

# Recycled Water Distribution Improvements Phase II Project

*Grant Applicant:*



## **South Coast Water District**

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### **Mandatory Federal Forms**

The following forms were submitted electronically via [grants.gov](https://www.grants.gov): SF- 424 Application for Federal Assistance, SF-424A Budget Information for Non-Construction Programs and Construction Programs, SF-424D Assurances – Construction Programs, SF-LLL Disclosure of Lobbying Activities.

### **Technical Proposal and Evaluation Criteria**

#### **Executive Summary**

October 4, 2021, Ms. Taryn Kjolsing, Engineering Manager, South Coast Water District SCWD/District , City of Dana Point, Orange County, California. The District is a Category A applicant.

**Work Proposed:** The proposed Recycled Water Distribution Improvements Phase II Project (Project) will expand the South Coast Water District's District's) recycled water system by upsizing recycled water pipelines and replacing a pressure reducing valve PRV to provide recycled water supply in place of imported potable water supply within the City of Dana Point, in Orange County, California. The District does not have partners for this Project. The District is in the South Orange County region, which is experiencing severe drought conditions, and the majority of California is experiencing extreme to exceptional drought conditions. Improvements to the recycled water system will significantly reduce the demand on imported potable water supplies from the Colorado River and the San Francisco-San Joaquin Bay Delta Bay-Delta) during periods of drought by producing an additional 347 acre-feet per year AFY) of recycled water initially. The overall project will expand the District's recycled water system to provide up to 1,265 AFY of recycled water to its service area. The District's 2020 Urban Water Management Plan UWMP and the South Orange County 2018 Integrated Regional Water Management Plan (IRWMP) are the primary drought plans that identify and support the Project, both citing recycled water expansion as a key strategy to increase water supply reliability for the District and the South Orange County region, which is approximately 80% reliant on imported water supplies from the Metropolitan Water District of Southern California via the Municipal Water District of Orange County.

- Following the funding award announcement, the Project is anticipated to start construction in September 2022 with a 9-month duration and completion in May 2023.
- The Project is not located on a federal facility.

#### **Project Location**

As presented in **Figure 1**, the proposed Project is located in the City of Dana Point, Orange County, California, generally within Stonehill Drive and Monarch Beach Drive. The Project latitude is 33° 28' 37.48 N, and longitude is -117° 42' 26.42" W at approximately 24116 Stonehill Drive, Dana Point, California, 92629.

#### **Technical Project Description**

The overall project will expand the District's recycled water system to provide up to 1,265 AFY of recycled water to its service area. The Project will resolve low-pressure issues that limit the amount of recycled water that can be delivered to District customers. Specifically, the proposed Phase II Project includes: 1) Installing approximately 5,700 linear feet of 14-inch diameter transmission main in Monarch Beach Drive and Stonehill Drive) to replace the existing smaller diameter pipelines serving Dana Hills High School, and 2) Replacing a PRV at the existing Recycled Water Reservoir 2 RW-2) site. The District's long-term water supply reliability planning documents include a goal to maximize recycled water use by 2035, and continue aggressive implementation of water conservation to reduce imported potable water demands. Over the past 25 years, District's population increased by approximately 10%, but potable water demands have dropped 36%. The increase in recycled water demand to reduce potable water usage has resulted in a larger than anticipated demand for recycled water on the District's system. The Project's Preliminary Design Report PDR prepared by Dudek in 2017, identified that an increase in recycled water usage within the District's system specifically

at 460 and 290 pressures zones) over the past few years was more than what was originally planned, and as a result, there is a need to increase the conveyance capacity of the system. Low-pressure problems occur in the recycled water distribution system in the vicinity of Stonehill Drive and Golden Lantern Street, with negative pressures observed at the nearby Dana Hills High School. These low-pressure issues prevent the District from meeting the recycled water demand from their existing customers, who seek to use recycled water in place of imported water for irrigation purposes. Increases in recycled water demands, coupled with a small diameter main located within this area of the distribution system, has resulted in a “bottleneck” issue, limiting the amount of recycled water the District can supply to its customers and preventing the District from achieving its recycled water goals. To resolve this issue, the PDR identified the following two Phases to increase capacity and maintain reliable service to recycled water customers:

1. Phase I of the recycled water distribution improvements completed in October 2019 installed additional transmission main infrastructure, and to date, has allowed the District to reliably provide the current 918 AFY of recycled water demand. Phase I is shown as the Orange line in Figure 1.
2. Phase II of the recycled water distribution improvements Project proposed in this application) includes installing approximately 5,700 linear feet of 14-inch diameter transmission main in Monarch Beach Drive and Stonehill Drive to replace the existing smaller diameter pipelines serving Dana Hills High School, and replacement of a PRV. This Project will expand the recycled water use up to an additional 347 AFY from new customer conversions to recycled water. Phase II is shown as the Purple line in Figure 1.

Recycled water main and associated facility upgrades are needed to eliminate the recycled water “bottleneck” and increase the conveyance capacity of the system to maximize the recycled water delivered to District customers. This Project is needed to achieve the District’s goal of maximizing recycled water by 2035 to meet its forecasted recycled water demand of 1,350 AFY, which includes maximum customer conversion from potable to recycled water for irrigation uses. The total overall project provides up to 1,265 AFY of recycled water (918 AFY for Phase I and 347 AFY for Phase II) to the District’s service area.

