Residential Direct Install 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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TABLE OF CONTENTS

		PAGE
EXECUTIVE SUMMARY	……	**3**
PROJECT LOCATION	……	**5**
TECHNICAL PROJECT DESCRIPTION	……	**8**
EVALUATION CRITERIA	……	**12**
PROJECT BUDGET	……	**39**
ENVIRONMENTAL AND CULTURAL RESOURCES COMPLAINCE	……	**42**
REQUIRED PERMITS OR APPROVALS	……	**43**
OVERLAP OR DUPLICATION OF EFFORTS STATEMENT	……	**44**
CONFLICT OF INTEREST DISCLOSURE	……	**45**
UNIFORM AUDIT REPORTING STATEMENT	……	**46**
DISCLOSURE OF LOBBYING ACTIVITIES	……	**46**
LETTERS OF SUPPORT	……	**46**
OFFICIAL RESOLUTION	……	**47**

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 Residential Direct Install Program for Disadvantaged Communities (Project) seeks to remove the financial barriers imposed by traditional rebate programs by replacing outdated fixtures and appliances with more efficient models at no cost to qualifying participants across Metropolitan's service area. The overall goal of the Project is to expand existing device replacements efforts, by transitioning from the existing rebate model to direct installation. The Project will improve indoor and outdoor water use efficiency and to help establish resiliency in the frontline communities that are more affected by the impacts of drought and climate change.

This proposal seeks $1,750,000 from the Bureau of Reclamation's (Reclamation) WaterSMART: Water and Energy Efficiency Grants (WEEG) program to support the direct installation of water efficient measures and flow monitoring devices in low income and disadvantaged communities (DAC). The Residential Direct Install Program for Disadvantaged Communities is a collaborative effort among Metropolitan, 24 of its member agencies and the Southern California Gas Company, that collectively provide water and energy service, respectively, to 15 million Southern Californians. Funding will supplement a portion of Metropolitan's Residential Direct Install Program for Disadvantaged Communities for fiscal periods 2024/2025, 2025/2026, and 2026/2027. Metropolitan will provide a minimum matching contribution of $1,750,000 dollars for the Project over three years for a total project cost of $3,500,000. The Project will provide funding to replace measures in approximately 3,200 dwelling units for income-qualified homeowners and affordable housing properties in DAC as defined by the Climate and Economic Justice Screening Tool (CEJST). By replacing outdated clothes washers, toilets, shower heads, faucet aerators, irrigation controllers, and installing flow monitoring devices, the Project will

save an estimated 244-acre feet of water per year. Over the lifetime of the device upgrades, the cumulative savings of this project is estimated to result in a lifetime savings of 2,651 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, its member agencies, and SoCal Gas.

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 device upgrades 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 Residential Direct Install 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 portions of the district's service area that are also serviced by the Southern California Gas Company (SoCal Gas). The areas that are jointly serviced by the Metropolitan and SCGC includes portions of five Southern California counties: Los Angeles, Orange, Riverside, San Bernardino, and Ventura, spanning over 4,000 square miles and providing service to approximately 15 million Southern Californians. Approximately 41 percent of Metropolitan's service area population reside in part of a disadvantaged community (as shown in Figure 3). 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 portions of Metropolitan and SoCal Gas overlapping service area that are classified as disadvantaged communities (Project Area) are shown in Figure 3.

