Direct Install Turf Replacement Program for Disadvantaged Communities

WaterSMART: Water and Energy Efficiency Grants for FY 2024
U.S. Department of the Interior
Bureau of Reclamation
Notice of Funding Opportunity No. R24AS00052

The Metropolitan Water District of Southern California
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Los Angeles, CA 90012

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EXECUTIVE SUMMARY

The executive summary should include:

- The date, applicant name, city, county, and state
- Please indicate whether you are a Category A applicant or a Category B applicant. If you are a Category B applicant, please briefly explain how you are acting in partnership with a Category A partner. Note: If you are a Category B applicant, you must include a letter from the Category A partner confirming that they are partnering with you and agree to the submittal and content of the proposal.
- A one-paragraph project summary that provides the location of the project, a brief description of the work that will be carried out, any partners involved, expected benefits, and how those benefits relate to the water management issues you plan to address. Please note: this information will be used to create a summary of your project for our website if the project is selected for funding.
- State the length of time and estimated completion date for the proposed project.
- Whether or not the proposed project is located on a Federal facility.

Date: February 22, 2024
Applicant Name: Metropolitan Water District of Southern California
Location: 700 North Alameda Street Los Angeles, CA 90012-2944
County: Los Angeles County
State: California

As a special district of the State of California that provides and delivers water, the Metropolitan Water District of Southern California (Metropolitan) qualifies as a **Category A applicant**.

PROJECT SUMMARY:

The Direct Install Turf Replacement Program for Disadvantaged Communities seeks to remove the financial barriers imposed by traditional rebate programs by replacing turf with drought tolerant alternatives at no cost to qualifying participants across Metropolitan's service area. The overall goal of the Project is to expand existing turf replacement program efforts to improve outdoor water use efficiency and establish resiliency in frontline communities that are more affected by the impacts of drought and climate change.

This proposal seeks $250,000 from the Bureau of Reclamation's (Reclamation) WaterSMART: Water and Energy Efficiency Grants (WEEG) program to support the direct installation of water efficient landscapes in low income and disadvantaged communities (DAC). The Direct Install Turf Replacement Program for Disadvantaged Communities (Project) is a collaborative effort among Metropolitan and its 26 member agencies comprised of 14 cities, 11 municipal water districts, and one county water authority, that collectively provide water service to 19 million Southern Californians. Funding will supplement a portion of Metropolitan's Direct Install Turf Replacement Program for Disadvantaged Communities for fiscal periods 2024/2025, 2025/2026, and 2026/2027. Metropolitan will provide a minimum matching contribution of $250,000 dollars for the Project over three years for a total project cost of $500,000. The Project will convert approximately 30-40 residential landscapes for income-qualified homeowners and affordable housing properties in DAC as defined by the Climate and Economic Justice Screening Tool (CEJST). The Project will convert approximately 55 thousand square feet resulting in an estimated quantifiable water savings of 5.8-acre feet per year. Over the lifetime of the transformed landscape, the cumulative savings of this project is estimated to result in a lifetime

savings of 174 AF effectively reducing residential demand, contributing to both the immediate conservation needed to avoid further declining levels in Lake Powell and Lake Mead reservoirs and long-term water use-efficiency to secure future water reliability within the Lower Colorado River Basin. The funding will also assist Metropolitan's member agencies to increase water resiliency in the face of future supply challenges and foster further collaboration between Metropolitan and its member agencies.

PROJECT TIMELINE:

The project will commence at the beginning of calendar year 2025. All work is anticipated to be completed by the end of calendar year 2027.

FEDERAL FACILITIES:

This proposed project is not expected to fund any turf replacement activity at Federal facilities.

PROJECT LOCATION

- Provide detailed information on the proposed project location or project area including a map showing the specific geographic location. For example, {project name}is located in {state and county} approximately {distance} miles {direction, e.g., northeast} of {nearest town}. The project latitude is {##°##'N} and longitude is {###°##'W}.

Metropolitan's Direct Install Turf Replacement Program for Disadvantaged Communities is available to residential water users residing in areas designated as disadvantaged communities as defined by the Climate and Economic Justice Screening Tool and within the district's 5,200 square mile service area. Metropolitan's service area includes portions of six Southern California counties: Los Angeles, Orange, Riverside, San Bernardino, San Diego, and Ventura and includes approximately 300 cities. These areas are serviced by 26 member agencies that include 14 cities, 11 municipal water districts, and one-county water authority. Metropolitan is governed by a Board of Directors made up from its member agencies. Approximately 38 percent of Metropolitan's service area population is part of a disadvantaged community (as shown in the figure below). Grant funds will be utilized specifically within these DAC areas. A map and list of communities served by Metropolitan is shown below in Figures 1 and 2. The portion of Metropolitan's service area classified as disadvantaged communities (Project Area) is shown in Figure 3.

FIGURE 1: *A map of Metropolitan's Service Area broken down by member agency service area boundaries.*

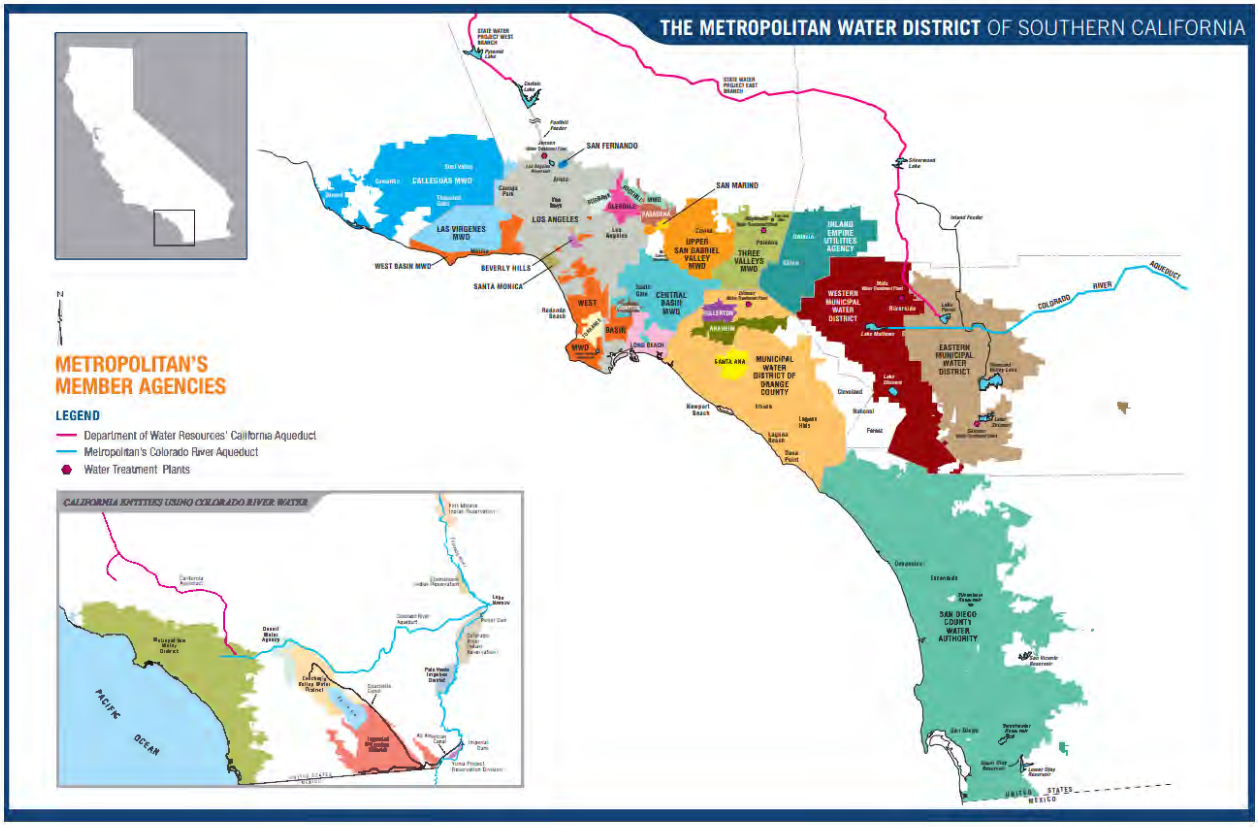
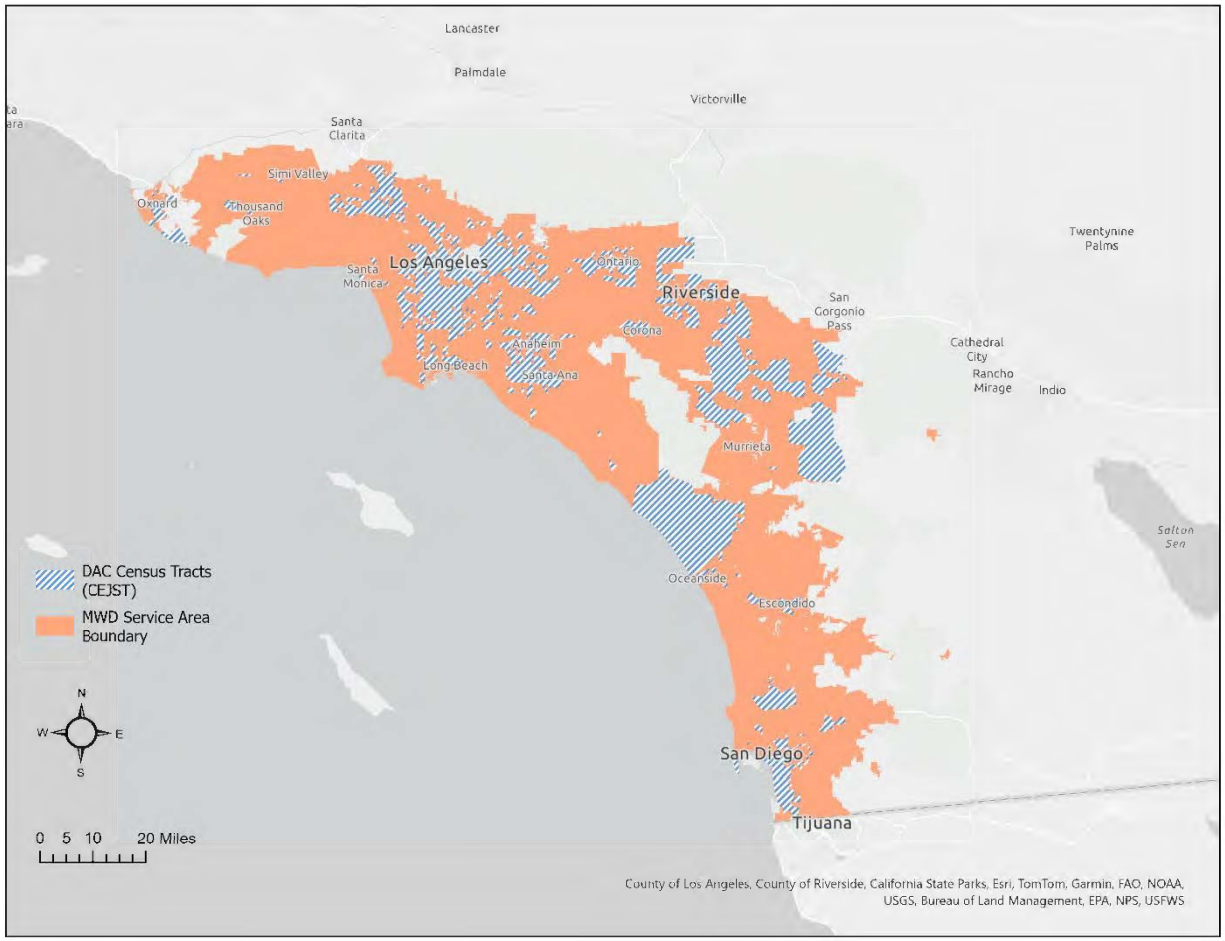