**Figure 1. Recycled Water Distribution Improvements Phase II Project Location**





## Performance Measures

**Table 1** below identifies Project benefits and performance measures through its anticipated 60-year life.

**Table 1. Project Benefits and Performance Measures**

Benefit	Target	Measurement Tools and Methods
Water Savings / Eliminate Potable Water Demand - Additional Recycled Water Supplies Delivered	Up to 347 AFY (Project) and 1,265 AFY for the overall project	Confirming the identified current potable water irrigation customers are connected to the recycled water system. Measuring the amount of recycled water delivered by the reading flow meters at each converted service for the identified meters (24 new customers total).
Energy Savings - Reduce Amount of Electrical Energy Required to Supply Water Demands	From Water Better Managed 441,037 kWh/year 347 AFY and 1,607,815 kWh/year for the overall project	Measuring the amount of recycled water supplied through the distribution system via the identified customer meters. This total can then be equated to the offset in energy required to transfer an equal quantity of water to the District from other water supply sources. Water savings will be converted to energy savings using the calculation of 2,500 kWh/AF of imported water offset.
Carbon Emissions Savings - Climate Change Impacts	269,032 lb. of CO <sub>2</sub> /year from water savings (347 AFY) and 980,767 lb. for the overall project	Confirm the water savings resulting from the Project in the “Water Savings” Project Performance Measure and convert to carbon emissions using the calculation of required energy = 2,500 kWh/AF and CO <sub>2</sub> emissions= 0.61 lb. of CO <sub>2</sub> /kWh.

## Evaluation Criteria

### Evaluation Criterion A - Project Benefits

The District is proposing the Project as part of its long-term resilience to drought planning by: 1) improving infrastructure for enhanced water reliability and flexibility in times of drought; 2) removing a “bottleneck” issue to increase recycled water supply for customers; 3) providing an additional 347 AFY initially and 1,265 AFY ultimately of recycled water supplied by the overall project (918 AFY for Phase I and 347 AFY for Phase II equals 1,265 AFY for the total overall project); and 4) benefitting fish, wildlife, and the environment by allowing more imported water to stay at its source to support Bay-Delta and Colorado River habitats.

**Building Long-Term Resilience to Drought Number of Years Benefits Provided.** The Project will build long-term resilience to drought by increasing recycled water supplies by 347 AFY, to reach a total of 1,265 AFY building on Phase I recycled water supplies, in place of less reliable imported water for non-potable uses, saving 441,037 kWh/year in energy, and 269,032 lbs. of CO<sub>2</sub>, annually, year-round, for the approximately 60-year life of the Project. These benefits are quantified in **Table 1** above. Compared to imported water, recycled water is a more reliable supply because it is dependent upon wastewater production, which will continue even during times of drought. The Project will result in the use of approximately 347 AFY for future recycled water connections that would otherwise be lost and unavailable to the District. The major distribution pipe improvements will also enhance the backbone distribution system to provide maximum recycled water delivery to District customers. Increasing the amount of local water supply has a significant impact on the District’s potable water supply because 80% of the District’s total water supply is purchased surface water imported by the Metropolitan Water District of Southern California MWD via the Municipal Water District of Orange County MWD OC. MWD’s imported water sources are the Colorado River Aqueduct CRA and the State Water Project SWP, which draws water from the Bay-Delta. The overall project, Phases I and II combined, will provide up to 1,265 AFY of recycled water that will offset the demand on imported

water and potable supplies and contributes to meeting the District's 2035 forecasted recycled water demand of 1,350 AFY. Given the increasing costs of imported water and the severe drought related water supply challenges that all of California, especially in Southern California, constantly faces, integrating system wide water recycling measures is critical for meeting water supply demands.

**o Additional Water Supplies Made Available & Estimated Quantity of Additional Supply from Project.**

The Project will make an additional 347 AFY of recycled water available initially, and 1,265 AFY ultimately, and therefore make the same amount of imported potable water supply available to the CRA and the SWP since the recycled water will be used in place of imported water. The total savings were calculated based on the potable water use of existing irrigation users anticipated to be converted from potable (imported) to non-potable (recycled) water.

**o Percentage of Total Water Supply Represented by Additional Water Supply.** The additional water supply of 347 AFY represents 5.6% of total SCWD supplies as of 2020. The additional water supply will be a direct offset of potable supply; therefore, it also represents approximately 6.5% of SCWD's current potable water supply. Current water supply amounts used to calculate these percentages are shown in Table 6-1 of the District's 2020 UWMP Page 6-2 : Total water supply equals 6,222 AFY, and total potable water supply of 5,377 AFY includes 847 AF groundwater and 4,530 AFY purchased or imported water. The estimate for percent of total supply is calculated as follows:  $347 \text{ AFY} / 6,222 \text{ AFY} = 5.6\%$ . The estimate for percent of total potable water is calculated as follows:  $347 \text{ AFY} / 5,377 \text{ AFY} = 6.5\%$ .

Analyzing the Project further, the existing recycled water supply (845 AFY) represents 13.6% of total water supplies in 2020. When the Phase I recycled water supplies are maximized at 918 AFY and combined with Phase II (the Project) recycled water supplies for a total of 1,265 AFY, this will represent a respectable 18.4% of total water supplies by 2025 (6,892 AFY). This amount is estimated as  $1,265 \text{ AFY} / 6,892 \text{ AFY} = 18.4\%$ .

**o Degree/Significance of the Benefits Associated with the Additional Water Supplies - Increased Reliability of Water Supplies.** The benefits of the Project are significant because the overall project will reduce imported water demand by up to 1,265 AFY and provides a critical local water supply in the event the District's imported water supply is cut off. The District and South Orange County region are both about 80% reliant on imported water for total supplies, but can be up to 100% reliant on imported water for potable supplies. For example, in 2016, the District pumped near-zero groundwater due to recent drought conditions that negatively impacted the groundwater supply and quality, requiring the District to be fully reliant on imported water for potable supplies. Since 2016, the volume of groundwater pumped has increased (2020 UWMP, Page 6-16), but has been less than 850 AF per year. The amount the District can extract is limited due to basin capacity and drought (see Evaluation Criterion D, San Juan Groundwater Basin Impacts), which makes the groundwater basin an unreliable source. Imported water pipelines cross five seismic faults several times, posing a high vulnerability to the region during times of drought, earthquake, or another catastrophic event. The 2018 South Orange County Reliability Study identified several risks to the imported water delivery system, including emergency shutdowns of outside facilities, prolonged drought, and lack of local project implementation. As detailed above, 347 AFY represents a 6.5% imported water supply savings for the District of its current total potable water supply. Realizing the increasing vulnerability of its primarily imported water supply, the District's planning documents include a goal to reduce dependency on imported water supply by 20%. The Project will yield real water supply benefits that will contribute to achieving this goal by producing an additional 347 AFY of recycled water, reducing the District's dependency on imported water supply and reducing potable water use.