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

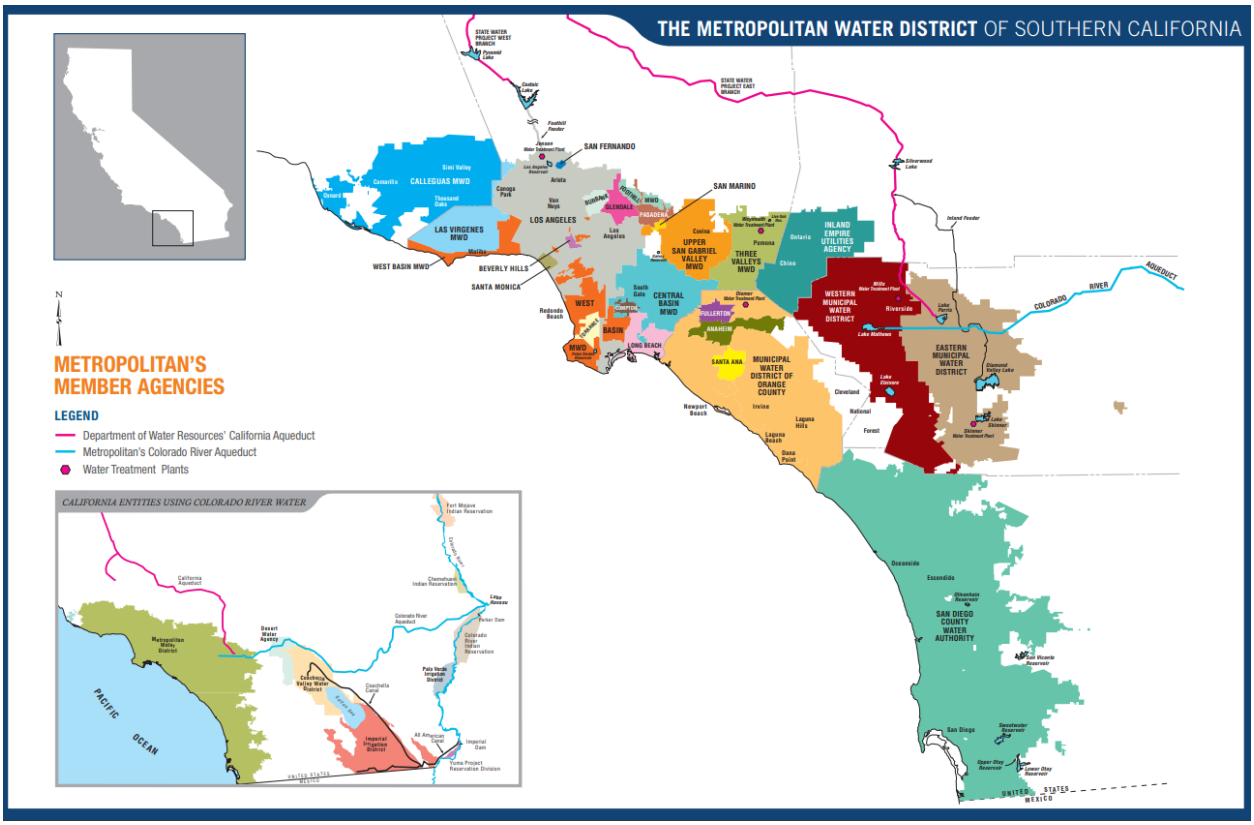
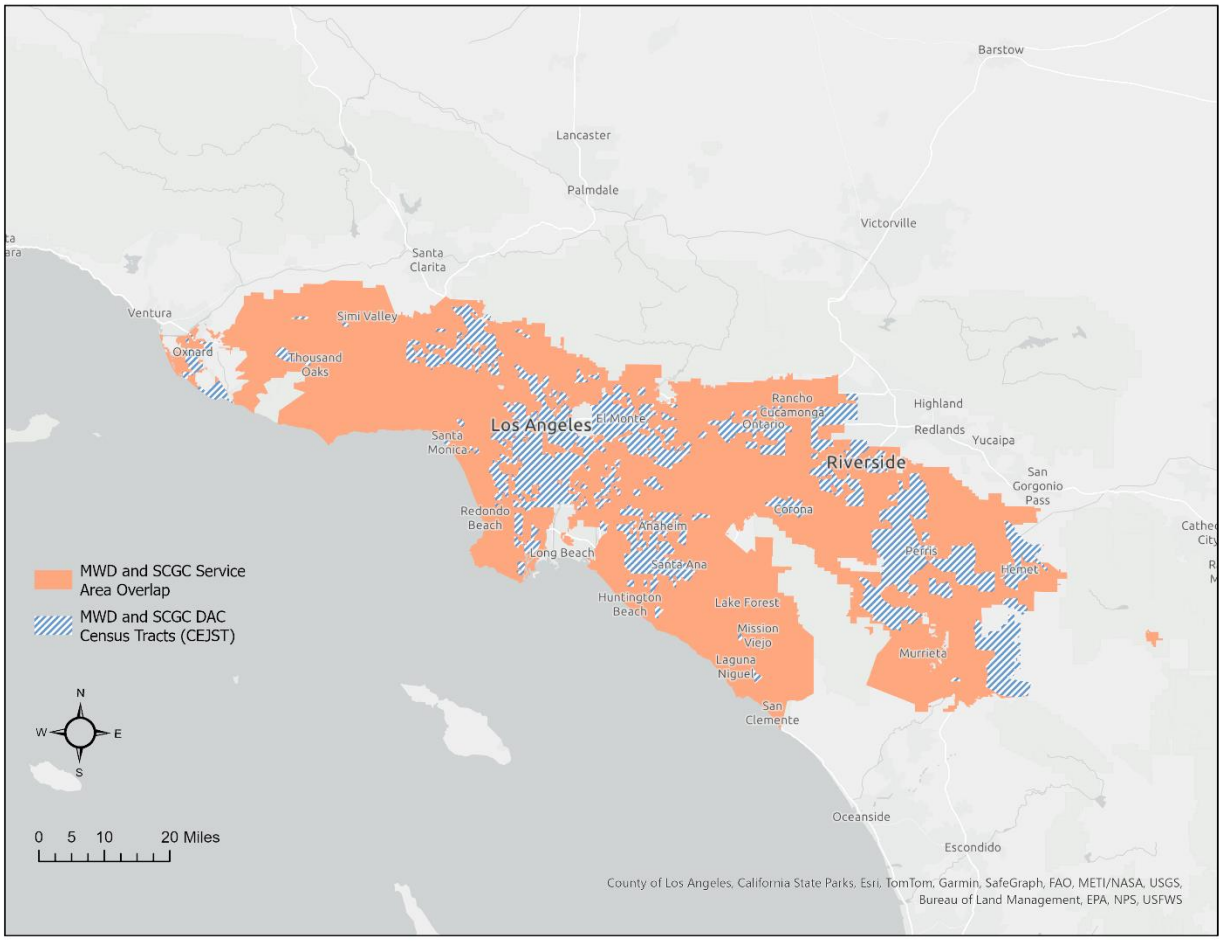


FIGURE 2: *A list of Metropolitan's member agencies and the communities that they serve.*

FIGURE 3: *Areas within Metropolitan's and SoCal Gas overlapping service area designated as disadvantaged communities by CEJST. Approximately 41% of this area's population resides in census tracts 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:

Since 2014, Metropolitan and Southern California Gas Company have partnered to provide water and energy efficiency programming to customers of both agencies. The two parties continue to develop collaborative programming measures through a Memorandum of Understanding that is in effect through December 31, 2024. 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. Disadvantaged communities are hardest hit during droughts as discretional use of water to cut back on is limited. Approximately 41 percent of our joint service area population resides in areas designated as disadvantaged communities by the Climate and Economic Justice Screening Tool (CEJST). 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.

The Residential Direct Install Program (Project) seeks to remove the cost-barriers which have prohibited access to rebate programs for many Southern Californians and provide no-cost direct installation of energy-efficiency and water-saving measures to low-income homes. The Project will expand an existing program for urban water managers throughout the Southern California region. Through the Project, eligible customers will receive no-cost, energy-efficiency upgrades from SoCal Gas through the Energy Savings Assistance Program (ESAP) and Metropolitan will provide additional funding to install high-efficiency toilets, showerheads, faucet aerators and weather-based irrigation controllers through the additional Residential Direct Install Program component. The Project will also seek to install flow monitoring devices as a leak detection measure for residential properties.

Metropolitan is seeking $1,750,000 from the WaterSMART Water and Energy Efficiency Grant program for the Project. Over the next three years, funding for the Project will be utilized to replace outdated indoor and outdoor device measures in approximately 3,200 residential dwelling units within disadvantaged communities region wide. Replacement of these devices with new water efficient models and the installation of flow monitoring devices will help to reduce indoor and outdoor water demands to alleviate some of the supply uncertainty along the Lower Colorado River Basin. The Project will also look to cultivate new relationships between historically underserved areas and the various levels of local, state, and federal governments.