FIGURE 2: *A list of Metropolitan's member agencies and the communities that they serve.*

FIGURE 3: *Areas within Metropolitan's service area designated as disadvantaged communities by CEJST. Approximately 38% of Metropolitan's service area population reside in areas designated as DACs by CEJST.*



TECHNICAL PROJECT DESCRIPTION:

- Provide a more comprehensive description of the technical aspects of your project, including the work to be accomplished and the approach to complete the work. This description should provide detailed information about the project including materials and equipment and the work to be conducted to complete the project. This section provides an opportunity for the applicant to provide a clear description of the technical nature of the project and to address any aspect of the project that reviewers may need additional information to understand.
- Please do not include your project schedule and milestones here; that information is requested in response to the Readiness to Proceed criterion described in Section E.1.6. In addition, please avoid discussion of the benefits of the project, which are also requested in response to evaluation criteria described in Section E.1.
- In addition, please avoid discussion of the benefits of the project, which are also requested in response to evaluation criteria described in Section E.1. This section is solely intended to provide an understanding of the technical aspects of the project.

Note: If the work you are requesting funding for is a phase of a larger project, please only describe the work that is reflected in the budget and exclude description of other activities or components of the overall project.

PROJECT DESCRIPTION:

For over 30 years, Metropolitan has invested hundreds of millions of dollars to help Southern Californian's improve their outdoor water use efficiency. Throughout this time, various iterations of turf replacement and device rebate programs have evolved to improve customer access to rebates, enhance incentives and promote the environmental benefits of landscape transformation beyond water savings. To date, 220 million square feet of turf in Southern California has been replaced with water efficient landscaping because of the combined efforts of the Bureau of Reclamation, State of California, Metropolitan, and our local water suppliers.

As Metropolitan looks to the future, we recognize that to ensure water supply reliability for all areas, our conservation programs must expand outside of our traditional reach to better assist low income and disadvantaged communities. Approximately 38% of our service area population reside in areas designated as disadvantaged communities by the CEJST dataset. Historically, these areas have seen lower participation rates in traditional conservation programming, primarily due to the high up-front costs associated with purchasing devices, materials, and labor.

Over the past decade, Metropolitan has provided funding and support for outdoor direct install programs administered by our member agencies. While these efforts have proven successful on the local level for some suppliers, others have faced administrative and financial challenges to incorporate such programming. The Direct Install Turf Replacement Program for Disadvantaged Communities (Project) is Metropolitan's next endeavor to enhance the implementation of turfgrass replacement programs and seeks to break down the cost barriers which have prohibited access to rebate programs for many Southern Californians. Over the next three years, the Project will commence to convert approximately 55 thousand square feet of turf region-wide, with water-efficient landscaping at residential sites (including affordable housing properties) within disadvantaged communities. Replacing thirsty lawns with water-efficient and climate-

appropriate landscaping within disadvantaged communities will reduce outdoor water demands and stress along the Lower Colorado River Basin, address growing water affordability challenges in DACs, and cultivate new relationships between these areas and various levels of local, state and federal governments.

PROJECT REQUIREMENTS AND PROCESSES:

Metropolitan's Direct Install Turf Replacement Program requirements foster the transformation of landscape norms within this region from turf dominant, high-water use landscapes to lower, more water-efficient landscapes through the use of climate appropriate plants, efficient irrigation, permeable surfaces that allow rainwater infiltration and mulch to retain soil moisture.

All Direct Install Turf Replacement landscapes will use climate-appropriate plants, efficient irrigation, and natural permeable surfaces consistent with our current program. At a minimum, all projects will ensure:

- The area to be converted must have irrigated turfgrass
- A minimum of 3 new plants installed per 100 square feet of area transformed
- No artificial turf or synthetic groundcover/mulches will be installed
- The inclusion of at least one 15-gallon tree per landscape, where appropriate
- The installation of a stormwater retention feature
- Only permeable hardscape within the transformed area
- The replacement or modification of overhead spray sprinklers
- Participants must agree to the following:
    1. allow a pre and post inspection
    2. comply with all applicable laws, policies, codes, covenants, conditions and restrictions; and
    3. allow water use data to be used to evaluate the program
    4. agree to take full maintenance responsibility of the installed landscape after a three-month maintenance assessment period for as long as they own the property

To qualify, direct-install participants must meet income qualifications, reside in a disadvantaged community, or own low-income housing. Applications will be validated against the CEJST mapping tool.

Once geographically qualified, a pre-site survey will be conducted to ensure the existing landscape contains irrigated turfgrass and to assess the site's current irrigation system. Existing irrigation systems will be inspected to ensure they can be retrofitted to drip irrigation or another high efficiency application. If a selected site does not have a pre-existing irrigation system, one will be installed. All high efficiency systems will be accompanied by the installation of a weather-based irrigation control to ensure the installed landscape is watered appropriately.

The pre-site survey will also include a design consultation between the customer and Metropolitan's contracted landscape professionals. All plant material selected for this program will be locally appropriate native plants chosen in consultation with the applicant and will incorporate trees where appropriate.

After design, turf will be removed, and planting, permeable hardscapes, and stormwater retention features will be installed by Metropolitan's landscape contractor. The scope of the installation services to be provided will be limited to the direct installation of an irrigation system, plants, ground cover material and hardscape, within the area where turf was removed. Metropolitan will not fund any improvement projects such to patios, planters, pavement, etc., that would fall outside of the general scope of the program.

Once installed, Metropolitan and its landscape contractor will provide education to the property owner/ manager/resident and troubleshoot maintenance for three months. After three months, the participant will assume full maintenance responsibility for their new landscape. The direct installation of the water efficient landscape is designed to be a permanent modification to the property.

PROJECT ADMINISTRATION:

Implementation of the Project will take place through Metropolitan's Regional Conservation Program which has several advantages. First, it maximizes the opportunity for customer participation for local agencies that have limited staff resources for program administration. Second, it increases the potential for individual customer success through direct interaction with their water agencies. It provides opportunities to educate customers about local landscape standards, irrigation technologies, and climate appropriate plants for local conditions. Most importantly, it leverages federal, regional, and local resources to build momentum and relationships with disadvantaged communities, who have lower participation rates in conservation programming, primarily due to the upfront costs associated with traditional rebate-format offerings.

As a project administrator, Metropolitan will perform the following tasks:

- Administer regional direct install turf replacement program as requested by member agencies
- Provide marketing, outreach, and customer assistance for the program
- Coordinate with member agencies to identify sites for candidacy in program
- Verify selected sites meet qualifying criteria, such as being located in DAC census tract as defined by CEJST, and owners/residents meet any other income qualifying requirements
- Coordinate initial pre-site survey with selected landscape contractor and property owner/resident. Verify site meets all qualifying criteria for program.
- Conduct periodic status meetings with member agencies to address implementation issues, share best practices, and ensure adherence to the project schedule
- Participate in pre and post inspections with participating agencies
- Receive and analyze sample data from retail water agencies, including pre and post conversion water use to determine efficacy of program
- Prepare financial and program performance reports, including final program evaluation

Implementing agencies will perform the following tasks:

- Provide marketing, outreach, and customer assistance for the regional program
- Identify candidates for program

- Review applications to ensure eligibility; conduct pre and/or post inspections to ensure compliance with program terms and conditions
- Collect site-specific data from participants to assist in the program evaluation
- Report sample data to Metropolitan for use in program evaluation
- Review data analysis and assist in program evaluation

USE OF USBR WATER AND ENERGY EFFICIENCY GRANT PROGRAM FUNDS:

USBR WEEG funds awarded to the Metropolitan Water District of Southern California will be used to expand the district's current regional turf replacement program to provide a direct installation service at no cost to qualifying residential ratepayers in low income and disadvantaged communities.

Metropolitan's current turf replacement program provides incentives for residential and commercial landscapes. Rebates amounts start at two dollars per square foot- paid out at a maximum of five thousand square feet for residential customers, and fifty thousand square feet for commercial customers, per water meter, per fiscal year. Historically, disadvantaged communities have seen lower participation rates in traditional conservation programming, primarily due to the high up-front costs associated with purchasing devices, materials, and labor. 100% of the requested funding within this application will used to cover program administration, provide landscape design services, plant and landscaping materials, professional installation and three months of landscape maintenance and troubleshooting.

With increasing outreach efforts, a call for conservation to respond to the current water supply conditions, and an impending California statewide conservation regulation that will establish residential outdoor water use targets for urban water suppliers, Metropolitan is optimistic that by expanding its turf replacement programming for disadvantaged communities that more customers will recognize available incentives and answer the call to replace their existing water thirsty lawns with more water-use efficient alternatives to effectively preserve imported supplies for Southern California and the Lower Colorado River basin.

EVALUATION CRITERIA:

- Section E.1 Evaluation Criteria provides a detailed description of each criterion and subcriterion and points associated with each. The evaluation criteria portion of your application should thoroughly address each criterion and subcriterion in the order presented to assist in the complete and accurate evaluation of your proposal.
- Copying and pasting the evaluation criteria and subcriteria in Section E.1. Technical Proposal: Evaluation Criteria into your applications is suggested to ensure that all necessary information is adequately addressed.

PERFORMANCE MEASURES

- Provide a brief summary describing the performance measure that will be used to quantify actual benefits upon completion of the project (e.g., water saved or better managed, energy generated or saved). For more information calculating performance measure, see Appendix A: Benefit Quantification and Performance Measure Guidance.
- All Water and Energy Efficiency Grants applicants are **required** to propose a "performance measure" (a method of quantifying the actual benefits of their project once it is completed). A provision will be included in all assistance agreements with Water and Energy Efficiency Grants recipients describing the performance measure and requiring the recipient to quantify the actual project benefits in their final report to Reclamation upon completion of the project. If information regarding project benefits is not available immediately upon completion of the project, the financial assistance agreement may be modified to remain open until such information is available and until a Final Report is submitted. Quantifying project benefits is an important means to determine the relative effectiveness of various water management efforts, as well as the overall effectiveness of Water and Energy Efficiency Grants.
- Note: program funding may be used to install necessary equipment to monitor progress. However, program funding may not be used to measure performance after project construction is complete (these costs are considered normal operation and maintenance costs and are the responsibility of the applicant).