**Improve the Management of Water Supplies.**

**o Increased Efficiency or Operational flexibility.** The Project will improve water management by delivering locally generated recycled water in place of receiving imported water from hundreds of miles away, thereby increasing efficiency. The Project will also increase operational flexibility because it will allow the District to

deliver more recycled water in place of imported or potable water sources during drought. Operational flexibility will be improved by the Project's major distribution piping that will support the demands of the pressure zone to efficiently deliver recycled water and enhance the backbone distribution system to maximize recycled water delivery to irrigation users throughout the District's service area. The Project will also improve operational flexibility during drought by increasing the recycled water supply as an alternative or supplement to groundwater supply. Currently, the District's only source of local potable water is the San Juan Groundwater Basin, which is in overdraft condition with low quality water, making it an unreliable source.

**o Estimated quantity of water that will be better managed as a result of this project.** Up to 1,265 AFY of water will be better managed with the completion of the overall project (918 AFY for Phase I and 347 AFY for the Phase II Project). These benefits will be realized annually for a 10-year average annual benefit of the same amount, 1,265 AFY. Over the same 10-year period, the savings will be a cumulative 3,470 AF and 12,650 AF for the Project and overall project, respectively.

**o Percentage of Total Water Supply the Water Better Managed Represents.** The 1,265 AFY of recycled water supply overall project total equals approximately 93.7% of the District's 2035 projected recycled water supply of 1,350 AFY (dividing 1,265 AFY by 1,350 AFY equals approximately 93.7%). Additionally, 1,265 AFY is also approximately 18.4% of SCWD's projected total water supply in 2025 (dividing 1,265 AFY by 6,892 AFY equals approximately 18.4%). As previously noted, the initial 347 AFY of new recycled water supplied by the Project equals 6.5% of the District's current total potable water use of 5,377 AFY. This is calculated by dividing 347 AFY (additional recycled water supplied by Project) by 5,377 AFY (2020 potable water supply from Table 6-1 of the District's 2020 UWMP), which equals approximately 6.5%.

**o Degree/Significance of Anticipated Water Management Benefits.** Upon completion of the proposed Project, the delivery of an additional 347 AFY to recycled water customers will prevent the low-pressure-induced recycled water "bottleneck" from happening in the future as demand for recycled water increases due to dry drought conditions (little rainfall). This results from the District continuing to expand its recycled water service to meet its water reliability goals of reducing dependency on recycled water. The overall Project's improvements to the recycled water delivery system will provide a total of 1,265 AFY. The distribution of recycled water in place of imported water will also conserve energy, reduce operating costs, and lower the District's carbon footprint.

**o New Information Made Available to Water Managers.** The Project will continue to provide recycled water information as it does now, therefore it won't make new information available to water managers.

## Evaluation Criterion B – Sustainability and Supplemental Benefits

**1. Climate Change: Executive Order (EO) 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.**

**Contributions to Climate Change Adaptation and Resiliency.** The proposed Project includes upsizing recycled water distribution pipelines and replacing a PRV to supply the District's customers with more recycled water for use in place of potable water for irrigation. The Project itself serves as a strategy on the part of the District to adapt to climate change conditions by leveraging recycled water supply to increase local water supply reliability and reduce the District's dependence on imported water, thereby conserving potable water for highest beneficial uses. The new local supply of recycled water will be produced from treated wastewater, which can be continually regenerated and returned to the water system even in times of drought, thereby providing a drought contingency.

**Other Natural Hazard Risk Reductions – Wildfires.** The proposed Project addresses emergency preparedness for times of drought by providing irrigation for defensible space around structures and recreational facilities. The frequency, intensity, and size of wildfires has increased over the past years due to drought conditions across the state creating dry vegetation. The Project provides a new local source of recycled water that is available to combat the increasing threat, duration, and severity of wildfires. The

District's potable water distribution system consists of 1,580 fire hydrants and reservoirs that hold up to 21.9 million gallons of water that can be used for fire suppression in its service area. As identified in Section 3.8 of the 2018 South Orange County IRWMP, changes in hydrological conditions in the South Orange County region due to climate change include drought, damage to trees, and increased risk of wildfire and erosion. Expanding recycled water will reduce potable demand and increase local supply available for regional wildland fire suppression. The District's service area includes portions of Laguna Beach and high fire risk areas in Laguna Canyon and Aliso Canyon. The 2019 City of Laguna Beach Wildfire Mitigation and Fire Safety Report describes that nearly all of the City of Laguna Beach and its surrounding 16,000 acres of open space are designated by the state's CalFire agency as a Very High Fire Hazard Severity Zone, and includes hilly terrain, significant vegetation (fuel for wildfires), hot, dry summer and fall seasons, and high-speed Santa Ana winds. These conditions are frequently involved in the most destructive fires in the region. Due to these natural conditions, Laguna Beach has a history of wildfires, the most devastating of which occurred on October 27, 1993, when a Santa Ana wind-driven fire consumed over 14,000 acres, caused the evacuation of over 23,000 people, and destroyed 441 homes and structures in less than a day. More recently, Laguna Beach experienced wildfires in 2015 and 2018 which started in open space areas. The proposed Project will provide up to 347 AFY of recycled water (1,265 AFY for the overall project) that makes more potable water available for fire suppression locally and regionally.