PROJECT REQUIREMENTS AND PROCESSES:

Implementation of the Project will take place through Metropolitan's partnership in the Southern California Gas Company's ESAP.

ESAP eligibility is based on applicant income, or determined through equivalent criteria, if the applicant or another person within the household receives benefits through public assistance programs.

At the time of this proposal, the maximum household income limits to qualify for ESAP and the Project are listed in the table below:

TABLE 1*: Qualifying Income Criteria for SoCal Gas's ESAP Program and Metropolitan's Residential Direct Install Program*

ESAP and Residential Direct Install Program Qualifying Household Income Limits (Effective June 1, 2023 to May 31, 2024)	
Household Size	Total yearly household income not more than
1	$36,450
2	$49,300
3	$62,150
4	$75,000
5	$87,850
6	$100,700
7	$113,550
8	$126,400
Each additional person	plus $12,850

The Public Assistance Programs that may be used to determine eligibility are:

- Medi-Cal/Medicaid
- Medi-Cal for Families A & B
- Women, Infants & Children (WIC)
- CalWORKs (TANF) or Tribal TANF
- Head Start Income Eligible - Tribal Only
- Bureau of Indian Affairs General Assistance
- CalFresh (Food Stamps)
- National School Lunch Program (NSLP)
- Low Income Home Energy Assistance Program (LIHEAP)
- Supplemental Security Income (SSI)

Representatives from SoCal Gas validate all income verification information. Once the income verification process is complete, applicants are then referred to an authorized contractor to discuss enrollment. The enrollment process consists of a pre-screening appointment conducted by phone, video, or in-person where the authorized contractor will assess the current appliances in the home. If the appliances within the home are determined to be eligible for an upgrade, the contractor will schedule a date and time to perform the in-home service installations.

To qualify for the additional services of the Residential Direct Install Program (to be funded by the Project), existing device measures must meet the following criteria:

TABLE 2*: Device Measures and Criteria for Replacement within the Residential Direct Install Program*

Device Measure	Criteria for Replacement
Premium and High-efficiency Toilets	Existing toilet must have flow of 1.6 gallons per flush or higher
Smart Irrigation Water Controller	Irrigation system must be operational. Existing timer must not have weather-based scheduling capabilities
Smart Hose Bib Controller	Household has no existing timer or automated sprinkler system. Replacement shall be installed at hose bib designated for lawn watering.
High-Efficiency Showerhead	Existing unit(s) must have flow greater than 1.5 gallons per minute.
High-Efficiency Faucet Aerator	Existing unit(s) must have flow greater than 1.5 gallons per minute.

Metropolitan will also add an additional term to the Residential Direct Install Program to ensure that any residential dwelling units that receive direct installation services funded by the Project are also in areas designated as disadvantaged communities as defined by CEJST.

PROJECT ADMINISTRATION:

SoCal Gas will lead the implementation and management of the Program, including contracting with third-party vendors and conducting overall program administration. Collaboration with SoCal Gas 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 and energy providers. 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.

SoCal Gas is responsible for managing day-to-day program decisions and coordinating with Metropolitan and other stakeholders as necessary. SoCal Gas directs their vendor to perform

outreach to find eligible, interested customers. Once they have identified an interested customer, the survey appointment is scheduled. SoCal Gas also conducts post-installation inspections to ensure the proper fixtures were installed at the correct locations.

Metropolitan will leverage SoCal Gas's existing ESAP program to provide additional funding for the installation of high-efficiency toilets, showerheads, faucet aerators, weather-based irrigation controllers, hose bib controllers and flow monitoring devices. Through its regional rebate program contractor, the Electric Gas Industries Association (EGIA), Metropolitan will coordinate payment and retain all records for devices installed through the Project. This relationship allows Metropolitan to participate in direct install activities with less administrative burden.

Metropolitan will function as an administrator for the grant, and will perform the following tasks:

- Conduct status meetings with SoCal Gas
- Participate in a representative sample of surveys and post installation inspections
- 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
- Verify existing appliances meet qualifying criteria for replacement.
- Receive and analyze data from SoCal Gas
- Prepare financial and program performance reports, including final 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 ongoing Residential Direct Install Program. The requested funds will allow Metropolitan and SoCal Gas to reach an additional 3,200 dwelling units beyond current programming targets. 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 percent of the requested funding within this application will used to cover program administration, devices, and installation costs for high-efficiency toilets, high-efficiency showerheads, high-efficiency faucet aerators, weather-based irrigation controllers, hose bib controllers, and flow monitoring devices.

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 expanding its Residential Direct Install Program will help to build resilience in disadvantaged communities. The installation of state-of-the-art water efficiency equipment directly to disadvantaged communities will have an immediate impact of mitigating the drought in those areas and providing for decades of water efficiency to combat future droughts and rate increases.

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

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:

The Residential Direct Install Program for Disadvantaged Communities will retrofit existing inefficient toilets, showerheads, faucet aerators, irrigation controllers and install flow monitoring devices to help residents monitor their home water use and detect leaks. The installation of state-of-the-art water efficiency equipment directly to over 3,200 residential dwelling units in disadvantaged communities will result in approximately 232 acre-feet of water saved per year and an estimated 2,651 acre-feet over the lifetime of the devices. By incorporating flow monitoring devices into the program, residential users will have real time access to their water use. Studies conducted by the City of Goodyear, Arizona and Flume Industries show that by empowering customers with their water use information, they are more likely to make mindful decisions, fix leaks and modify their behaviors to reduce their overall water use. Datapoints from this 2022 study reveal a 14.6 percent net reduction in per capita use per day. Similar pilot studies conducted by the Contra Costa Water District in Concord, California and the San Antonio Water System in San Antonio, Texas, have yielded similar results, with savings ranging from 17 percent and 18 percent, respectively.

