the cost of the incentive for their conversion. Additional costs paid will not be tracked by Desert Water Agency.

Environmental and Regulatory Compliance Costs

Based on correspondence with Reclamation's Yuma Area office, Desert Water Agency expects the cost of obtaining a NEPA Categorical Exemption (CEC) to be approximately \$1,000.

Other Expenses

Not applicable.

Indirect Costs

Not applicable.

Environmental and Cultural Resources Compliance

- *Will the proposed project impact the surrounding environment (e.g., soil [dust], air, water [quality and quantity], animal habitat)?* This project will only remove existing grass located on previously disturbed land and should not affect soil or habitat. The project requires ground cover so dust will not be an issue. The project will reduce the water demands of the project sites.
- *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?* No.
- *Are there wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdiction as "Waters of the United States?"* No.
- *When was the water delivery system constructed?* Various dates starting in the 1920s.
- *Will the proposed project result in any modification of or effects to, individual features of an irrigation system (e.g., headgates, canals, or flumes)?* No.
- *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.* No.
- *Are there any known archeological sites in the proposed project area?* No.
- *Will the proposed project have a disproportionately high and adverse effect on low income or minority populations?* No.
- *Will the proposed project limit access to and ceremonial use of Indian sacred sites or result in other impacts on tribal lands?* No. If permission is granted by the Agua Caliente Band of Cahuilla Indians, then grass removal projects may occur on previously disturbed Tribal lands.
- *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?* No.



Required Permits or Approvals

No permits are required for this project. The only approval required will be a Desert Water Agency Board of Directors approval of the grant agreement between the Agency and Reclamation

Letters of Project Support

See three letters of project support attached.

Official Resolution

Resolution 1231 approved by Desert Water Agency's Board of Directors on February 18, 2020 is attached.

Unique Entity Identifier

Desert Water Agency is registered with SAM. Our DUNS Number is 058228479.

AGUA CALIENTE BAND OF CAHUILLA INDIANS



PLANNING & DEVELOPMENT DEPARTMENT

CONSTRUCTION DIVISION • ECONOMIC DEVELOPMENT DIVISION

PLANNING & NATURAL RESOURCES DIVISION • TRIBAL HISTORIC PRESERVATION OFFICE

February 20, 2020

The Honorable Brenda Burman, Commissioner
U.S. Bureau of Reclamation
1849 C Street NW
Washington, DC 20240-0001

**RE: Letter of Support for WaterSMART Grant: Small-Scale Water Efficiency
Projects FY 2020, FOA BOR-DO-20-F006**

Dear Ms. Burman:

As the Director of Planning & Natural Resources for Agua Caliente Band of Cahuilla Indians, I am writing in strong support of **Desert Water Agency Grass Removal Incentives for Water Conservation Project**. The Agua Caliente Band of Cahuilla Indians has 500 tribal members on 31,500 acres. Agua Caliente has long been a good steward of water resources and a proponent for sustainable management of groundwater in the Coachella Valley.

Coachella Valley experiences high temperatures and minimal precipitation, so water conservation is essential to the long-term future of the valley. The proposed Grass Removal Incentive Program will allow more residents on the Reservation and those in neighboring areas to reduce their water footprint.

Water conservation is critical and in our area, about 80% of water use is outdoors. Grass removal is a great place to achieve high savings.

On behalf of the Agua Caliente Band of Cahuilla Indians, please accept this letter of support for DWA's Grass Removal Incentive for Water Conservation Project. We appreciate your thoughtful review of DWA's proposal and the regional benefits it offers.

Sincerely,

Margaret E. Park, AICP
Director of Planning & Natural Resources
**AGUA CALIENTE BAND
OF CAHUILLA INDIANS**



City of Palm Springs

Office of Sustainability

3200 E. Tahquitz Canyon Way • Palm Springs, California 92262
Tel: (760) 323-8214 • Fax: (760) 322-8360 • Web: www.palmspringsca.gov

February 10, 2020

The Honorable Brenda Burman, Commissioner
U.S. Bureau of Reclamation
1849 C Street NW
Washington, DC 20240-0001

RE: Letter of Support for WaterSMART Grant: Small-Scale Water Efficiency Projects FY 2020,
FOA BOR-DO-20-F006

Dear Ms. Burman:

As the Sustainability Manager for City of Palm Springs, I am writing in strong support of **Desert Water Agency Grass Removal Incentives for Water Conservation project**. The City of Palm Springs has about 48,375 residents and millions of visitors a year.