**Community Climate Resilience by Reducing Energy Needed to Manage Water & Complementing Regional Green Solutions.** The Project reduces the energy needed to manage water by saving 441,037 kWh/year and 1,607,815 kWh/year for the overall project and complements several other recycled water expansion projects that reduce energy needs throughout the South Orange County region and watershed management area. The proposed Project will use a low-impact water treatment process that will consume less energy than a standard treatment system and consequently reduce lifecycle operating costs. Energy savings benefits will be realized immediately upon operation of the Project. Southern California, including the District, receives imported water via the SWP and the CRA, a conveyance process that requires a large amount of energy. By producing water locally rather than importing water, the proposed Project will significantly reduce the amount of energy used to deliver every 1 AFY of water to the District's customers. The proposed Project is expected to add 347 AFY to the District's recycled water supply, which brings the total recycled water supply for the overall project to 1,265 AFY and will ultimately allow the District to meet its 2035 forecasted demand of 1,350 AFY. The proposed Project would reduce energy consumption by offsetting the energy that would be required to deliver 347 AFY of imported potable water by producing the same amount of recycled water locally, which requires much less energy. The power required to import 1 AF of water is approximately 2,500-kilowatt hour (kWh)/AF based on the publication "California's Water – Energy Relationship" prepared by the California Energy Commission November 2005, p. 51 and based on the average of approximately 3,000 kWh/AF for SWP water and 2,000 kWh/AF for CRA water. Conversely, the District can locally produce and deliver every 1 AF of recycled water using only 1,229 kWh of energy. The effective reduction in energy required to supply 347 AFY and 1,265 AFY is the difference between the energy associated with the potable water delivery and the energy used to produce recycled water which results in a savings of 441,037 kWh/year and ultimately 1,607,815 kWh/year in energy required. The following calculations present estimates of energy consumption rates:

- Project Energy Used by Imported Water:  $347 \text{ AFY} \times 2,500 \text{ kWh/AF} = 867,500 \text{ kWh/year}$
  - Project Energy Used by Recycled Water:  $347 \text{ AFY} \times 1,229 \text{ kWh/AF} = 426,463 \text{ kWh/year}$
- The annual Project benefit is equal to energy savings of:  $867,500 \text{ kWh} - 426,463 \text{ kWh} = 441,037 \text{ kWh/year}$ .

- Overall project Energy Used by Imported Water:  $1,265 \text{ AFY} \times 2,500 \text{ kWh/AF} = 3,162,500 \text{ kWh/year}$
  - Overall project Energy Used by Recycled Water:  $1,265 \text{ AFY} \times 1,229 \text{ kWh/AF} = 1,554,685 \text{ kWh/year}$
- The annual overall project benefit is equal to energy savings of:  $3,162,500 \text{ kWh} - 1,554,685 \text{ kWh} = 1,607,815 \text{ kWh/year}$ .

The effective reduction in energy required to supply 347 AFY and 1,265 AFY is the difference between the energy associated with the potable water delivery and the energy used to produce recycled water, which



results in a savings of 441,037 kWh/year and ultimately 1,607,815 kWh/year in energy required.

**Establishing and Using a Renewable Energy Source.** The proposed Project will not establish and use a renewable energy source.

**Reducing Climate Air Pollution.** The Project will reduce carbon dioxide (greenhouse gases) by using less energy to produce recycled water locally in place of importing water from the CRA and SWP. The Project mitigates air pollution by reducing the energy and associated greenhouse gases required to convey imported water to the District's service area. Carbon emission estimates of 0.61 lb. of CO<sub>2</sub>/kWh based on the U.S. Environmental Protection Agency's 9th edition of eGRID, "Year 2010 eGRID Subregion Emissions - Greenhouse Gases" were used to calculate emissions saved as follows:

- 0.61 lb. of CO<sub>2</sub>/kWh    441,037 kWh/year = 269,032 lbs. of CO<sub>2</sub> savings per year upon Project completion.
- 0.61 lb. of CO<sub>2</sub>/kWh    1,607,815 kWh/year    980,767 lbs. of CO<sub>2</sub> savings per year upon overall project completion.

Therefore, the Project will reduce CO<sub>2</sub> climate emissions by 269,032 lbs. per year, with the overall project ultimately reducing CO<sub>2</sub> climate emissions by 980,767 lbs. per year.

**Reducing Greenhouse Gas Emissions by Sequestering Carbon.** The Project does not include sequestering carbon in soils, grasses, trees, and other vegetation.

**Conservation or Management Component Protecting Water Supplies.** The Project has a management and conservation component that serves to protect water supplies and its associated uses. The Project implements the regional climate change action plan, adopted by the District, and is listed in Chapter 4 of the South Orange County IRWMP as a measure to mitigate climate change impacts for the region. As described in the IRWMP, Chapter 12 Climate Change includes a climate change analysis per the California Department of Water Resources in 2016. Pages 10-11 of the IRWMP describes Climate Change Adaptation & Mitigation Strategies, while Page 10-13 identifies specific Climate Change Adaptations. Expanding recycled water service in place of potable water is identified as a climate change adaptation strategy.

The proposed Project will also implement the San Juan Basin Optimization Plan to protect local groundwater supplies that are currently threatened by climate change and drought conditions. By increasing recycled water supply, the Project will ensure irrigation flows (urban runoff) continue to replenish the basin to help ameliorate threats posed by rising sea levels and, saltwater intrusion, and poor water quality to the South Orange County region's only source of groundwater, the San Juan Basin. The San Juan Basin, which is managed by the San Juan Basin Authority (whose members include Moulton Niguel Water District (MNWD), Santa Margarita Water District (SMWD), SCWD, and the City of San Juan Capistrano), is an impaired groundwater basin with a high concentration of total dissolved solids (TDS) (approximately 2,200 milligrams per liter) due to both natural and anthropogenic degradation sources. Rising sea levels could further increase TDS in the San Juan Basin and further reduce groundwater quality. Drought and low rainfall also result in less water replenishing the basin, which lowers the quality of the water as the concentration of TDS increases in the lower volume of water. Desalters are currently used to treat the contaminated groundwater and seawater intrusion that threatens the San Juan Basin. However, more recycled water used for irrigation ensures flows make their way into the watershed's creeks and ultimately infiltrate into the groundwater basin.