These estimated quantifiable savings to be achieved by the Project will effectively assist populations within disadvantaged communities and reduce residential demands 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 used indoors generally ends up the sanitary sewer system where it is treated for reuse or for environmental uses. 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 Residential Direct Install Program for Disadvantaged Communities will reduce indoor water use by retrofitting outdated indoor measures and will reduce outdoor use by replacing outdated irrigation control systems with more efficient models. Incorporating flow monitoring devices will further assist homeowners in detecting leaks with real time water consumption information. These actions may help to prevent additional losses. Any water conserved through the upgraded device measures or mitigating leaks reduces overall residential demands, decreasing Metropolitan's need to import water from the State Water Project and Colorado River.

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.

DOCUMENTATION OF ESTIMATED WATER SAVINGS:

The Residential Direct Install Program is estimated to save 244 acre-feet of water per year. This quantification is based on a range of measured and estimated savings metrics from direct install and rebate programs implemented within the region, that have installed the same device types available through the Project. These metrics are used as standard water savings numbers by Metropolitan for the current regional device rebate program. Each measure/device type has estimated lifetime based on the expected amount of the time the device will perform as intended.

The following tables identify the device measures to be installed within the Project, the associated water savings, and the expected device lifetimes.

TABLE 3*: Device measures, associated savings, lifetimes, and units to be installed as part of the Project*

Device Measure	Water Saved	Device Lifetime	Estimated Number of Units to be Installed
Premium High-Efficiency Toilet (PHET)	0.0105 AF/YR	20	4,515
Weather Based Irrigation Controller (WBIC)	0.0414 AF/YR	10	734
Hose-Bib Controller (HBC)	0.0179 AF/YR	10	10
High-Efficiency Showerhead (HES)	0.00421 AF/YR	5	6,468
High-Efficiency Aerator (HEA)	0.002 AF/YR	5	12,936
Flow Monitoring Device (FMD)	0.05 AF/YR	10	2,264

The assumptions in Table 3 were applied to the following formula to obtain the estimated water savings for the Project:

Annual Water Savings (AWS) of Residential Direct Install Program

$$AWS = PHET\left(0.105\frac{AF}{YR}\right) + WBIC\left(0.414\frac{AF}{YR}\right) + HBC\left(0.0179\frac{AF}{YR}\right) + HES\left(0.00421\frac{AF}{YR}\right) + HEA\,(0.002\frac{AF}{YR}) + FMD\,(0.05\frac{AF}{YR})$$

Where:

PHET= count of premium high-efficiency toilets installed throughout project duration
WBIC= count of weather-based irrigation controllers installed throughout project duration
HBC= count of hose bib controllers installed throughout project duration
HES= count of high-efficiency showerheads installed throughout project duration
HEA = count of high-efficiency aerators installed throughout project duration
FMD= count of flow monitoring devices installed throughout project duration

$$AWS = 244.27\frac{AF}{YR}$$
$$= 4{,}515\left(0.105\frac{AF}{YR}\right) + 734\left(0.414\frac{AF}{YR}\right) + 10\left(0.0179\frac{AF}{YR}\right)$$
$$+ 6{,}468\left(0.00421\frac{AF}{YR}\right) + 12{,}936\,(0.002\frac{AF}{YR}) + 2{,}264\,(0.05\frac{AF}{YR})$$

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

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

Annual average water savings have been determined by theoretical calculation of estimated total water use for turf grass, 62.25 gallons per square foot per year.

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

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

Where:
ETo (reference evapotranspiration) = 50.2
Conversion Factor = 0.62
Plant Factor (PF) = 0.8
Project Area (PA) = 1 square foot of irrigated landscape
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)
- Post-conversion: 0.5, assume improvement of efficiency by factor of due to the improvement of controller settings that are automatically adjusted for weather.

The average square footage for single family residential properties that participate in Metropolitan's other conservation programs is 1,500 square feet. Properties within DACs in Metropolitan's service area tend to have smaller irrigated landscape areas. For the purposes of this calculation, we have assumed that an 1,100 square foot landscape and would require approximately 68,500 gallons of water per year. This average sized landscape equipped with a weather-based irrigation controller would use 55,000 gallons of water per year resulting in an estimated 13,500 gallons saved per year. This translates to the 0.414-acre-foot savings per year for WBICs in *Table 3*.

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

The average annual landscape 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.

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

All existing irrigation controllers that do not have automatic weather scheduling capabilities built in will be eligible for an upgrade to a new smart controller that utilizes local weather data to adjust daily

watering schedules. Customers that do not have an existing controller and irrigate using a manual system attached to a hose bib will be eligible to receive a smart hose bib controller.

The following irrigation controller options are available to replace outdated, less efficient measures as a part of the Residential Direct Install Program:

TABLE 4*: Irrigation Controllers to be installed as part of Project*

Device Measure	Make/Model	Estimated Number of Units	Criteria for Replacement
Weather Based Irrigation Controller	Orbit B-Hyve Rachio	734	Irrigation system must be operational. Existing timer must not have weather-based scheduling capabilities
Hose Bib Controller	Orbit B-Hyve Hose Bib Controller	10	Household has no existing timer or automated sprinkler system. Replacement shall be installed at hose bib designated for lawn watering

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

All weather-based controllers will be installed through a direct-install program at no cost to the resident.

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

A pre-site survey will be conducted by SoCal Gas authorized contractor prior to installation. This survey will be conducted by phone, video, or in-person where the authorized contractor will assess the current irrigation system. If the irrigation system is found to be in working order and the existing controller does not have weather-based scheduling capabilities it will be considered eligible for an upgrade and the contractor will schedule a date and time to perform the in-home service installations. Post installation audits will also be conducted by Metropolitan and SoCal Gas at a sample of sites to verify the devices were installed at the correct locations.

f. 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: Post project water use may also be determined by using reference evapotranspiration (ETo) values from the California Irrigation Management Information System (CIMIS) weather stations within Metropolitan's service area and applying the following formula:

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

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 – Since no turf replacement has occurred, assumed the same 80% pre conversion factor.