Section E. Application Review Information

Technical Proposal: Evaluation Criteria

The following evaluation criteria prioritize projects that are intended to meet the objectives stated in Section 9504(a) of the Secure Water Act (P.L. 111-11) and that align with priorities of the Biden administration, including E.O. 14008: Tackling the Climate Crisis at Home and Abroad. Applications should thoroughly address each criterion and any subcriterion in the order presented below. It is suggested that applicants **copy and paste the below criteria and subcriteria** into their applications to ensure that all necessary information is adequately addressed.

The evaluation criteria portion should be addressed in the technical proposal section of the application. Applications should thoroughly address each criterion and any subcriterion in the order presented below. **Applications will be evaluated against the evaluation criteria listed below.** If the work described in your application is a phase of a larger project, only discuss the benefits that will result directly from the work discussed in the technical project description and that is reflected in the budget—not the larger project.

Applications will be evaluated against the evaluation criteria listed below. If the work described in your application is a phase of a larger project, only discuss the benefits that will result directly from the work discussed in the technical project description and that is reflected in the budget, not the larger project. *The evaluation criteria portion should be addressed in the technical proposal section of the application.*

Evaluation Criteria: Scoring Summary	Points
A. Quantifiable Water Savings	25
B. Renewable Energy	20
C. Other Project Benefits	15
D. Disadvantaged Communities and Tribal Benefits	15
E. Complementing On-Farm Irrigation Improvements	8
F. Readiness to Proceed	8
G. Collaboration	5
H. Nexus to Reclamation	4
Total	**100**

Evaluation Criterion A—Quantifiable Water Savings
Up to **25 points** may be awarded for this criterion. This criterion prioritizes projects that will conserve water and improve water use efficiency, supporting the goals of E.O. 14008. Points will be allocated based on the quantifiable water savings expected as a result of the project. Points will be allocated to give greater consideration to projects that are expected to result in more significant water savings.

All applicants should be sure to:

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.

QUANTIFIABLE WATER SAVINGS FOR PROJECT:

Metropolitan's average annual water savings estimate of 34.54 gallons per square foot of turf replaced on residential parcels is based on a range of measured and estimated savings from programs implemented within the region. This metric is used as the standard water savings number for turf replacement by Metropolitan for the current and past regional turf replacement programs. Each project is estimated to have a 30-year life based on an extended projection of the landscape to remain drought tolerant indefinitely. In 2022, Metropolitan completed a Turf Reversion Study to better understand the favorability and maintenance of drought tolerant landscapes once customers participate in the Turf Replacement. A geospatial analysis using aerial imagery of over two-thousand historical program participants revealed that less than 4% of program participants reverted to turf landscapes, with many of the reversions occurring during home sales. It is assumed that residents will replace plants with other plants at the end of their life cycles as opposed to reverting to turf.

The Project will covert approximately 30-40 residential landscapes in disadvantaged communities across Metropolitan's service area, totaling approximately 55 thousand square feet and resulting in an estimated quantifiable water savings of 5.8-acre feet per year. Over the lifetime of the transformed landscape, the cumulative savings of this project is estimated to result in a lifetime savings of 174 AF. Due to the multiplier effect seen in turf replacement projects,

additional water savings may be achieved due to the influence of the Projects efforts and will come at no cost to Metropolitan or Reclamation. Metropolitan's 2022 analysis also analyzed the behavioral impact that turf replacement rebates have within local neighborhoods. This study revealed that for every residential property that received a turf replacement incentive, an adjacent 1.3 properties transformed their landscapes to more water efficient alternatives on their own accord, and without incentives after a neighbor participated in the Turf Replacement Program.

While this proposal is limited in scale due to budgetary considerations for the upcoming fiscal year, the potential magnitude for savings as the Project evolves beyond the proposed scope is significant. It is estimated that there is approximately 300 million square feet of turf located on single family zoned parcels in areas designated as disadvantaged communities within Metropolitan's service area. A scaled-up version of the Project has the potential to effectively reduce residential demand to contribute to both the immediate conservation needed to avoid further declining levels in Lake Powell and Lake Mead reservoirs and long-term water use-efficiency to secure future water reliability within the Lower Colorado River Basin.

Describe current losses:

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

Water that is currently used to irrigate turf lawns may end up in a variety of settings. Some amounts may eventually end up seeping back into the ground, but a significant amount particularly due to faulty irrigation systems and overwatering may be lost due to evaporation or result in polluted urban runoff. The Direct Install Turf Replacement Program for Disadvantaged Communities will update all outdated irrigation systems to more efficient measures and incorporate stormwater and urban runoff retention features within the installed landscape. These requirements help to prevent additional losses and contribute to additional savings beyond the water saved by replacing turf with lower water use plants.

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.

- 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.

Turf Removal: Applicants proposing turf removal projects should address the following: How have average annual water savings estimates been determined? Please provide all relevant calculations, assumptions, and supporting data.

DOCUMENTATION OF ESTIMATED WATER SAVINGS:

Metropolitan's average annual water savings estimate of 34.54 gallons per square foot of turf replaced on residential parcels is based on a range of measured and estimated savings from programs implemented within the region. This metric is used as the standard water savings number for turf replacement by Metropolitan for the current and past regional turf replacement programs. Each project is estimated to have a 30-year life based on an extended projection of the landscape to remain drought tolerant indefinitely. A geospatial analysis using aerial imagery of over two-thousand historical program participants revealed that less than 4% of program participants reverted to turf landscapes, with many of the reversions occurring during home sales. It is assumed that residents will replace plants with other plants at the end of their life cycles as opposed to reverting to turf.

TABLE 1: *Estimated Water Savings*

USBR WEEG Funds	**Metropolitan Cost Share**	**Total Project Budget**
$250,000.00	$250,000.00	$500,000.00
Total Project Budget	**Estimated Cost Per Square Foot**	**Estimated Square Feet Replaced**
$500,000.00	$9.14/ft^{2*}	54,730 ft^2
Estimated Square Feet Replaced	**Water Savings/Square Foot/Year**	**Total Project Savings/Year**
54,720 ft^2	34.54 gallons/ft^2/year	1,890,385 gallons

Total Project Savings/Year (Gallons)	**Total Project Savings/Year (Acre-Feet)**
1,890,385 gallons	5.80

Total Project Savings/Year (Acre-Feet)	**Lifetime of Project (Years)**	**Total Project Savings/Lifetime (Acre-Feet)**
5.80 AF/Year	30	174 AF/Year
*Based on $9 avg cost per square foot over the next 3 years, with administrative charges of $225 per application processed.		

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?

TURF REPLACEMENT AND ESTIMATED CONSUMPTIVE RATE

Metropolitan estimates that a total of 55,000 square feet of turf will be replaced through the Direct Install Turf Replacement Program for Disadvantaged Communities over the course of the 3-year completion time frame for funded projects.

The estimated annual consumptive turf use rate of 62.25 gallons per square foot per year was calculated based on the Estimated Total Water Use for turfgrass:

$$\text{ETWU} = \frac{\text{ETo} * 0.62 * \text{PF} * \text{PA}}{\text{IE}}$$

$$62.25 \frac{\text{gal}}{\text{square ft}}/\text{yr} = \frac{50.2 * 0.62 * .8 * 1}{.4}$$

Where:
ETo (reference evapotranspiration) = 50.2
Conversion Factor = 0.62
Plant Factor (PF) = 0.8
Project Area (PA) = 1 square foot
Irrigation Efficiency= 0.4

The following assumptions were made to determine turf consumptive use rate per area:

- Reference ETo for Metropolitan's service area = 50.2 inches per year
    - Metropolitan has eight reference evapotranspiration zones within its service area ranging from 32.9 to 62.5 inches per year
    - The area of each zone within Metropolitan's service area was calculated using GIS
    - The reference evapotranspiration for Metropolitan's service area was calculated based on the weighted average of the zone areas
- Plant Factor: Pre-conversion - Irrigation requirements for cool season turf = 80% Eto (reference evapotranspiration)
- Irrigation Efficiency defined as "the measurement of the amount of water beneficially used divided by the amount of water applied"
    - Pre-conversion = 0.4; assume 0.5 for inefficient system design and condition plus further inefficiency of 0.1 due to improper controller settings that result in overwatering (typical observation within Metropolitan's service area)

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

The average annual turf consumptive use per unit area was not based on historical water consumption data. The methodology for determining average annual consumptive use per square foot was determined theoretically by calculating the Estimated Total Water Use (ETWU) of cool season turfgrass as detailed in the above calculation.

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

All prospective sites will be reviewed prior to applicants being accepted into the program. More specifically, the pre-inspection site audit will determine the square footage of the project site area, the current method of irrigation, and will verify that there is existing turfgrass in the areas to be replaced with program funds. The pre-site survey will allow Metropolitan and our landscape contractor to have the property representative review and sign paperwork (ie. Participation forms, hold harmless, program terms and conditions). If the applicant is determined to be an appropriate candidate for the program, they will move on to the design consultation phase with Metropolitan's contracted landscape professional. All plant material selected for this program will be locally appropriate native plants chosen in consultation with the applicant and will incorporate trees where appropriate. Applicants receive notice they have been selected for the program once the application review is complete and the site is deemed eligible.

Once projects are completed, a post-inspection site audit will also be conducted to verify that the new landscape complies with all of Metropolitan's Direct Install Turf Replacement Program requirements. The post inspection will verify the conversion area measurements, the installation of an efficient irrigation system, and the implementation of a stormwater capture feature.

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

VERIFICATION OF WATER SAVINGS (POST COMPLETION):

Metropolitan will work with its member agencies to obtain water-use information to conduct a comparison of a pre-conversion versus post-replacement water us for program applicants. Data will be collected for a sample of sites to determine general characteristics of participants in the program. Pre and post conversion water use history and site data for the sample sites will be used to estimate program water savings.