**Contributions to Climate Change Resiliency.** The Project would contribute to climate change resiliency by further **diversifying the District's water supply portfolio** through a locally controlled supply, combining an aggressive water use efficiency program, recycling, storm water recharge, and local supplies to reduce dependence on imported water supplies. Should an earthquake, wildfire, system shutdown, or other event disrupt the delivery of imported water to the area, the Project's recycled water would provide emergency water supplies for the District (and South Orange County).

An important part of climate change resiliency is being prepared for **economic losses**. The Project alleviates economic losses by providing recycled water for irrigation in place of imported water; recycled water is available even during times of drought since it is dependent on wastewater, which will continue to be

produced even in times of drought due to continuous water use for toilet flushing and washing purposes. MWDOC retained the services of the Orange County Business Council and found that the economic impacts for the MWDOC service area ranged up to \$1.7 billion, depending on the shortage scenario. Even a relatively short 10-day, 20% reduction carries a projected impact of over \$60 million. These numbers illustrate the tremendous potential cost from water system outages or short-term drought. The District's goal is to help customers achieve use reduction compliance through education and assistance at little to no cost. Expanded rebate programs through MWD and the District's free conservation programs are available to eligible customers. Many of the strategic reliability measures implemented by MWD and local water purveyors have helped to protect the region from rationing or other severe conservation measures thus far.

The Project also will **decrease heightened competition for finite water supplies** by increasing recycled water supplies to offset limited imported and groundwater water supplies. Drought conditions result in a heightened competition for imported water within MWD's service area and limited San Juan Basin groundwater supplies. The District is currently 80% reliant on imported water from MWD and MWDOC for its potable water. With nearly 19 million people in MWD's service area, Southern California is heavily reliant on imported water supplies to meet demands. It was forecasted by Reclamation that forecasted demands will exceed available supply in the Colorado River. This results in competition for limited water supplies throughout the Delta and Colorado River Basin. Locally, the San Juan Basin's groundwater supply is shared among SCWD, SMWD, MNWD, and the City of San Juan Capistrano. As described previously, the drought has decreased basin recharge. Some of the Basin's storage capacity cannot be used because of potential sea water intrusion, economic considerations, and increasingly poor water quality; this has caused tension among local agencies due to the limited local supply. The Project reduces tension locally because it increases local water supply reliability by offsetting imported water and improving the basin recharge capacity.

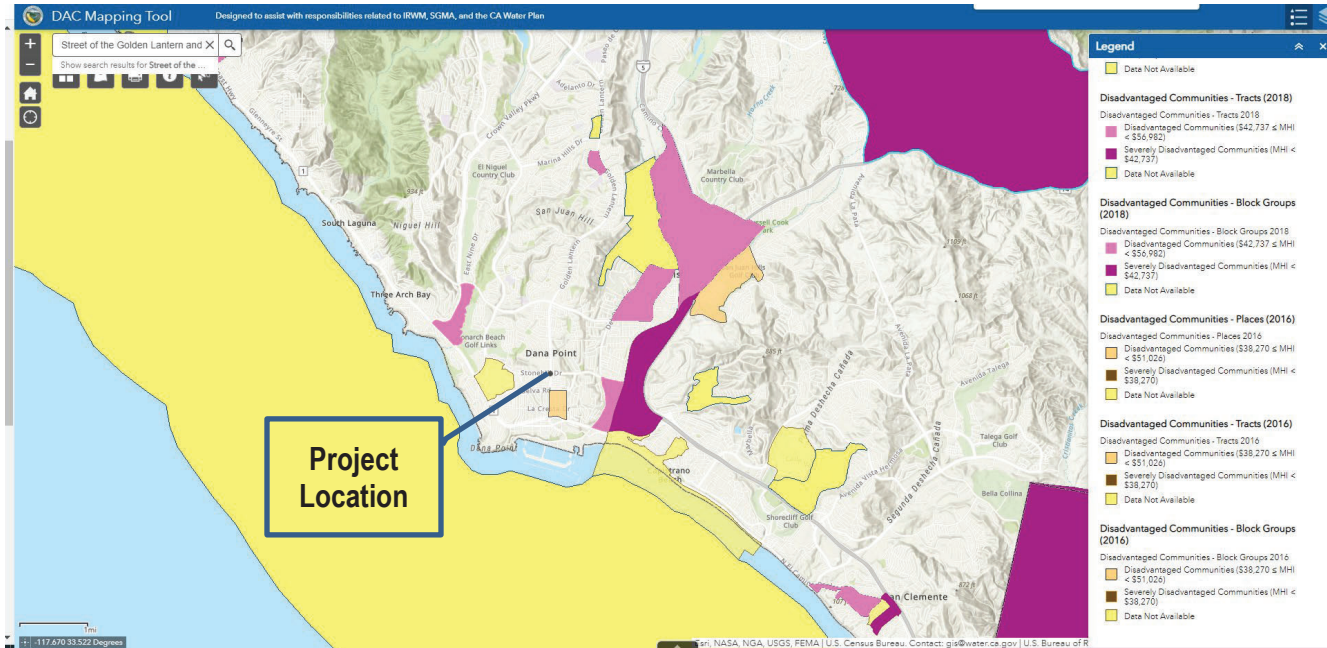
***2. Disadvantaged or Underserved Communities: EO 14008 and EO 13985 affirm the advancement of environmental justice and equity for all through the development and funding of programs to invest in disadvantaged or underserved communities.***

**Benefits to a Disadvantaged or Historically Underserved Communities.** The Project is needed to ensure disadvantaged communities DACs have a reliable, affordable potable water supply. As defined by the California Department of Water Resources, DACs are census geographies with an annual median household income (MHI) that is less than 80% of the Statewide annual MHI. Severely Disadvantaged Communities SDACs are census geographies having less than 60% of the Statewide annual MHI. DACs reside in the District's service area as shown in **Figure 2**.