PA = Project Area, square feet of irrigated landscape
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 = 0.5; assume improvement of efficiency by factor of due to the improvement of controller settings that are automatically adjusted for weather.

The average square footage for single family residential properties that participate in Metropolitan's other conservation programs is 1,500 square feet. Properties within DACs in Metropolitan's service area tend to have smaller irrigated landscape areas. For the purposes of this calculation, we have assumed that an 1,100 square foot landscape and would require just over 68,500 gallons of water per year. This average sized landscape equipped with a weather-based irrigation controller would use 55,000 gallons of water per year resulting in an estimated 13,500 gallons saved per year.

Post-project methods for quantifying benefits of irrigation projects will include verifying the amount of irrigated landscape area. 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 any known irrigation changes compared to the estimated pre-project turf irrigation efficiency 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 sample 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.

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

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

Average annual water savings have been determined through a theoretical calculation that sums the product of the estimated number of devices to be installed within the program by their average annual water savings in acre-feet. Over 30 years of water efficiency programming and pilot studies have informed annual water savings metrics for devices from programs implemented within the region.

To quantify the estimated average annual water savings for the Project, Metropolitan will applied the following water savings values shown in *"Table 3"* to the following calculation:

TABLE 3 (repeated for reference)

Device Measure	Water Saved	Device Lifetime	Estimated Number of Units to be Installed
Premium High-Efficiency Toilet (PHET)	0.0105 AF/YR	20	4,515
Weather Based Irrigation Controller (WBIC)	0.0414 AF/YR	10	734
Hose-Bib Controller (HBC)	0.0179 AF/YR	10	10
High-Efficiency Showerhead (HES)	0.00421 AF/YR	5	6,468
High-Efficiency Aerator (HEA)	0.002 AF/YR	5	12,936
Flow Monitoring Device (FMD)	0.05 AF/YR	10	2,264

Annual Water Savings (AWS) of Residential Direct Install Program

$$AWS = PHET\left(0.105\frac{AF}{YR}\right) + WBIC\left(0.414\frac{AF}{YR}\right) + HBC\left(0.0179\frac{AF}{YR}\right) + HES\left(0.00421\frac{AF}{YR}\right) + HEA\,(0.002\frac{AF}{YR}) + FMD\,(0.05\frac{AF}{YR})$$

Where:

PHET= count of premium high-efficiency toilets installed throughout project duration
WBIC= count of weather-based irrigation controllers installed throughout project duration
HBC= count of hose bib controllers installed throughout project duration
HES= count of high-efficiency showerheads installed throughout project duration HEA= count of high-efficiency aerators installed throughout project duration
FMD= count of flow monitoring devices installed throughout project duration

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

The following devices will replace outdated, inefficient measures through the Residential Direct Install Program:

TABLE 5: *High-Efficiency Indoor Appliances and Fixtures to be installed within the Project*

Device Measure	Make/Model	Estimated Number of Units to be Installed
Premium High-Efficiency Toilets	Humble Bee 1.0 gpf Seasons 0.8 gpf, 1.0 gpf Stealth 0.8 gpf Western Pottery 1.0 gpf	4,515
Weather Based Irrigation Controller	Orbit B-Hyve Rachio	734
Hose-Bib Controller	Orbit B-Hyve	10
High-Efficiency Showerhead	Niagara	6,468
High-Efficiency Aerator	Neoperl Niagara	12,936
Flow Monitoring Device	Flume	2,264

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

The Metropolitan Water District has had no problem finding 1.6 gallon per flush toilets and non-weather-based irrigation controllers, shower heads and aerators to replace. To date, the Residential Direct Install Program has retrofitted outdated devices in over 6,000 homes and demand for the program exceeds the current program budget. Demand for these types of devices also remains high within Metropolitan's regional rebate program. In 2023, Metropolitan received approximately 1,000 applications for high efficiency toilets and over 4,000 applications for weather-based irrigation controllers. These metrics represent activity primarily in non-DAC

areas. It is estimated that the prevalence of inefficient devices remains higher in DAC areas due to lower participation rates in Metropolitan's regional program.

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

All devices will be installed through a direct-install program at no cost to the resident.

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

Actual water savings for the indoor device components will be determined using a theoretical calculation and based on the number of each device type installed. Over 30 years of water efficiency programming and pilot studies have informed annual water savings metrics for devices from programs implemented within the region.

To quantify the actual water savings for the Project, Metropolitan will apply the following water savings values to the following calculation:

TABLE 3 (redacted and repeated for reference)

Device Measure	Water Saved	Device Lifetime
Premium High-Efficiency Toilet (PHET)	0.0105 AF/YR	20
Weather Based Irrigation Controller (WBIC)	0.0414 AF/YR	10
Hose-Bib Controller (HBC)	0.0179 AF/YR	10
High-Efficiency Showerhead (HEHES)	0.00421 AF/YR	5
High-Efficiency Aerator (HEHEA)	0.002 AF/YR	5
Flow Monitoring Device (FMD)	0.05 AF/YR	10

Annual Water Savings (AWS) of Residential Direct Install Program

$$AWS = PHET\left(0.105\frac{AF}{YR}\right) + WBIC\left(0.414\frac{AF}{YR}\right) + HBC\left(0.0179\frac{AF}{YR}\right) + HES\left(0.00421\frac{AF}{YR}\right) + HEA\,(0.002\frac{AF}{YR}) + FMD\,(0.05\frac{AF}{YR})$$

Where:

PHET= count of premium high-efficiency toilets installed throughout project duration
WBIC= count of weather-based irrigation controllers installed throughout project duration
HBC= count of hose bib controllers installed throughout project duration
HES= count of high-efficiency showerheads installed throughout project duration HEA= count of high-efficiency showerheads installed throughout project duration
FMD= count of flow monitoring devices installed throughout project duration

This calculation can also be expanded to quantify the anticipated lifetime savings over the standard lifetime of each device:

Lifetime Water Savings (LWS) of Residential Direct Install Program

$$LWS\ AF = PHET\left(0.105\ \frac{AF}{YR}\right)(20\ YR) + WBIC\left(0.414\frac{AF}{YR}\right)(10\ YR) + HBC\left(0.0179\frac{AF}{YR}\right)(10\ YR) + HES\left(0.00421\frac{AF}{YR}\right)(5\ YR) + HEA\ (0.002\frac{AF}{YR})(5\ YR) + FMD\ (0.05\frac{AF}{YR})(10\ YR)$$

Evaluation Criterion B—Renewable Energy (20 points)
Up to **20 points** may be awarded based on the extent to which the project increases the use of renewable energy or otherwise results in increased energy efficiency and reduced greenhouse gas emissions.