Theoretical irrigation requirement: For projects that do not have dedicated irrigation meters, pre-project water use will be determined by using reference evapotranspiration (ETo) values from the California Irrigation Management Information System (CIMIS) weather stations within Metropolitan's service area. The following formula will be used:

$$\mathrm{ETWU} = \frac{\mathrm{ETo} * 0.62 * \mathrm{PF} * \mathrm{PA}}{\mathrm{IE}}$$

Where:

ETWU = Estimated Total Water Use per year (gallons)
ETo = Reference Evapotranspiration (inches)
PF = Plant Factor

- Pre-conversion - Irrigation requirements for cool season turf = 80% ETo
- Post-conversion - Plant factor for moderate water use plants = 0.4 – 0.6; assume lower end due to focus on low water use California native plants, local program requirements, and participants' interest in saving water

PA = Project Area, square feet of irrigated turf to be removed
0.62 = Conversion Factor
IE = Irrigation Efficiency: defined as "the measurement of the amount of water beneficially used divided by the amount of water applied"

- Pre-conversion = 0.4; assume 0.5 for inefficient system design and condition plus further inefficiency of 0.1 due to improper controller settings that result in overwatering (typical observation within Metropolitan's service area)
- Post-conversion = 0.8; average based on range of requirements for local programs (including capping existing systems, elimination of overhead spray, and installation of drip systems); and participants' interest in saving water

Post-project methods for quantifying benefits of turf removal projects will include verifying the amount of turf removed at project sites. This will be accomplished through a combination of project inspections, site photos, and geographic information systems technology with aerial photos. The preliminary estimated water savings will be calculated based on area of turf removed and any known irrigation changes compared to the estimated pre-project turf irrigation application rate from the theoretical irrigation requirement. The total savings for this project will be calculated as the summation of water savings for all participating sites, determined through dedicated meter data and the theoretical irrigation requirement for the sample sites.

Data will be normalized for weather if conditions are significantly different for pre- and post-data evaluation periods. For analysis, it is best to have at least 12 months of post installation data, to allow time for establishment of the landscape. If enough time has not passed, post-conversion water savings data may not reflect accurate savings.

Evaluation Criterion B—Renewable Energy
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 Sub criterion 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 Sub criterion 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 Sub criteria 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 Sub criteria No. B.1 and B.2.

Sub criterion No. B.1: Implementing Renewable Energy Projects Related to Water Management and Delivery
Up to **20 points** may be awarded for projects that include construction or installation of 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 Sub criterion No. B.2.

AND/OR

Subcriterion No. B.2: Increasing Energy Efficiency in Water Management Up to **6 points** may be awarded for projects that address energy demands and reduce greenhouse gas emissions by retrofitting equipment to increase energy efficiency and/or through water conservation improvements that result in reduced pumping or diversions.

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

- If quantifiable energy savings is expected to result from the project, please provide sufficient details and supporting calculations. If quantifying energy savings, please state the estimated amount in kilowatt hours per year.
- How will the energy efficiency improvement combat/offset the impacts of climate change, including an expected reduction in greenhouse gas emissions.
- 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?
- 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.
- Does the calculation include any energy required to treat the water, if applicable?
- Will the project result in reduced vehicle miles driven, in turn reducing greenhouse gas emissions? Please provide supporting details and calculations.
- 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).

ESTIMATED ENERGY SAVINGS:

This proposal is estimated to reduce demand up to 5.8 AF per year of local supplies and imported water, which is pumped from the Colorado River through the Colorado River Aqueduct and from the Bay-Delta through the State Water Project. According to the California Public Utilities Commission's (CPUC) 2021 release of the Water Energy Calculator V2.0, the average energy intensity of Colorado River water conveyed by Metropolitan to its member agencies is 2,110.9 kilowatt hours per acre-foot. The energy intensity required to convey water to Southern California from the State Water Project is greater, at 3,306.2 kilowatt hours per acre foot. In addition, the range of energy intensity to distribute treated water to end use customers is 368.3 kilowatt hours per acre foot. Based on the energy intensity data in CPUC's tool, the program will result in the following energy savings due to reduced reliance on water imported from the Colorado River and State Water Project:

TABLE 2: *Estimated Energy Savings in reduced demands of imported supplies- Colorado River*

Estimated Water Savings	**Colorado River Conveyance Energy Intensity kWh/AF**	**Estimated Energy Savings Range from Conveyance kWh/Year**
5.8 AF/Year	2,110.9 kWh/AF	12,243 kWh/Year
Estimated Water Savings	**Energy Intensity of Treatment and Urban Distribution kWh/AF**	**Estimated Energy Savings from Treatment and Urban Distribution kWh/Year**
5.8 AF/Year	368.3 kWh/AF	2,136.14 kWh/Year
Total Potential Energy Savings (kWh/Year)		14,380 kWh/Year
Source: CPUC W-E Calculator 2.0 v2.0.4: https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/demand-side-management/energy-efficiency/water-energy-nexus-programs		

TABLE 3: *Estimated Energy Savings* in reduced demands of imported supplies- State Water Project

Estimated Water Savings	**State Water Project Conveyance Energy Intensity (kWh/AF)**	**Estimated Energy Savings Range from Conveyance**
5.8 AF/Year	3,306.2 kWh/AF	19,176 kWh/Year
Estimated Water Savings	**Energy Intensity of Treatment and Urban Distribution (kWh/AF)**	**Estimated Energy Savings from Treatment and Urban Distribution**
5.8 AF/Year	368.3 kWh/AF	2,136 kWh/Year
Total Potential Energy Savings (kWh/Year)		21,312 kWh/Year
Source: CPUC W-E Calculator 2.0 v2.0.4: https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/demand-side-management/energy-efficiency/water-energy-nexus-programs		

The benefit of this energy savings is further enhanced by timing. Irrigation demands within Metropolitan's service area are highest during the warmer months. Historic reference evapotranspiration during July is nearly three times higher than the low in January. The project's estimated water and energy savings will primarily occur during the warmer months when demands are high, resources are constrained, and reservoirs are lower.

PROJECT IMPACTS ON GHG EMISSIONS:

The greenhouse gas (GHG) emissions reductions associated with the implementation of the Project are estimated to result in the lifetime avoidance of 15.8 metric tons of CO_2e. These reductions were calculated based on the amount of water saved due to turf conversion and the associated reduction in energy needed for supplying that amount of water. The average emission factor per acre-foot of imported water of 0.091 MT CO_2e used in the calculation was determined by Metropolitan's historical water and emissions data from between 2005 to 2017. In addition to the quantifiable GHG emission reductions, the Project will contribute to the improvement of low income and disadvantaged communities through the multiple benefits provided by the implementation of climate friendly trees at each site. Some of the primary co-benefits of installing climate adaptable trees are directly improving community health by enhancing local air and water quality and combating climate change. The importance of these benefits is magnified for low income and disadvantaged communities, where populations are more susceptible to respiratory, cardiovascular, and chronic illness due to constant exposure to excessive levels of environmental pollution.

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

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

- Explain and provide detail of the specific issue(s) in the area that is impacting water resilience and sustainability. Consider the following:
    - Describe recent, existing, or potential drought or water scarcity conditions in the project area.
    - Is the project in an area that is experiencing, or recently experienced, drought or water scarcity?
    - Describe any projected increases to the severity or duration of drought or water scarcity in the project area. Provide support for your response (e.g., reference a recent climate informed analysis, if available).
- 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.
- Please describe how the project will directly address the concern(s) stated above.
- 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?
- 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.
    - Indicate the quantity of conserved water that will be used for the intended purpose(s).
    - Provide a description of the mechanism that will be used, if necessary, to put the conserved water to the intended use.
    - Will the project assist States and water users in complying with interstate compacts?
    - Will the project help to prevent a water-related crisis or conflict? Is there frequently tension or litigation over water in the basin?

ADDRESSING WATER AND SUSTAINABILITY CONCERNS:

This proposal is in direct response to multiple supply related issues that the Western United States and the State of California both recently and continue to face.

- On August 16th, 2021, the Department of the Interior declared the first ever shortage on the Colorado River system.
- On October 19th, 2021, Governor Gavin Newsom issued an Executive Order that expanded California's drought declaration to include Metropolitan's service area.
- On March 28th, 2022, California Governor Newsom directed the State Water Board to consider adopting an emergency regulation for urban water conservation. On May 24th, 2022, the Board adopted an emergency regulation, which went into effect on June 10th, 2022. The Emergency Regulation Requirements include no watering for commercial, industrial, and institutional decorative grass and urban water suppliers implementing all Level 2 demand reduction actions.

- On April 27th, 2022, the Metropolitan Water District of Southern California declared a Water Shortage Emergency and initiated an Emergency Conservation Program for regions of its service area that rely heavily on State Water Project sources.
- On June 14th, 2022, the Senate Committee on Energy and Natural Resources held a committee hearing discussing the extreme drought in the Western United States where Bureau of Reclamation Commissioner Camille C. Touton testified the need for 2–4-million-acre feet of water to maintain critical elevation levels in Lake Mead and Lake Powell.
- On November 16th, 2022, The Metropolitan Water District in cooperation with 31 other major water suppliers along the Colorado River Basin submitted a Memorandum of Understanding (MOU) to Reclamation affirmed their commitments to implement comprehensive and innovative water conservation programs, initiatives, policies, and actions within their communities, including:
    - Expanding water efficiency programs for indoor and outdoor water use.
    - Implementing programs and policies reducing and replacing non-functional, decorative grass by 30 percent while protecting urban landscapes and trees canopies.
    - Increasing water reuse and recycling programs where feasible.
    - Implementing water efficiency strategies and best practices, such as water loss controls, conservation-based rate structures, industrial and commercial conservation, land use coordination and other suitable conservation strategies within each community.
- On October 13th, 2023, Governor Gavin Newsom signed CA AB1572, which directs urban water suppliers to support the elimination of irrigation of nonfunctional turf with potable water.

Although the shortage emergencies declared in 2022 were mitigated by an above average hydrological year in 2023, Metropolitan remains proactive and committed to working to enhance conservation throughout its service area to ensure water reliability for its region, the State of California, and all other parties that depend on the Colorado River Basin for a safe and reliable supply.

PROJECTED INCREASES TO DROUGHT SEVERITY AND WATER SCARCITY

The Metropolitan Water District provides water to 19 million southern Californians, comprising approximately 50% of the State's entire population. The State's 2023 Water Plan Update illustrates a future where it is anticipated that California's existing flood, water, and wastewater management and treatment systems will be unable to deliver the same level of quality and service as in the past due to climate change. Per the report, increases in average and extreme temperatures and increases in the frequency and intensity of extreme precipitation events are leading to changes in runoff patterns and other cascading impacts. California's water systems were designed based on the assumption of historical winter snowpack and spring snowmelt from the Sierra Nevada. Historically, the snowmelt released runoff over an extended period, through the spring and early summer. With increased temperatures and more precipitation falling as rain instead of snow, there is higher risk of early runoff, flooding, leaving less water available when

demands peak during the summer months. In *California's Water Supply Strategy: Adapting to a Hotter, Drier Future*, the California Department of Water Resources projects that over the next 20 years as temperatures rise, California could lose 10 percent of its water supplies due to less snowfall, more evaporation, and greater consumption of water by vegetation, soil, and the atmosphere itself.

On a more imminent timeframe, Reclamation's latest 24-Month Study Projections (January 2024) related to the Operation Plan for Colorado River Reservoirs conveys a more dire message. In the most probable scenario, elevations in Lake Mead through the end of 2024 are anticipated to remain relatively constant and in "level 1 shortage condition". However, by the end of 2025, Reclamation projects that under this most probable scenario, elevation levels in Lake Mead could decline to 1,045 feet, which would trigger "level 2 shortage conditions" similar to those experienced in 2022. Should these levels continue to decline in the future, the threat of a "level 3 shortage condition" would become more likely and impact future water supplies for Southern California.