Coachella Valley experiences high temperatures and minimal precipitation, so water conservation is essential to the long-term future of the valley. Although we may not be in an official drought, we know that we are always operating in a water deficit environment.

Desert Water Agency (DWA) is a great proponent of water conservation, and this project is another important step in being a good steward of our region's resources. The proposed Grass Removal Incentive Program will allow more Palm Springs residents and those in neighboring areas reduce their water footprint.

Water conservation is critical and in our area about 80% of water use is outdoors. Grass removal is a great place to achieve high savings.

On behalf of City of Palm Springs, please accept this letter of support for DWA's Grass Removal Incentive for Water Conservation Project. We appreciate your thoughtful review of DWA's proposal and the regional benefits it offers.

Sincerely,

Patrick Tallarico

Sustainability Manager
City of Palm Springs



COACHELLA VALLEY WATER DISTRICT

Established in 1918 as a public agency

GENERAL MANAGER
Jim Barrett

ASSISTANT GENERAL MANAGER
Robert Cheng

CLERK OF THE BOARD
Sylvia Bermudez

ASSISTANT GENERAL MANAGER
Dan Charlton

February 11, 2020

The Honorable Brenda Burman, Commissioner
Bureau of Reclamation
Attn: Mr. Matthew Reichert
Denver Federal Center
Bldg. 67, Rm. 152
6th Avenue and Kipling Street
Denver, CO 80225

RE: Letter of Support for WaterSMART Grant: Small-Scale Water Efficiency Projects
FY 2020, FOA BOR-DO-20-F006

Dear Commissioner Burman:

As the Director of Communications and Conservation for Coachella Valley Water District (CVWD), I am writing in strong support of **Desert Water Agency's Grass Removal Incentive for Water Conservation Project**. CVWD is a close partner, both geographically and working with, Desert Water Agency (DWA). The agencies work together to replenish and manage the Coachella Valley's groundwater supply.

The Coachella Valley experiences high temperatures and minimal precipitation making water conservation essential to the long-term future of the region where up to 70% of residential water use is outdoors. DWA is a great proponent of water conservation and this project is another important step in being a good steward of our region's resources. The proposed Grass Removal Incentive Program will allow more residents in DWA's service area to reduce their water footprint.

CVWD is pleased to endorse DWA's Grass Removal Incentive for Water Conservation Project and appreciates your thoughtful review of DWA's proposal and the regional benefits it offers.

Sincerely,

Katie Evans
Director of Communications and Conservation

RESOLUTION NO. 1231

**RESOLUTION OF THE BOARD OF DIRECTORS
OF DESERT WATER AGENCY
AUTHORIZING AND APPROVING SUBMISSION FOR
A US BUREAU OF RECLAMATION SMALL-SCALE
WATER EFFICIENCY PROJECTS GRANT**

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

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

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

WHEREAS, about eighty percent of water is used outdoors, making grass removal an effective tool; and

WHEREAS, Desert Water Agency intends to submit an application for seventy-five thousand dollars in financial assistance from the United States Bureau of Reclamation through its small-scale water efficiency project grant in fiscal year 2020; and

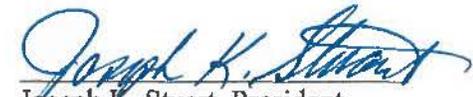
WHEREAS, the funding requested is for the Desert Water Agency Grass Removal Incentive Program; and

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

WHEREAS, if successful, the Agency will use California Department of Water Resources grant funding or the Agency's own budgeted funds for the matching funds in the funding plan submitted with the application;

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of Desert Water Agency hereby authorizes staff to apply for grant funding through the United States Bureau of Reclamation's Small-scale Water Efficiency Projects.

ADOPTED this 18th day of February, 2020.


Joseph K. Stuart, President

ATTEST: 
Craig Ewing, Secretary-Treasurer