For projects that include constructing or installing renewable energy components, please respond to 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 244 acre-feet 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. All water used indoors that ends up in the sanitary sewer system is estimated to use 725.6 kilowatt hours per acre foot of energy for collection and in secondary treatment processes. Based on the energy intensity data in CPUC's tool, the program has the potential to save between 760,000 and 1,050,000 kWh depending on the blend of water imported from the Colorado River and State Water Project:

TABLE 6: *Estimated Energy Savings in reduced demands of imported supplies- Colorado River*

Estimated Water Savings	**Colorado River Conveyance Energy Intensity (kWh/AF)**	**Estimated Energy Savings from Conveyance (kWh/Year)**
244 AF/Year	2,110.9	515,059
Estimated Water Savings	**Energy Intensity of Treatment and Urban Distribution (kWh/AF)**	**Estimated Energy Savings from Treatment and Urban Distribution (kWh/Year)**
244 AF/Year	368.3	89,865
Estimated Water Savings	**Energy Intensity of Wastewater Collection and Secondary Treatment (kWh/AF)**	**Estimated Energy Savings from Wastewater Collection and Secondary Treatment (kWh/Year)**
214* AF/Year	725.6	155,278
Total Potential Energy Savings (kWh/Year)		~760,000 kWh/Year

*214 AF/Year includes indoor savings only. Outdoor saving is not expected to contribute to energy saved for wastewater treatment and collection as most water used outdoors infiltrates the landscape or is lost to evaporation.

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 7: *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 (kWh/Year)**
244 AF/Year	3,306.2 kWh/AF	806,713 kWh/Year
Estimated Water Savings	**Energy Intensity of Treatment and Urban Distribution (kWh/AF)**	**Estimated Energy Savings from Treatment and Urban Distribution (kWh/AF)**
244 AF/Year	368.3 kWh/AF	89,865 kWh/Year
Estimated Water Savings	**Energy Intensity of Wastewater Collection and Secondary Treatment (kWh/AF)**	**Estimated Energy Savings from Wastewater Collection and Secondary Treatment (kWh/Year)**
214* AF/Year	725.6 kWh/AF	155,278 kWh/Year
Total Potential Energy Savings (kWh/Year)		~1,050,000 kWh/Year

*214 AF/Year includes indoor savings only. Outdoor saving is not expected to contribute to energy saved for wastewater treatment and collection as most water used outdoors infiltrates the landscape or is lost to evaporation.

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 the reduction of the amount of water required to be heated for indoor use and seasonal timing of irrigation. Improving the water efficiency of indoor appliances and fixtures may reduce the amount of gas or electricity required to heat said water for use throughout the home. 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 annual avoidance of 22.2 metric tons of CO_2e and 241 metric tons of CO2e over the lifetime of the devices. These reductions were calculated based on

the amount of water saved due to device replacements 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. The Project may also generate additional savings by reducing the amount of water that is needed to be heated for indoor use. 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 16, 2021, the Department of the Interior declared the first ever shortage on the Colorado River system.
- On October 19, 2021, Governor Gavin Newsom issued an Executive Order that expanded California's drought declaration to include Metropolitan's service area.
- On March 28, 2022, California Governor Newsom directed the State Water Board to consider adopting an emergency regulation for urban water conservation. On May 24, 2022, the Board adopted an emergency regulation, which went into effect on June 10, 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 27, 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 14, 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 16, 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.

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 and Southern California Gas Company provide water and energy to 15 million southern Californians, comprising approximately 40 percent 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 device rebate programming efforts into disadvantaged communities by directly installing high-efficiency indoor appliances and fixtures, along with smart irrigation controllers. Water use efficiency in California has been adopted as a proactive measure during times of normalcy and surplus to preparation for future shortages. By saving approximately 244 acre-feet of water per year, the program may serve as a model to initiate other efforts in disadvantaged communities in Southern California and other areas dependent on the Colorado River. The Project will also 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, and address affordability challenges in these communities.

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.

By expanding our water efficiency programming with efforts that reduce indoor and outdoor water use, this Projects affirms Metropolitan's intention to abide by our commitment as stated in the 2022 MOU by and among Colorado River Basin Municipal and Public Water Providers.

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 high-efficiency indoor appliances and fixtures and the incorporation of efficient irrigation measures, the Residential Direct Install Program for Disadvantaged communities will effectively reduce outdoor water use in low income and disadvantaged communities by 2,651 acre-feet over the lifetime of the Project. These improvements have the potential to 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 and reduced demand 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, which can in turn spiral into economic disaster. This Project aims to assist disadvantaged communities and bolster their drought resilience by providing urban water suppliers with an expanded 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 providing the latest high-efficiency indoor and outdoor devices to underserved urban areas 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 inefficient devices and fixtures and installing flow monitoring devices, this project will save approximately 244-acre feet of water and between 760,000 to 1,050,000 kWh of electricity per year. 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. The installation of smart weather-based controllers will also provide an additional benefit of reducing urban runoff which may improve local water quality of surface waters and stormwater systems.

Furthermore, the Project aims to reduce climate pollutions by a factor of 241 metric tons of CO_2e over the lifetime of the devices and will help to mitigate air quality concerns across our region.

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 Residential Direct Install 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 41 percent of the population in areas dually served by Metropolitan and the Southern California Gas Company reside in DAC designated census tracts. 100 percent of the funding requested within this proposal will go towards improving drought resiliency and reducing air and water pollution within DACs.