SUSTAINABILITY BENEFITS:

This proposal seeks to expand traditional turf replacement programming efforts into disadvantaged communities by improving irrigation measures and directly installing drought-tolerant plants in replacement of turfgrass. Water efficient landscapes in California should be adopted not only in response to drought, but also in times of normalcy and surplus in mitigation for the ever increasing and more frequent dry periods. By saving approximately 5.3 acre-feet of water per year, the program may serve as a model to initiate larger programmatic efforts in disadvantaged communities in Southern California and other areas dependent on the Colorado River. The Project will provide water managers with an additional resource, specifically for disadvantaged communities, to not only make more efficient use of supplies within their service areas, but to establish resilience for frontline communities that are more drastically affected by the impacts of drought and climate change.

Water that is conserved by the Project is likely to be utilized to address shortages and reestablish water levels in reservoirs and storage to meet future dry year demands. The Program will also reduce irrigation demand which can help critical habitat improvement for federally listed threatened and endangered species in the Lower Colorado River and Bay-Delta through improved water management and reduced demand during warmer months.

This Projects affirms Metropolitan's intention to abide by our commitment with the fellow urban water suppliers dependent on the Colorado River in the 2022 MOU submitted to Reclamation. Once implemented, the project may serve as a prime example of a comprehensive and innovative conservation program that emphasizes the removal of turf grass while protecting urban landscapes and tree canopies.

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

- Will the project benefit species (e.g., federally threatened or endangered, a federally recognized candidate species, a state listed species, or a species of particular recreational, or economic importance)? Please describe the relationship of the species to the water supply, and whether the species is adversely affected by a Reclamation project or is subject to a recovery plan or conservation plan under the Endangered Species Act (ESA).
- Will water remain in the system for longer periods of time? If so, provide details on current/future durations and any expected resulting benefits (e.g., maintaining water temperatures or water levels, recreational benefits, etc.).
- Will the proposed project reduce the likelihood of a species listing or otherwise improve the species status?
- Please describe any other ecosystem benefits as a direct result of the project.

ECOLOGICAL BENEFITS

Through the direct installation of water efficient landscaping and the incorporation of efficient irrigation measures, the Direct Install Turf Replacement Program for Disadvantaged communities will effectively reduce outdoor water use in low income and disadvantaged communities by 174 acre-feet over the lifetime of the Project. The turf replacement multiplier effect as well as programmatic adoption by surrounding agencies may potentially compound actual savings realized from this effort. These improvements have the potential to improve Metropolitan's flexibility in managing imported supplies from the Colorado River Basin which can help critical habitat improvement for federally listed, threatened, and endangered species in the Lower Colorado River. As a result, habitats for fish species including the Bonytail, Razorback Sucker, Humpback Chub, and Colorado Pikeminnow may see improvement. Threatened and endangered bird species such as the Yuma Clapper Rail and the Southern Willow Flycatcher, which utilize the marsh habitat and cottonwood willow thickets along the river, are also negatively impacted by water withdrawals. Improved water management during warmer months will help to mitigate negative impacts on these species.

The conservation efforts resulting from the Project are consistent with the efforts of the Lower Colorado River Multispecies Conservation Plan and would likely improve the status of threatened and endangered species covered under the plan. In addition, it would reduce the likelihood of additional listings within Metropolitan's service area by reducing polluted runoff from landscapes.

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

- Describe how the project addresses climate change and increases resiliency. For example, does the project help communities adapt to bolster drought resilience?
- Does the project seek to improve ecological resiliency to climate change?
- Does the proposed project seek to reduce or mitigate climate pollutions such as air or water pollution?
- Does the proposed project include green or sustainable infrastructure to improve community climate resilience?
- Does the proposed project contribute to climate change resiliency in other ways not described above?

COMBATING CLIMATE CHANGE:

Due to climate change, the threat of drought, water scarcity and water quality issues have intensified and become increasingly severe throughout Southern California. These conditions can affect our entire region, impacting commercial, domestic, and agricultural uses of water, leading to potential economic impacts. This Project aims to assist disadvantaged communities and bolster their drought resilience by providing urban water suppliers with a new tool that eliminates the current financial barriers that prevent many low-income residents from participating in traditional water use efficiency programming. More importantly this Project helps save water by transforming landscapes in the most under resourced urban areas to more climate appropriate alternatives and empowers historically under resourced communities to participate in larger efforts to mitigate supply scarcity issues at the regional level, state level, and nationwide.

By replacing turfgrass and outdated irrigation systems with low water use plants and efficient irrigation measures, this project will save approximately 5.8-acre feet of water and between 14,380 kWh to 21,312 kWh of electricity per year. There may be additional water savings and sustainability benefits achieved through the multiplier effect of turf replacement programming. A 2022 study conducted by Metropolitan shows that for every 100 turf replacement rebate participants, an additional 132 adjacent parcels converted their turf without receiving a rebate, potentially resulting in additional water savings without investment from municipalities or Reclamation. This will help to improve Metropolitan's flexibility in managing imported supplies and the energy required to transport said water, providing relief to supply issues on the Colorado River System, the State Water Project and associated energy grids that have been exacerbated by the effects of climate change.

Furthermore, the Project aims to reduce GHG emissions by a factor of 15.8 metric tons of CO_2e and improve local air and water quality by incorporating climate appropriate trees at every project site. Installing at least one tree at each appropriate site will assist in sequestering carbon, removing particulate matter from the air and providing additional shade for the property once established. By improving shade coverage on the property, the project has the indirect benefit of potentially reducing electricity used for cooling, resulting in additional potential reductions in

climate pollutants. Similarly, trees will provide water quality improvements by intercepting stormwater, reducing nutrient loads and preventing soil from infiltrating sanitary systems and local waterways. The inclusion of native tree and plant species will also provide the ecological benefit of habitat development for native and endemic wildlife.

E.1.4 Evaluation Criterion D—Disadvantaged Communities, Insular Areas, and Tribal Benefits

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

Please address only those priorities that are applicable to your project. It is not necessary to address priorities that are not applicable to your project. A project will not necessarily receive more points simply because multiple priorities are addressed. Points will be allocated based on the degree to which the project supports one or more of the priorities listed, and whether the connection to the priority(ies) is well supported in the application.

E.1.4.1 Subcriterion D.1. Disadvantaged Communities

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

- Please use the White House Council on Environmental Quality's interactive Climate and Economic Justice Screening Tool (CEJST), available online at Explore the map Climate & Economic Justice Screening Tool (screeningtool.geoplatform.gov/ en/#17.59/36.63278/-105.181329) to identify any disadvantaged communities that will benefit from your project. The CEJST developed by the White House Council on Environmental Quality is a geospatial mapping tool that utilizes publicly available, nationally consistent data sets related to climate change, the environment, health, and economic opportunity to identify disadvantaged communities. In addition to identifying specific census tracts that are disadvantaged, the CEJST includes the lands of Federally recognized Tribes as disadvantaged communities. In addition, regardless of whether a Federally recognized Tribe has land, all Federally recognized Tribal entities are considered disadvantaged communities for the purposes of the Justice40 Initiative.
- If applicable, describe how the proposed project will serve or benefit a disadvantaged community, identified using the tool. For example, will the project improve public health and safety by addressing water quality, add new water supplies, provide economic growth opportunities, or provide other benefits in a disadvantaged community?

BENEFITS TO DISADVANTAGED AND UNDERSERVED COMMUNITIES:

Disadvantaged communities, that have historically been under resourced and face persisting or historic socioeconomic injustices, are often the first to feel the impacts brought along by climate change and the last to rebound from its destruction. The objective of Direct Install Turf Replacement Program for Disadvantaged Communities is to build drought resiliency and community relationships within these areas. According to the Climate and Economic Justice Screening Tool (CEJST) approximately 38% of Metropolitan's entire service area reside in DAC designated census tracts. 100% of the funding requested within this proposal will go towards improving drought resiliency and reducing air and water pollution within DAC.

The Project will effectively reduce outdoor water use by replacing water thirsty turf, and inefficient irrigation systems with more climate appropriate plant species and the latest weather-based technology. The implementation of additional sustainability measures, such as stormwater retention features built into the landscape and the installation of trees, will provide natural physical mechanisms to mitigate air and water quality issues, which are prevalent throughout our region.

The incorporation of trees in urban settings has also been known to correlate with positive benefits to the physical and mental health of the community. Several studies have shown that neighborhoods with higher tree densities have on average less incidences of cardiovascular disease and lower prescription rates of anti-depressants. Per the American Forests organization, these benefits are unfortunately, not realized in disadvantaged communities as they often have between 33 to 41% less green space and canopy coverage than affluent neighborhoods. Trees incorporated as a part of the Project will provide multiple benefits of improving physical and mental health among residents of Project area while mitigating climate change.

Last but not least, the Project will aim to foster meaningful relationships between historically underserved and pollution burdened areas, their community-based advocacy groups, urban water suppliers and Reclamation. These relationships will be essential in mitigating climate change and it continues to threaten our water supply and other natural resources.

The main correlating priority of the Project as it pertains to E.O. 14008: *Tackling the Climate Crisis at Home and Abroad* is defined in Sec 219, SECURING ENVIRONMENTAL JUSTICE AND SPURRING ECONOMIC OPPORTUNITY to "develop programs, policies, and activities to address the disproportionately high and adverse human health, environmental, climate-related and other cumulative impacts on disadvantaged communities, as well as the accompanying economic challenges of such impacts." The Project also supports President Biden's Justice 40 initiative to ensure "Federal investments flow to disadvantaged communities that are marginalized, underserved, and overburdened by pollution."

E.1.4.2 Subcriterion D.2. Tribal Benefits

The Department is committed to strengthening tribal sovereignty and the fulfillment of Federal Tribal trust responsibilities. The President's memorandum, Tribal Consultation and Strengthening Nation-to-Nation Relationships, asserts the importance of honoring the Federal Government's commitments to Tribal nations. Address the following, if applicable:

- Does the proposed project directly serve and/or benefit a Tribe? Will the project increase water supply sustainability for an Indian Tribe? Will the project provide renewable energy for an Indian Tribe?
- Does the proposed project support Tribal led conservation and restoration priorities, and/or incorporate or benefit indigenous traditional knowledge and practices?
- Does the proposed project directly support tribal resilience to climate change and drought impacts or provide other Tribal benefits such as improved public health and safety through water quality improvements, new water supplies, increased renewable energy, or economic growth opportunities? Does the proposed project support Reclamation's Tribal trust responsibilities or a Reclamation activity with a Tribe?