The Project will provide more reliable recycled water at a lower cost than imported water to DACs for irrigation uses. From a social equality and environmental justice perspective, affordable water rates are important to provide to members of DACs. During droughts, irrigation water, if provided from potable supplies, is the first to be reduced, creating more dust and allergens, as well as adding to heat islands, thereby negatively impacting public health. The Project provides more recycled water to ensure public health needs are met. The Project will increase water supply reliability by providing new recycled water supply to low income and minority communities at an affordable price, compared to much more expensive imported potable water, for irrigation purposes. Providing high quality and reliable water supply to DACs throughout the South Orange County region is an objective of SCWD, MWDOC, and MWD. Water saved makes the same amount available for DACs in the region. This benefit of water savings will be realized annually, year-round, for the 60-year life of the Project. In addition, the associated costs and energy required to deliver up to 347 AFY Project), and 1,265 AFY for the overall project, of imported water to the District is saved, which results in less financial impact to the District and its ratepayers, lessens the environmental impacts from greenhouse gases and climate change, conserves energy, and reduce operating costs. Currently, the District incurs a total cost of \$1,058/AF for imported potable water via the MWD. Conversely, per the 2017 Project PDR, the District can produce Title 22-compliant recycled water at a cost of approximately \$359/AF. Therefore, by replacing imported potable water with an equal supply of locally produced recycled water, the District will save \$699/AF in operating costs for the 60-year Project life. Further, the District can produce Title 22 recycled water at a

cost of \$111/AF per energy unit including operation of the wastewater treatment plant), compared to MWD's charge of \$138/AF per energy unit. The energy savings realized from using local recycled water in place of imported potable water will result in cost savings of \$27/AF for the Project life. The District will pass along operating cost savings to its customers, including DACs, upon Project implementation.

**Figure 2. Disadvantaged Communities within SCWD Service Area**



**Meeting Disadvantaged Community State Criteria.** Table 2 presents the District's calculation of population and MHI for the DAC or Economically Distressed Areas (EDA) and other applicable calculations for EDAs. The American Community Survey (ACS) of the U.S. Census dataset was used as a source to estimate the communities' MHI. The most recent comprehensive data available is for the year 2016. The 2020 data has not yet been released. The ACS data provided estimates of MHI for different census geographies, such as for states, counties, census places (incorporated cities and unincorporated towns), census tracts, and census block groups. Using the ACS data for 2016, 80% of the statewide MHI is \$54,191. The DACs shown in **Figure 2** consist of the census block group data presented in **Table 2**. The percentages next to each Block Group ID Number in **Table 2** reflect the percentage of the block group located within the District's service area and will be served by the Project. Applying the percentages to the total population results in the District's **total DAC population of 3,698**. The District's total population of its service area is approximately 40,000. **Therefore, DAC's amount to approximately 9.2% of the District's service area.** The City of Dana Point makes up most of the District's service area, and the MHI in Dana Point in 2016 was \$87,878. This is block group census data from 2016 when the population of Dana Point, California was 34,062 <http://www.city-data.com/income/income-Dana-Point-California.html#ixzz4pHmQFKrX>.

**Table 2. District 2016 Census Block Group Data**

Block Group ID Number	Population	Households	Median Household Income	Total DAC Population within District Service Area
060590423242 77%	993	428	\$35,656	767.6
060590423101 (99%)	870	475	\$36,307	860.1
060590422011 32%	744	480	\$45,561	239.1
060590423135 100%	1,831	796	\$40,288	1,831.0
			<b>Total</b>	<b>3,698</b>



**Meeting the Underserved Community Definition - Populations or Geographic Communities Denied Full Opportunity to Participate in Economic, Social, and Civic Life.** The District's service area includes the communities of Dana Point, South Laguna, and areas of San Clemente and San Juan Capistrano. The District's service area includes Hispanic and Latino, and Indigenous Juaneno Band of Mission Indians, Acjachemen Nation) communities that are defined as underserved communities per the definition in E.O. 13985. The Project benefits these communities by ensuring affordable and high-quality water is served to the communities for irrigation purposes, thereby making drinking water more available for potable uses throughout the service area.

***3. Tribal Benefits: The Department of the Interior is committed to strengthening tribal sovereignty and the fulfillment of Federal tribal trust responsibilities.***

**Supporting Tribal Resilience to Climate Change and Drought Impacts.** The proposed Project supports tribal resilience to climate change and drought impacts by making more water available in the Colorado River Basin for tribes that rely on the CRA as a source of water. The Project increases local recycled water supply to reduce demands on imported supply from the Colorado River Basin and the SWP, as the District receives imported water from MWD via MWDOC, which currently relies on these as its primary sources of water. Reclamation manages the Colorado River system from which MWD imports water. The Project will increase recycled water supply by up to 347 AFY (and 1,265 AFY for the overall project) through development of local water production and will ultimately benefit the Colorado River Basin by reduced demand on this source. The District purchases potable water supply from MWD through MWDOC. Imported water savings associated with the Project translate to more water remaining in the fragile Colorado River and Bay-Delta systems. The local Juaneno Band of Mission Indians is a state recognized, but not federally recognized tribe.