Water conservation rebate activity in disadvantaged communities has been lower compared to non-DAC areas due to the substantial upfront costs incurred by the homeowner and the lack of available discretionary income to purchase a device and obtain a rebate. The Residential Direct Install Program seeks to remove the cost-barriers which have prohibited access to rebate programs for many Southern Californians and provide no-cost direct installation of energy-efficiency and water-saving measures to low-income homes. By incorporating improved indoor measures at no cost to the resident, the Project will help disadvantaged communities reduce their discretionary water use, which is helpful in preserving strained water supplies and to enduring drought. The Project will also effectively reduce outdoor water use by replacing inefficient irrigation control systems with the latest weather-based technology and will mitigate water quality issues, which are prevalent throughout our region. Last but not least, the Project will aim to foster meaningful relationships between historically underserved, 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 reduce Metropolitan's reliance on 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.
- The current drought on the Colorado River is more severe than any drought measured in the 20th century.

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 indoor and outdoor water use efficiency. 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 behavioral shifts through the installation of flow monitoring devices that allow customers to access live usage data, which has become an

increasing initiative throughout the Southwest. As previously mentioned, studies conducted by Flume Industries and the City of Goodyear, Arizona, show that by empowering customers with their water use information, they are more likely to make mindful decisions, and modify their behaviors to reduce their overall water use. Datapoints from this 2022 study reveal a 14.6 percent net reduction in per capita use per day. Similar pilot studies conducted by the Contra Costa Water District in Concord, California and the San Antonio Water System in San Antonio, Texas, have yielded similar results, with savings ranging from 17 percent and 18 percent, respectively.

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

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:

The Residential Direct Install Program for Disadvantaged Communities is an ongoing partnership between Metropolitan and SoCal Gas and there will be no delay in incorporating awarded funds into the program budget. Momentum for the Project is already established, and all program administrative and contractual elements are already in place. Metropolitan and SoCal Gas are currently in the process of extending our Memorandum of Understanding beyond December 31, 2024. This extension will be complete and provided to Reclamation once adopted. No additional design or engineering work is required to support the launch of the Project. Therefore, the deployment of grant funds is anticipated to occur immediately once an agreement is executed between Metropolitan and the Bureau of Reclamation. 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. Once approved, these funds will be available for draw down.

The Residential 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. Participants will be responsible for obtaining necessary permits prior to device installation.

TABLE 8: *Program Timeline*

Task		Month Due	Deliverables
1	Extend MOU with SoCal Gas beyond the current expiration date of December 31, 2024.	1	Copy of Memorandum of Understanding between Metropolitan and SoCal Gas
2	Provide outreach to member agencies to encourage participation, explain program requirements and administration	1	Summary of outreach efforts
3	Administer program, monitor performance, collect sample data	1, Ongoing	Program tracking database
4	Prepare semiannual financial and program performance reports	6, 12, 18, 24, 30	SF 425 and interim performance report
5	Work with participating agencies on program assessment and evaluation	12, 24, 36	Data collection and analysis
6	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:

Since 2014, Metropolitan and Southern California Gas Company have partnered to provide water and energy efficiency programming to customers of both agencies. By extension, these collaborative efforts provide water and energy efficiency programming on behalf of over one hundred urban water suppliers in Southern California.

Twenty-four out of twenty-six member agencies of the Metropolitan Water District support this provision of funding for regional programming. The San Diego County Water Authority and City of Long Beach Utilities Department are not serviced by SoCal Gas but benefit through similar local programs funded by Metropolitan outside the scope of this Project. If awarded, all Metropolitan member agencies that are serviced by SoCal Gas will have a chance to also

participate in the Residential Direct Install Program for Disadvantaged Communities and provide additional benefits to the consumers they serve.

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 Metropolitan's conservation efforts to disadvantaged communities throughout our 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 from the additional benefits that irrigation efficiency improvements have on urban runoff, which support their interests.

Evaluation Criterion H— Nexus to Reclamation (4 Points)
Up to **4 points** may be awarded if the proposed project is connected to a Reclamation project or Reclamation activity. No points will be awarded for proposals without connection to a Reclamation project or Reclamation activity.
Describe the nexus between the proposed project and a Reclamation project or Reclamation activity. Please consider 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 reduce Metropolitan's reliance on the Colorado River 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 $1,750,000 from the Bureau of Reclamation's (Reclamation) WaterSMART: Water and Energy Efficiency Grants (WEEG) program to support the direct installation of water efficient indoor devices, irrigation controllers and flow monitors for low income and disadvantaged communities (DAC). The total costs associated with the Project are anticipated to be $3,500,000. The Metropolitan Water District of Southern California will provide a 50% cost share and provide matching funds in the amount of $1,750,000 from our general conservation budget. Currently, there are no anticipated third-party contributions.

TABLE 9: *Project Cost Share*

Source	Amount
Costs to be reimbursed with the requested federal funding	$1,750,000.00
Costs to be paid by the applicant	$1,750,000.00
Value of third-party contributions	$0
Total Project Costs	$3,500,000.00

The associated costs for the Project are entirely comprised of charges for contractual administrative work by Metropolitan's regional program administrator, EGIA and implementation costs for devices and installation by the Southern California Gas Company

Metropolitan's contractual relationship with the Southern California Gas Company is authorized under an umbrella Memorandum of Understanding (MOU) with specific program details and pricing enforced through a Program Order. 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 SCG and EGIA, respectively.

SoCal Gas provides day to day administration for the program, including the coordination of all installations through its contractors. For administrative work SoCal Gas charges an administrative fee of 8 percent in addition to costs per device including installation by their contractor. EGIA currently provides budget tracking, participation monitoring and invoice processing for Metropolitan's agreement with SoCal Gas for the Residential Direct Install Program at a rate of 10.95 percent per device billed, except for high-efficiency showerheads and faucet aerators which have a flat admin cost per device of $3.00 and $1.50, respectively.