BENEFITS TO TRIBAL NATIONS:

The Project will increase Metropolitan's ability to flexibly manage imported supplies, and thereby support the amount of water available through water markets and transfers in the Colorado River, State Water Project, and Central Valley Project systems. These supplies may be available to Indian tribes through water markets.

OTHER PROJECT BENEFITS:

This region faces several ongoing challenges that significantly impact water supply:

- Population and economic growth are key demand uncertainties.
- A robust economy could cause increased demands in the future.
- Climate change and changes in weather patterns could significantly affect water supply reliability.

  Increasingly stringent regulations and new constituents of concern of groundwater overdraft
- The current drought on the Colorado River is more severe than any drought measured in the 20th century.

All water saved by the Project will be used to offset Metropolitan's overall demand. Thus, it will benefit all of Metropolitan's multiple sectors and users including residential, municipal, industrial, commercial, and recreational sites. This reduction will also help alleviate current stress on the Lower Colorado River Basin and will help the region achieve the water savings necessary to avoid future water supply shortages.

The project also encourages widespread transformation of contemporary landscapes norms which has become an increasing initiative throughout the State of California. There may be additional water savings and sustainability benefits achieved through the multiplier effect of turf replacement programming. A 2022 study conducted by Metropolitan shows that for every 100 turf replacement rebate participants, an additional 132 adjacent parcels converted their turf without receiving a rebate, potentially resulting in additional water savings without investment from the municipalities. This data may also indicate a behavioral shift and growing preference for water-use efficient landscaping. As one of the largest and influential agencies in the western United States, other water agencies throughout the region look to Metropolitan as a resource, an example, and as an encouraging leader in outdoor water use efficiency.

E.1.5 Evaluation Criterion E—Complementing On-Farm Irrigation Improvements

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

PROJECT BENEFITS TO ON-FARM IRRIGATION IMPROVEMENTS

Not applicable.

E.1.6 Evaluation Criterion F—Readiness to Proceed (8 points)

Up to **8 points** may be awarded for this criterion. Points may be awarded based upon the extent to which the proposed project is capable of commencing upon entering into a financial assistance agreement. Note: If your project is selected, responses provided in this section will be used to develop the scope of work that will be included in the financial assistance agreement.

Applications that include a detailed project implementation plan (e.g., estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates) will receive the most points under this criterion.
Identify and provide a summary description of the major tasks necessary to complete the project. **Note:**

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

- Describe any permits that will be required, along with the process for obtaining such permits.
- Identify and describe any engineering or design work performed specifically in support of the proposed project.
- Describe any new policies or administrative actions required to implement the project.
- Describe the current design status of the project. If additional design work is required prior to construction, describe the planned process and timeline for completing the design work.
- 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?

READINESS TO PROCEED:

Deployment of grant funds is anticipated to occur within 6 months of award notification, which falls in line with Reclamation's anticipation that grant funds will be awarded through a financial agreement that is in place by December 31, 2024. All projected expenditures, including Metropolitan's required cost-share for this funding assistance request have been included in the FY24-25 and FY25-26 conservation budget and are awaiting final appropriation.

Momentum from Metropolitan's regional turf replacement program is already established, and several of the program administrative elements are already in place and will translate directly to the administration of the Direct Install Turf Replacement Program for Disadvantaged Communities.

For years, Metropolitan and its member agencies have utilized the SoCal WaterSmart web platform to intake and track regional program applications. The contract with Metropolitan's vendor, the Electric and Gas Industries Association (EGIA), who operates the public facing and backend portal for all regional turf replacement program efforts for Metropolitan and its member agencies, may be easily modified to include all application intake and tracking for the Project.

The development of procurement documents to obtain qualifications for professional landscape contractor services has commenced and the solicitation process will begin once Metropolitan's FY24-25 and FY25-26 conservation budget is finalized. This is anticipated to occur by April 2024. Selection of a contractor is anticipated by Fall 2024.

All administrative design for the program has been completed. Legal adoption of program terms and conditions have been prepared and are pending submission to Metropolitan's counsel for final review, which will be completed prior to a formal award.

No additional design or engineering work is required to support the launch of the Project. A customized landscape design for each participant will be created, but this will occur after program launch and once prospective sites have been determined to meet all qualifying program criteria and representatives have agreed to all program terms.

The Direct Install Program for Disadvantaged Communities is not an infrastructure project and will occur solely on private residential properties. No delays are expected to result from environmental compliance, nor will any permits be required for program implementation. Some local jurisdictions may require permits for individual projects depending on local codes and the extent of landscape renovation. Participants will be responsible for obtaining necessary permits prior to initiating landscape projects.

Table 4: *Program Timeline*

Task		Month Due	Deliverables
1	Finalize Program Terms and Conditions	1	Copy of Final Program Terms and Conditions
2	Initiate RFQ and enter into agreement with landscape contractor	1	Copy of Procurement Documents, Executed Agreement with Contractor
3	Adapt SoCalWaterSmart Platform for application intake and project monitoring	1	Sample Program Application
4	Issue addendum to member agency agreements to incorporate Direct Install Turf Replacement Program and grant requirements	1	Executed addendum
5	Provide outreach to member agencies to encourage participation, explain program requirements and administration	1	Summary of outreach efforts
6	Administer program, monitor performance, collect sample data	Ongoing	Program tracking database
7	Prepare semiannual financial and program performance reports	6, 12, 18, 24, 30	SF 425 and interim performance report

Table 4: *Program Timeline Continued*

Task		Month Due	Deliverables
8	Work with participating agencies on program assessment and evaluation	12, 24, 36	Data collection and analysis
9	Prepare final financial and program evaluation report	36	SF 425 and final program performance report

Evaluation Criterion G—Collaboration

Up to **5 points** may be awarded for projects that promote and encourage collaboration among parties in a way that helps increase the sustainability of the water supply.

Please describe how the project promotes and encourages collaboration. Consider the following:

- Is there widespread support for the project? Please provide specific details regarding any support and/or partners involved in the project. What is the extent of their involvement in the process?
- What is the significance of the collaboration/support?
- Will this project increase the possibility/likelihood of future water conservation improvements by other water users?
- Please attach any relevant supporting documents (e.g., letters of support or memorandum of understanding).

COLLABORATION:

Metropolitan's proposed Direct Install Turf Replacement Program for Disadvantaged Communities is the culmination of decades of outdoor water use efficiency programming in Southern California that was inspired by more recent localized efforts by Metropolitan's member agencies, the Long Beach Utilities Department and City of Pasadena. Through their efforts, they have proven the efficacy of direct install turf replacement programs to achieve water savings and build relationships in low income and disadvantaged communities. Metropolitan's goal with the Project is to replicate these efforts on a regional scale to further encourage water use efficiency in DAC throughout our region.

Metropolitan's twenty-six member agencies support the provision of funding for regional programming. All agencies currently participate in Metropolitan's regional turf replacement program or manage their own. If awarded, all Metropolitan member agencies will have a chance to also participate in the Direct Install Turf Replacement Program and provide additional benefits to the consumers they serve.

Metropolitan's Climate Adaptation Master Plan for Water (CAMP4W)identifies the need for an additional 300,000 AF of increased conservation savings and supply production by 2032 to ensure reliable water supplies for the region. Achieving this level of savings will require transforming markets as well as social and landscape norms, particularly within low income and disadvantaged communities.

Landscape water use is identified as a primary opportunity for savings with turf replacement a key strategy for the region. This collaboration among agencies on landscape conservation is essential to long-term, sustained reductions in outdoor water use. Transforming landscape norms requires a region-wide effort with common messaging and broad availability of programs. Regional collaboration with water agencies and Reclamation will provide the foundation for this effort.

More specifically, the Project will encourage collaboration to evaluate program benefits that move beyond water saving measures to holistic approaches that seek to change norms. The Project will increase the number of examples of water efficient landscapes within disadvantaged communities throughout Metropolitan's service area and encourage relationships with historically underserved communities and their representative grassroots organizations.

On a national scale, this Project will solidify Metropolitan's MOU to foster collaboration with other major water suppliers dependent on the Colorado River and demonstrate our commitment to implementing comprehensive and innovative water conservation programs, initiatives, policies, and actions within our communities.

Additionally, this proposal would encourage collaboration with watershed, water quality, and stormwater organizations as turf replacement provides additional benefits that support their interests.

Evaluation Criterion H— Nexus to Reclamation
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 the following:

- Does the applicant have a water service, repayment, or O&M contract with Reclamation?
- If the applicant is not a Reclamation contractor, does the applicant receive Reclamation water through a Reclamation contractor or by any other contractual means?
- Will the proposed work benefit a Reclamation project area or activity?
- Is the applicant a Tribe?

NEXUS TO RECLAMATION:

Metropolitan holds Priority 4 water rights from the Colorado River. The recently conducted Protection Volume Analysis completed by Reclamation shows that it would take approximately 600,000 acre-feet to 4.2 million acre-feet per year, to maintain critical elevations in Lake Powell and Lake Mead. This project will increase Metropolitan's flexibility in managing or imported supplies and will support Reclamation's projects and activities managing the water resources of the Colorado River Basin. The project will also support Reclamation's water use efficiency efforts specifically within the Lower Colorado Region Basin.

The Project will implement a new tool for urban water managers in our efforts to achieve the ultimate goal of maintaining a healthy and functioning river system. Through the 2022 MOU by and among Colorado River Basin Municipal and Public Water Providers, Metropolitan has pledged to develop innovative conservation programs and reduce outdoor water use. This Project embodies the spirit of this collaboration between the Bureau of Reclamation, Metropolitan, and other municipal and public water providers, and contributes to the conservation efforts required to ensure future water supply reliability.

D.2.2.3 Budget Narrative

In the budget detail and narrative section, applicants should describe and justify requested budget items and costs. Applicants should provide details to support the SF-424A, "Object Class" categories or the SF-424C, "Cost Classification" categories. The budget narrative must clearly identify all items of cost (total estimated project cost), including those contributed as non-Federal cost share by the applicant (required and voluntary), third-party in-kind contributions, and those covered using the funding requested from Reclamation, and any requested pre-award costs.
The total project cost is the sum of all allowable items of costs, including all required cost sharing and voluntary committed cost sharing, including third-party contributions necessary to complete the project. Applicants must include detailed descriptions of all cost justifications (see Reclamation's suggested format in Attachment B for more detail). Costs, including the valuation of third-party in-kind contributions, must comply with the applicable cost principles contained in 2 CFR, §200.

Note: The Budget Narrative Attachment Form in Grants.gov is to be used to upload the budget proposal.

BUDGET NARRATIVE

This proposal seeks $250,000 from the Bureau of Reclamation's (Reclamation) WaterSMART: Water and Energy Efficiency Grants (WEEG) program to support the direct installation of water efficient landscapes in low income and disadvantaged communities (DAC). The total costs associated with the Project are anticipated to be $500,000.00. The Metropolitan Water District of Southern California will provide a 50% cost share and provide matching funds in the amount of $250,000.00 from our general conservation budget. Currently, there are no anticipated third-party contributions.