**Supporting Reclamation's Tribal Trust Responsibilities.** The proposed Project directly supports Reclamation's current efforts, including the May 20, 2019 signing of completed drought contingency plans for the Colorado River basin. The plan is designed to reduce risks from ongoing drought or supply line interruptions and protect the most important water source in the western U.S. By reducing the amount of water imported, this water in effect remains in the Colorado River basin from which it originates or is made available to meet demands in other areas of the State. Any increase in water reliability and greater availability in overall water supply resulting from local water production efforts would also help Reclamation in meeting the federal Indian trust responsibility, a legally enforceable fiduciary obligation on the part of the U.S. to protect tribal treaty rights, lands, assets, and resources, to the tribes.

***4. Ecological Value: Drought resiliency projects often provide environmental benefits in addition to water supply reliability benefits for other users. Ecological resiliency is crucial to sustain ecosystems that can respond to and recover from external stressors resulting from climate change and drought.***

***• Does the project seek to improve ecological climate change resiliency of a wetland, river, or stream to benefit to wildlife, fisheries, or habitats? Do the benefits support endangered/threatened species? What are the types and quantities of environmental benefits provided, such as the types of species and the numbers benefited, acreage of habitat improved, restored, or protected, or the amount of additional stream flow added? How were these benefits calculated? Will the project reduce the likelihood of a species listing or otherwise improve the species status?***

The Project provides ecological benefits locally and statewide by protecting the habitats of Federally listed Steelhead Trout species, the Laguna Beach State Marine Protected Areas (MPA), and Bay-Delta and CRA. Locally, the proposed Project will benefit the recovery of federally listed Steelhead Trout in the San Juan Creek by ensuring irrigation flows make their way to creeks and streams to enhance water quality and support local habitat. By providing up to 347 AFY (and 1,265 AFY for the overall project) of new recycled water, the Project ensures irrigating landscaping upstream of the natural ecosystems will be available to support the natural habitats. The Laguna Beach State Marine Reserve and Laguna Beach State Marine Conservation Area are two adjoining marine protected areas that extend offshore of Laguna Beach in Orange County, CA, within the District's service area. The reserve covers 6.27 square miles, and the conservation area covers an additional 3.44 square miles. These two MPAs protect marine life by prohibiting or limiting the removal of



marine wildlife from within its borders and are characterized by rocky and sandy habitats, diverse rocky intertidal, shallow kelp reefs, and outstanding marine biodiversity. Recycled water use contributes to maintaining surface flows for land and marine habitat protection.

As previously noted, the District's potable water supply is 80% reliant on imported water obtained from MWD through MWDOC, which is a blend of SWP and CRA water. Decreasing water supplies received from the Bay-Delta help reduce negative ecological impacts triggered by water exportation from the area. The proposed Project will reduce imported water demand on the CRA and SWP by up to 347 AFY and 1,265 AFY for the overall project), making water available for the SWP's Delta Smelt and other listed species located in the Delta habitat. Twenty-nine known species of fish once populated the estuary and currently twelve of those species are considered gone or threatened by extinction. More water in the Bay-Delta and CRA may improve the overall quality of the water that remains in the ecosystem. The Project's recycled water supply will offset imported water deliveries to the District, alleviating stress on the Bay-Delta habitat and ecosystem. The Recovery Plan for the Sacramento-San Joaquin Delta Native Fishes (November 26, 1996) includes the Delta Smelt and monitoring endangered species and potential recovery rates the Plan is available at the following link: [https://www.fws.gov/sfbaydelta/species/delta\\_smelt.cfm](https://www.fws.gov/sfbaydelta/species/delta_smelt.cfm). With a reduction in this imported water demand, the impact on the Delta Smelt, Salmon and other species currently impacted by water pumping activities, will be alleviated to the extent of the Project. The Project's delivery of an additional 347 AFY of recycled water and 1,265 AFY for the overall project) will result in some water remaining in the Bay-Delta or CRA. Therefore, reductions in imported water mitigate negative environmental impacts on the habitat in the Bay-Delta and CRA.

**5. Other Benefits: Will the project address water sustainability in other ways not described above? For example: Will the project assist States and water users in complying with interstate compacts? Will the project benefit multiple sectors and/or users e.g., agriculture, municipal and industrial, environmental, recreation, or others)? Will the project benefit a larger initiative to address sustainability of water supplies?**

The Project will benefit larger statewide, regional, and local initiatives to address sustainability of water supplies. Drought conditions result in a heightened competition for imported water within MWD's southern California service area and limited groundwater supplies in the local San Juan Basin. Per MWD's 2020 UWMP imbalances are occurring in the Upper Colorado River Basin, where snowpack peaked in April 2020 at 107% of median, yet from April through July runoff was observed at just 52% of average due to hot and dry conditions in the late spring and early summer. The District is reliant on imported water from MWD and MWDOC for 80% of its potable water supplies. With nearly 19 million people in MWD's service area, Southern California is heavily reliant on imported water supplies to meet demands. It was forecasted by Reclamation that forecasted demands will exceed available supply in the Colorado River. As described in the District's 2020 UWMP, approximately 40 million people rely on the Colorado River and its tributaries for water, with 5.5 million acres of land using Colorado River water for irrigation. The Colorado River flow has been above average (MWD, 2020 UWMP, 2021) in only three of the past 15 years (2000–2015) due to long-term drought conditions, which have produced current and future imbalances in water supply and demand in the Colorado River Basin. The long-term imbalance in future supply and demand is projected to be approximately 3.2 million acre-feet by the year 2060.

Further, the Bay-Delta similarly faces many challenges to its long-term sustainability, such as climate change threatening greater variability in floods and droughts. The Bay-Delta is key to the SWP's ability to deliver water to its agricultural and urban contractors. All but five of the SWP's 29 contractors receive water deliveries below the Bay-Delta. Sea-level rise, an effect of climate change, complicates efforts to manage salinity levels and preserve water quality in the Bay-Delta to ensure a suitable water supply for urban and agricultural use. As a result, the California Department of Water Resources has a statewide requirement for water suppliers to prepare an Urban Water Management Plan every 5 years that 1) assesses the reliability of water sources over a 20-year planning time frame; 2) describes demand management measures and water shortage contingency plans; 3) reports progress toward meeting a targeted 20% reduction in per-capita urban water consumption by the year 2020; and 4) discusses the use and planned use of recycled water. As a water

recycling project, the proposed Project benefits the larger statewide initiative to meet these listed requirements by producing more recycled water to reduce demand on imported water and increase statewide water reliability.