A breakdown of the cost per device is displayed in the table below:

TABLE 10: *Cost Per Device*

Device Measure	Device Cost Including Installation	SoCal Gas Admin Fee (8%)	SoCal Gas Total	EGIA Admin Fee (10.95%)	Total Cost Per Device
High-Efficiency Toilet	$400.00	$32.00	$432.00	$47.30	$479.30
Smart Irrigation Controller	$330.00	$26.40	$356.40	$39.03	$395.43
Smart Hose Bib Controller	$130.00	$10.40	$140.40	$15.38	$155.78
High-Efficiency Showerhead	$12.00	$0.96	$12.96	$3.00*	$15.96
High-Efficiency Aerators	$4.00	$0.32	$4.32	$1.50**	$5.82
Flow Monitoring Device	$319.00	$25.52	$344.52	$37.73	$379.25

* For showerheads, EGIA charges a flat admin fee of $3/device
** For aerators, EGIA charges a flat admin fee of $1.50/device

A breakdown of the estimated Project budget based on cost per device is displayed in the table below.

TABLE 11: *Estimated Project Budget*

Task	Budget Category	Device Cost Per Unit	Estimated Number of Units to be Installed*	Total Cost
Program Administration SoCalGas	Administrative/Contractual	See Table 10	See Table 10	$232,087.68
Program Administration EGIA	Administrative/Contractual	See Table 10	See Table 10	$366,590.04
			Administrative Subtotal	$598,677.72
High-Efficiency Toilet Install	Implementation/Construction	$400.00	4,515	$1,806,000.00
Smart Irrigation Controller Install	Implementation/Construction	$330.00	734	$242,220.00
Smart Hose Bib Controller Install	Implementation/Construction	$130.00	10	$1,300.00
High-Efficiency Showerhead Install	Implementation/Construction	$12.00	6,468	$77,616.00
High-Efficiency Aerators Install	Implementation/Construction	$4.00	12,936	$51,744.00
Flow Monitoring Devices Install	Implementation/Construction	$319.00	2,264	$722,216.00
			Implementation/Construction Subtotal	$2,901,096.00
			Contingencies Subtotal**	$226.28
			Total Direct Costs	$3,500,000.00
			Total Indirect Costs	$0.00
			Total Project Costs	$3,500,000.00

* Estimated number of units to be installed based on existing Program activity, per number of devices installed at each residential dwelling unit, applied to a total of 3,234 units to fit the project budget.
** Contingency subtotal for potential additional installations of more affordable installations (aerators and showerheads) and for the purpose of rounding total project budget to $3.5M.

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 permits 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 Residential Direct Install Program for Disadvantaged Communities will be implemented on developed residential land parcels in the service area. Replacement of indoor device measures and irrigation controllers 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 is not anticipated to impact 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 only indoor device measures and irrigation controllers; therefore, it is not anticipated to contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area.

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 Residential Direct Install Program for Disadvantaged Communities is not an infrastructure project and will occur solely on private residential properties. To date, no participants have been mandated to obtain permits, therefore no major permitting processes are anticipated. Some local jurisdictions may require permits for individual projects depending on local codes. Participants will be responsible for obtaining necessary permits prior to initiating any direct install services.

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 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 residential leak detection program in disadvantaged communities. The scope of work to be carried out under that proposal differs from the proposed Project but would also leverage Metropolitan's existing partnership with SoCal Gas. 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.

Metropolitan is also aware of a potential proposal in response to this funding opportunity to be submitted in partnership between the Los Angeles Department of Water and Power (LADWP) and the Southern California Gas Company. This joint proposal may have a similar scope of work. If Metropolitan and LADWP are awarded, Metropolitan will direct Southern California Gas Company to focus on areas outside of the LADWP service area to maximize funding benefits for the region and to ensure there is no overlap of federal funds.

In March 2022, Metropolitan was awarded $2.5 million dollars in grant funding for the Residential Direct Install Program through the California Department of Water Resources Urban and Multibenefit Drought Relief Funding program. State funding from this award is nearly exhausted and is anticipated to be fully spent by the time FY24 WEEG funds are awarded. Therefore, 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 for FY2024. In April 2023, Metropolitan was awarded an additional $5 million dollars in grant funding for Residential Direct Install Program through the California Department of Water Resources Urban and Multi-benefit Drought Relief Funding program. That funding is pending the execution of agreement between DWR and Metropolitan. Funds awarded from the Urban and Multi-benefit Drought Relief Funding Program are not expected to overlap with any potential funding awarded through the WaterSMART: Water and Energy Efficiency Grants Program for FY2024.

Key personnel for these efforts: 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.

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.

Darren Hanway
Manager
Energy Programs & Strategy
555 W. Fifth St. G19A8
Los Angeles, CA 90013

tel: (213) 244-3419
email: DHanway@SoCalGas.com

February 16, 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: Support of Metropolitan Water District's WaterSMART Water and Energy Efficiency Grant Application for FY 2024

Dear Mr. German:

On behalf of Southern California Gas (SoCalGas), I want to express our support for Metropolitan Water District's (Metropolitan) grant application for a Residential Indoor Direct Installation Program for Disadvantaged Communities.

SoCalGas is the nation's largest natural gas distribution utility, and we deliver increasingly clean, safe and reliable energy to 21.1 million consumers in more than 500 communities. A significant portion of our consumers reside in census tracts designated as disadvantaged communities. SoCalGas is committed to the promotion of energy and water efficiency in our service territories, and we often partner with other utilities and agencies, including Metropolitan, in the implementation of our customer programs and assistance.

This project will support the installation of water and energy efficient devices for qualifying residents throughout Metropolitan and SoCalGas's overlapping service areas. The measures include premium high-efficiency toilets, weather-based irrigation controllers, high-efficiency showerheads, aerators, and flow monitor or leak detection devices.

For years, traditional water use-efficiency rebate programs have inadvertently restricted access to many residing in disadvantaged communities due 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 devices and expand traditional conservation programming models.

Darren Hanway
Manager
Energy Programs & Strategy
555 W. Fifth St. G19A8
Los Angeles, CA 90013

tel: (213) 244-3419
email: DHanway@SoCalGas.com

SoCalGas encourages your support for this project. If you have any questions, please do not hesitate to contact me.

Thank you,

DocuSigned by:
Darren Hanway
CBF1A6240C494F6...

Darren Hanway