Table 5: Project Cost Share

Source	Amount
Costs to be reimbursed with the requested federal funding	$250,000.00
Costs to be paid by the applicant	$250,000.00
Value of third-party contributions	$0
Total Project Costs	$500,000.00

The associated costs for the Project are entirely comprised of charges for contractual administrative work by Metropolitan's regional program administrator, EGIA, and the construction of water efficient landscapes by a professional landscape contractor, to be selected through a formal procurement process. Metropolitan's contractual relationship with the Electric and Gas Industries Association was established through a formal procurement process. The associated device costs and administrative fees used to determine the proposed Project budget are in line with the current costs and fee schedules Metropolitan has established with EGIA.

EGIA currently provides application intake, tracking and customer service administration of Metropolitan's regional turf replacement rebate at a rate of $225 per residential application. It is anticipated that this per site fee will carry over for the administration of the Direct Install Turf Replacement Program for Disadvantaged Communities.

The procured landscape contractor will provide installation services at an estimated rate of $9.00ft^2$. This rate is inclusive of all work to be completed under the contract and will consist of landscape design, turf removal, plant, irrigation and landscaping materials, installation of the water-efficient landscape and a three months of maintenance visits.

A breakdown of the estimated budget, categorized by task is displayed in the table below:

Table 6: *Project Budget*

Task	Budget Category	Unit Cost ($)	Units	Estimated Budget
Program Administration Electric and Gas Industries Association	Administrative/Contractual	$225/site application	33	$7,425.00
Landscape Design	Implementation/Construction	Approximately $9.00/ft^2*	54,730	$492,575.00
Turf Replacement				
Plants, Irrigation and Landscaping Materials				
Landscape Installation				
3 Month Maintenance Period				
			Total Direct Costs	$500,000.00
			Total Indirect Costs	$0.00
			Total Project Costs	$500,000.00
*Based upon average estimated costs for professional landscape direct install services, with 3-year adjustment for inflation.				

There are no anticipated Project costs for personnel, fringe benefits, travel, equipment, or supplies. Because the projects will occur on private residences, there is no anticipated costs for environmental compliance or permit costs. Implementation will occur on land already developed with localized impacts to the site only.

D.2.2.4 Environmental and Cultural Resources Compliance

Please answer the questions from Section H.1 Environmental and Cultural Resource Considerations.

- To allow Reclamation to assess the probable environmental and cultural resources impacts and costs associated with each application, all applicants should consider the following list of questions focusing on the NEPA, ESA, and NHPA requirements. Please answer the following questions to the best of your knowledge. If any question is not applicable to the project, please explain why. The application should include the answers to:
- Will the proposed project impact the surrounding environment (e.g., soil [dust], air, water [quality and quantity], animal habitat)? Please briefly describe all earth-disturbing work and any work that will affect the air, water, or animal habitat in the project area. Please also explain the impacts of such work on the surrounding environment and any steps that could be taken to minimize the impacts.
- 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?
- 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.
- When was the water delivery system constructed?
- 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.
- 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.
- Are there any known archeological sites in the proposed project area?
- Will the proposed project have a disproportionate and adverse effect on any communities with environmental justice concerns?
- Will the proposed project limit access to, and ceremonial use of, Indian sacred sites or result in other impacts on 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?

ENVIRONMENTAL AND CULTURAL RESOURCES COMPLIANCE

The Direct Install Turf Replacement Program for Disadvantaged Communities will be implemented on developed residential land parcels in the service area. Replacing turf under the program would not be anticipated to require substantial earthwork that could affect the air, water, or animal habitat in the project area or the surrounding environment. These already-developed parcels do not provide habitat for proposed or listed species as Federally threatened or endangered. Similarly, such developed land parcels would not be designated as critical habitats or within wetlands or surface waters. The Project would not alter existing water supply infrastructure sites and would not modify irrigation system features such as headgates, canals, or flumes. While the service area includes buildings, structures, or features listed or eligible for listing on the National Register of Historic Places (NRHP), the Project would affect only the lawns on such properties. The Project explicitly targets communities that are designated by the

CEJST as disadvantaged, which would be anticipated to have a positive effect on communities with environmental justice concerns. While Metropolitan's service area includes archeological sites, the Project would be carried out on developed residential land parcels that would not be anticipated to disturb archeological sites. The Project would be carried out on developed residential land parcels in the service area that, unless located on tribal lands, would not be anticipated to contain Indian sacred sites or tribal lands otherwise. The Project would also be available to tribes in the service area. The Project would replace existing areas, many of which now contain weeds and non-native invasive species, with native plant species.

D.2.2.5 Required Permits or Approvals

You should state in the application whether any permits or approvals are necessary and explain the plan for obtaining such permits or approvals.

Note: Improvements to Federal facilities that are implemented through any project awarded funding through this NOFO must comply with additional requirements. Reclamation may also require additional reviews and approvals prior to award to ensure that any necessary easements, land use authorizations, or special permits can be approved consistent with the requirements of 43 CFR Section 429 and that the development will not impact or impair project operations or efficiency.

REQUIRED PERMITS OR APPROVALS

The Direct Install Program for Disadvantaged Communities is not an infrastructure project and will occur solely on private residential properties. No major permitting processes are anticipated. Some local jurisdictions may require permits for individual projects depending on local codes and the extent of landscape renovation. Participants will be responsible for obtaining necessary permits prior to initiating landscape projects.

D.2.2.7. Overlap or Duplication of Effort Statement

Applicants must provide a statement that addresses if there is any overlap between the proposed project and any other active or anticipated proposals or projects in terms of activities, costs, or commitment of key personnel. If any overlap exists, applicants must provide a description of the overlap in their application for review.

Applicants must also state if the proposal submitted for consideration under this program does or does not in any way duplicate any proposal or project that has been or will be submitted for funding consideration to any other potential funding source—whether it be Federal or non-Federal. If such a circumstance exists, applicants must detail when the other duplicative proposal(s) were submitted, to whom (Agency name and Financial Assistance program), and when funding decisions are expected to be announced. If at any time a proposal is awarded funds that would be duplicative of the funding requested from Reclamation, applicants must notify the NOFO point of contact or the Program Coordinator immediately.

OVERLAP OR DUPLICATION OF EFFORT STATEMENT:

In 2022, the Metropolitan Water District of Southern California was awarded $2 million dollars through the WaterSMART: Water and Energy Efficiency Grants Program FY2022 via funding provided by the Bipartisan Infrastructure Law (BIL). Metropolitan's FY 2022 award will use BIL funding specifically for turf replacement in public agency landscapes through Metropolitan's regional turf replacement program.

In 2023, the Metropolitan Water District of Southern California was awarded $5 million dollars through the WaterSMART: Water and Energy Efficiency Grants Program FY2023 via funding provided by the Bipartisan Infrastructure Law (BIL). Metropolitan's FY 2023 award will use BIL funding specifically for turf replacement in residential and commercial landscapes through Metropolitan's regional turf replacement program.

In August 2023, Metropolitan submitted a proposal to Reclamation's Lower Colorado River Basin Conservation and Efficiency Program for Bucket 2 consideration. This proposal included a component requesting federal funds for a direct install turf replacement program in disadvantaged communities.

This application seeks $250,000 dollars for direct install turf replacement efforts in Metropolitan's turf replacement program but specifically for disadvantaged communities in the residential sector. Participants in the Direct Install Turf Replacement Program for Disadvantaged communities will not be eligible for Metropolitan's Regional Turf Replacement rebate program. Therefore, there will be no overlap in the projects completed between Metropolitan's FY 2022, FY 2023, or in our FY 2024 proposal. There has not been any indication of an agreement for our proposal for Lower Colorado River Basin Conservation and Efficiency Program Bucket 2 consideration. However, if awarded Metropolitan will ensure to communicate this information with Reclamation and invoke procedures within this Project to ensure any funding does not overlap.

There will, however, be overlap in commitment of key personnel between the FY22 and FY23 projects. All key personnel: Krista Guerrero, Resource Specialist, Elise Goldman, Resource Specialist, James Morgutia, Associate Resource Specialist and Gary Tilkian, Water Efficiency Team Manager are anticipated to retain the same roles in the administration and reporting for this proposed project and have the capacity to do so.

In March 2022, Metropolitan was awarded $2 million dollars in grant funding for residential and commercial turf replacement through the California Department of Water Resources Urban and Multibenefit Drought Relief Funding program. Based upon current program activity, this funding is expected to be fully allocated to turf replacement projects in the current fiscal year. Funds awarded from the Urban and Multibenefit Drought Relief Funding Program are not expected to overlap with any potential funding awarded through the WaterSMART: Water and Energy Efficiency Grants Program FY2023.

In April 2023, Metropolitan was awarded $30 million dollars in grant funding for commercial and public agency turf replacement through the California Department of Water Resources Urban and Multibenefit Drought Relief Funding program. Funds awarded from the Urban and Multibenefit Drought Relief Funding Program are not expected to overlap with any potential funding awarded through the WaterSMART: Water and Energy Efficiency Grants Program in FY2022, FY2023 or this proposal for FY2024.

D.2.2.7 Conflict of Interest Disclosure Statement
Per 2 CFR §1402.112, "Financial Assistance Interior Regulation" applicants should state in the application if any actual or potential conflict of interest exists at the time of submission. Submission of a conflict-of-interest disclosure or certification statement is mandatory prior to issue of an award.

D.2.2.7.1 Applicability
This section intends to ensure that non-Federal entities and their employees take appropriate steps to avoid conflicts of interest in their responsibilities under or with respect to Federal financial assistance agreements. In the procurement of supplies, equipment, construction, and services by recipients and by sub recipients, the conflict-of-interest provisions in 2 CFR§200.318 apply.

D.2.2.7.2 Notification
Non-Federal entities, including applicants for financial assistance awards, must disclose in writing any conflict of interest to the DOI awarding agency or pass-through entity in accordance with 2 CFR §200.112. Recipients must establish internal controls that include, at a minimum, procedures to identify, disclose, and mitigate or eliminate identified conflicts of interest. The successful applicant is responsible for notifying the Financial Assistance Officer in writing of any conflicts of interest that may arise during the life of the award, including those that have been reported by sub recipients.

D.2.2.7.3 Restrictions on Lobbying
Non-Federal entities are strictly prohibited from using funds under a grant or cooperative agreement for lobbying activities and must provide the required certifications and disclosures pursuant to 43 CFR §18 and 31 USC §1352.

D.2.2.7.4 Review Procedures
The Financial Assistance Officer will examine each conflict-of-interest disclosure on the basis of its particular facts and the nature of the proposed grant or cooperative agreement and will determine whether a significant potential conflict exists and, if it does, develop an appropriate means for resolving it. Enforcement. Failure to resolve conflicts of interest in a manner that satisfies the government may be cause for termination of the award. Failure to make required disclosures may result in any of the remedies described in 2 CFR §200.339, Remedies for noncompliance, including suspension or debarment (see also 2 CFR §180).

CONFLICT OF INTEREST DISCLOSURE STATEMENT:

No actual or potential conflicts of interest for this project exist at the time of submission.

D.2.2.8 Uniform Audit Reporting Statement

All U.S. states, local governments, federally recognized Indian Tribal governments, and nonprofit organizations expending $750,000 USD or more in Federal award funds in the applicant's fiscal year must submit a Single Audit report for that year through the Federal Audit Clearinghouse's Internet Data Entry System. U.S. state, local government, federally recognized Indian Tribal governments, and non-profit applicants must state if your organization was or was not required to submit a Single Audit report for the most recently closed fiscal year. If your organization was required to submit a Single Audit report for the most recently closed fiscal year, provide the Employer Identification Number (EIN) associated with that report and state if it is available through the Federal Audit Clearinghouse website.

UNIFORM AUDIT REPORTING STATEMENT:

In fiscal year 2023, Metropolitan was exempt from submitting a Single Audit Report because its expenditure of Federal funds did not reach the $750,000 threshold.

D.2.2.9 Certification Regarding Lobbying

Applicants requesting more than $100,000 in Federal funding must certify to the statements in 43 CFR §18, Appendix A. If this application requests more than $100,000 in Federal funds, the authorized official's signature on the appropriate SF-424 form also represents the applicant's certification of the statements in 43 CFR § 18, Appendix A.

D.2.2.10 SF-LLL: Disclosure of Lobbying Activities (if applicable)

If applicable, a fully completed and signed SF-LLL: Disclosure of Lobbying Activities form is required if the applicant has made or agreed to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. This form cannot be submitted by a contractor or other entity on behalf of an applicant.

DISCLOSURE OF LOBBYING ACTIVITES

Metropolitan advocates for programmatic funding for Reclamation's WaterSmart: Water Efficiency and Energy Grant program. Funds under this grant or cooperative agreement will not be used for this or any other lobbying activities. A Disclosure of Lobbying Activities Form SF-LLL will be included in this application package.

D.2.2.11 Letters of Support

You should include any letters from interested stakeholders supporting the proposed project. To ensure your proposal is accurately reviewed, please attach all letters of support as an appendix. Letters of support received after the application deadline for this NOFO will not be considered in evaluating your proposed project. These letters do not count within the 125 page maximum.

LETTERS OF SUPPORT:

Please see the letters of support included as attachments at the end of this application.

D.2.2.13 Official Resolution

If selected, the applicant must provide prior to award an official resolution adopted by your organization's board of directors or governing body, or, for state government entities, an official authorized to commit the applicant to the financial and legal obligations associated with receipt of a financial assistance award under this NOFO, verifying:

- The identity of the official with legal authority to enter into an agreement
- The board of directors, governing body, or appropriate official who has reviewed and supports the application submitted
- That your organization will work with Reclamation to meet established deadlines for entering into a grant or cooperative agreement

An official resolution meeting the requirements set forth above is mandatory before an award of funding will be made.

ANTICIPATION OF OFFICIAL RESOLUTION:

An official resolution of support for this proposal from the Metropolitan Water District of Southern California's Board of Directors is prior to the award of funding and will be submitted immediately upon adoption.

17140 S. Avalon Blvd.
Carson, CA 90746

310-217-2411
www.westbasin.org

February 20, 2024

U.S. Department of the Interior
Bureau of Reclamation – Financial Assistance Operations
Attn: Josh German
Mail Code 86-63000, P.O. Box 25007
Denver, CO 80225-0007

RE: Letter of Support for Metropolitan Water District's FY 2024 WaterSMART Water and Energy Efficiency Grant (WEEG) application

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Dear Mr. German,

On behalf of the West Basin Municipal Water District (West Basin), I want to express my support for Metropolitan Water District's (Metropolitan) FY 2024 USBR WEEG grant application to provide a Direct Install Turf Replacement Program for Disadvantaged Communities.

West Basin serves a socio-economically diverse population, with approximately 35% to 40% of our customers residing in census tracts designated as disadvantaged communities. For years, traditional water use-efficiency rebate programs have had lower participation rates from residents in disadvantaged communities due in part to the upfront investments required for participation. To secure a reliable supply of water for our region and to mitigate the impacts of reoccurring drought that impact the Colorado River Basin, Metropolitan's service area must continue to transition to more water efficient landscapes in all sectors.

The proposed project represents the next step in Metropolitan's regional water efficiency program evolution as the federal funds will provide urban water suppliers with an expanded tool to bring the benefits of climate resilient landscapes to low-income and disadvantaged communities at no cost to participants. By supporting this project, communities that have previously been unable to fully utilize available turf replacement programs will be empowered to eliminate non-functional turf and further promote the water conservation ethic required to mitigate severe supply challenges faced along the Lower Colorado River Basin.

West Basin appreciates your consideration of this project. If you have any questions regarding our support, please contact West Basin's Manager of Water Policy & Resources, Matt Veeh, at 310-660-6273 or via email to MatthewV@westbasin.org.

Sincerely,

General Manager

THE CITY OF
SAN FERNANDO

February 20, 2024

U.S Department of the Interior
Bureau of Reclamation
Financial Assistance Operations
Attn: Josh German
Mail Code: 86-63000
P.O. Box 25007
Denver, CO 80225-0007

SUBJECT: Letter of Support for Metropolitan Water District's WaterSMART Water and Energy Efficiency Grant Application for FY 2024

Dear Mr. German,

On behalf of the City of San Fernando, I want to express our support for Metropolitan Water District's (Metropolitan) $250,000 grant application to provide a Direct Install Turf Replacement Program for Disadvantaged Communities.

San Fernando provides service to a socio-economically diverse population, with a significant portion of our customers residing in census tracts designated as disadvantaged communities. For years, traditional water use-efficiency rebate programs have had lower participation from those residing in disadvantaged communities due, at least in part, to the upfront investments required for participation. To secure a reliable supply of water for our region and to mitigate the impacts of reoccurring drought that impact the Colorado River Basin, Metropolitan's service area must continue to transition to more water efficient landscapes and expand traditional conservation programming models.

This project represents the next step in our regional program evolution as these funds will provide urban water suppliers with an expanded tool that will bring the multiple benefits of turf replacement to low income and disadvantaged communities at no cost to participants. By supporting this project, communities that have long been underserved will be empowered to take charge in eliminating non-functional turf and further promote the water conservation and use efficiency required to mitigate the worst supply challenges ever faced along the Lower Colorado River Basin.

ADMINISTRATION DEPARTMENT

117 MACNEIL STREET
SAN FERNANDO
CALIFORNIA
91340

OFFICE OF THE
CITY MANAGER
(818) 898-1202

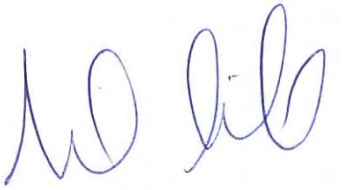
PERSONNEL DIVISION
(818) 898-1220

WWW.SFCITY.ORG

This effort supports the City's adopted 2023 Legislative Platform, particularly section 4.15 ***– Strengthen Climate Resilience and Environmental Justice****; The City supports Legislation that would maximize efficient water use and reduce water waste in California while reflecting local conditions, demand hardening, and historic conservation efforts.*

The City of San Fernando encourages your support for this project. If you have any questions, please contact Nick Kimball, City Manager at NKimball@sfcity.org.

Sincerely,



Nick Kimball
City Manager

February 21, 2024

U.S Department of the Interior
Bureau of Reclamation
Financial Assistance Operations
Attn: Josh German
Mail Code: 86-63000
P.O. Box 25007
Denver, CO 80225-0007

Subject: Support of Metropolitan Water District's WaterSMART Water and Energy Efficiency Grant Application for FY 2024

Dear Mr. German:

On behalf of Eastern Municipal Water District (EMWD), I want to express our support for Metropolitan Water District's (Metropolitan) $250,000 grant application to provide a Direct Install Turf Replacement Program for Disadvantaged Communities.

EMWD provides service to a socio-economically diverse population, with a significant portion of our customers residing in census tracts designated as disadvantaged communities. For years, traditional water use-efficiency rebate programs have had lower participation from those residing in disadvantaged communities due, at least in part, to the upfront investments required for participation. To secure a reliable supply of water for our region and to mitigate the impacts of reoccurring drought that impact the Colorado River Basin, Metropolitan's service area must continue to transition to more water efficient landscapes and expand traditional conservation programming models.

This project represents the next step in our regional program evolution as these funds will provide urban water suppliers with an expanded tool that will bring the multiple benefits of turf replacement to low

2270 Trumble Road • P.O. Box 8300 • Perris, CA 92572-8300
T 951.928.3777 • F 951.928.6177 www.emwd.org

income and disadvantaged communities at no cost to participants. By supporting this project, communities that have long been underserved will be empowered to take charge in eliminating non-functional turf and further promote the water conservation and use efficiency required to mitigate the worst supply challenges ever faced along the Lower Colorado River Basin.

EMWD encourages your support for this project. If you have any questions, please contact Jenna Shimmin, Director of Water Use Efficiency at (951) 928-3777 extension 4307 or by email at shimminj@emwd.org.

Sincerely,

Joe Mouawad, P.E.
General Manager

Central Basin
Municipal Water District

U.S Department of the Interior
Bureau of Reclamation
Financial Assistance Operations
Attn: Josh German
Mail Code: 86-63000
P.O. Box 25007
Denver, CO 80225-0007

Support of Metropolitan Water District's WaterSMART Water and Energy Efficiency Grant Application for FY 2024

Dear Mr. German,

On behalf of Central Basin Municipal Water District, I want to express our support for Metropolitan Water District's (Metropolitan) $250,000 grant application to provide a Direct Install Turf Replacement Program for Disadvantaged Communities.

Central Basin Municipal Water District provides service to a socio-economically diverse population, with a significant portion of our customers residing in census tracts designated as disadvantaged communities. For years, traditional water use-efficiency rebate programs have had lower participation from those residing in disadvantaged communities due, at least in part, to the upfront investments required for participation. To secure a reliable supply of water for our region and to mitigate the impacts of reoccurring drought that impact the Colorado River Basin, Metropolitan's service area must continue to transition to more water efficient landscapes and expand traditional conservation programming models.

This project represents the next step in our regional program evolution as these funds will provide urban water suppliers with an expanded tool that will bring the multiple benefits of turf replacement to low income and disadvantaged communities at no cost to participants. By supporting this project, communities that have long been underserved will be empowered to take charge in eliminating non-functional turf and further promote the water conservation and use efficiency required to mitigate the worst supply challenges ever faced along the Lower Colorado River Basin.

Central Basin Municipal Water District encourages your support for this project. If you have any questions, please contact Management Analyst Madeline Chen at madelinec@centralbasin.org.

Thank you,

Madeline Chen