The proposed Project supports the District's **local and regional initiatives** to address sustainability by achieving a balanced water supply portfolio, including the following:

- Maximize Recycled Water Use: Existing use (2020) is 845 AFY with a forecasted increase to 1,350 AFY by 2035.
- Maximize Water Conservation: District customers are achieving approximately 20% water conservation.
- Over the past 25 years, District's population increased by approximately 10%, but potable water demands have dropped 36%.
- District's 2020 "Daily Per Capita Potable Water Demand" is currently at 140 gallons per capita per day GPCD compared to the California compliance target of 150 GPCD.
- Minimize Water System Losses and Customer Leaks: Implementation of Automated Meter Reading technology and an aggressive system leak detection programs to enhance water conservation and minimize leaks. SCWD's 3 to 4% water system loss is among the best in Orange County.

Although these efforts have been implemented, the reliance on imported water is still significant, and therefore, the proposed Project is greatly needed for the region.

### **Evaluation Criterion C – Drought Planning and Preparedness**

**Copy of Applicable Drought Plan, or Sections of the Plan, Appended to Application.** The District's drought planning is presented in the District's 2020 Water Shortage Contingency Plan (WSCP) and Chapters 2, 4, 6, 7, 8, and 10 and Appendix H of the District's 2020 Urban Water Management Plan (UWMP) and in Chapters 2, 4 and Appendix F of the 2018 IRWMP for South Orange County. The proposed recycling Project is supported by these planning documents; documents pages referenced below identifying specific ties to drought planning and preparedness are included in Appendix A.

#### **Plan Addresses Drought.**

**WSCP:** As described in Section 3 on Page 3-1, the District's WSCP anticipates a water supply shortage and provides pre-planned guidance for managing and mitigating such a shortage. The District's WSCP is a standalone document and is also summarized in Chapter 8 and presented in Appendix H of the 2020 UWMP. The WSCP serves as a drought plan because it includes six levels of water supply shortage response actions (Page 3-6 to 3-8). The WSCP was developed in response to: 1) Governor Brown issuing a drought emergency proclamation in January 2014 and signing the 2014 Executive Order that directs urban water suppliers to implement drought response plans; and 2) Governor Newsom issuing in April 2021, and then expanding in May and in July 2021, a drought emergency proclamation expanding the regional drought state of emergency to 50 of 58 California counties and signing the 2021 Executive Order calling on all Californians to voluntarily reduce their water use by 15% compared to 2020 levels.

**UWMP:** The 2020 UWMP supports the Project by acknowledging the likely scenario of future water shortages and communicating water shortage preparedness measures by summarizing the WSCP in Chapter 8 and including the entire WSCP in Appendix H of the 2020 UWMP.

**IRWMP:** The South Orange County IRWMP serves as a regional drought plan as demonstrated by its objectives and strategies to Increase Water Supply, Reliability, and Efficiency (Section 4.3.3, page 4-14 of the IRWMP). Per Section 4.2.1 (Page 4-7) of the IRWMP, "In developing the objectives, the stakeholders considered long-term regional planning conflicts and issues including identification of enhanced local water supplies to offset reduction of imported water to meet demands during times of drought".

#### **o Stakeholder Collaboration to Develop Drought Plan.**

**WSCP and UWMP:** The WSCP (as Chapter 8 and Appendix H of the UWMP), was developed with input

from multiple stakeholders, as described in Section 2.2 and Section 10.2 of the 2020 UWMP Pages 2-2 to 2-4 and 10-2 to 10-3, and included collaboration with MWD and MWDOC, among other South Orange County stakeholders. Input from MWDOC's 2020 UWMP was included to ensure consistency between the two documents as well as MWD's 2020 UWMP and 2020 IRP (MWD, 2021). The District encouraged community and public interest involvement in the plan update through public hearings and review of the draft document. Public hearing notifications were published in local newspapers and on the SCWD website and social media platforms. In addition, the District closely collaborated with adjacent local water suppliers MWDOC, SMWD, MNWD, Laguna Beach County Water District, and the Cities of Laguna Beach, Dana Point, San Clemente, San Juan Capistrano, Laguna Niguel, and Mission Viejo on the regional approach to mitigating drought. Project support is also shown in the letters from stakeholders included in Appendix B of this application.

**IRWMP:** The IRWMP was developed through an extensive public outreach and involvement process (Section 2.5 Page 2-21), including stakeholder workshops, public meetings, email and website communication. Section 2.6.1 (Page 2-23) describes the regional participation and coordination during IRWMP development and updates with regional stakeholders. This process included developing the objectives and strategies that address drought conditions. The IRWMP was developed through a collaborative process of 26 South Orange County IRWM member agencies and other local stakeholders, including non-profits (Surfrider, Audubon, MiOcean), tribal representatives, DAC members, and general public.

**o Climate Change Impacts to Water Resources or Drought in Drought Plan.**

**WSCP:** Section 1 (Page 1-1) of the 2020 WSCP defines a water shortage as when water supply available is insufficient to meet the normally expected customer water use at a given point in time, that may occur due to a number of reasons, such as drought, climate change, and catastrophic events. Section 3.2.2.2 (Page 3-4) of the WSCP also describes the District's annual assessment of supply and demand conditions related to supplemental imported water – which includes climate change projections within the District's service area.

**UWMP:** The District's 2020 UWMP considers climate change impacts to water resources and drought in Section 4.3.1.1 (page 4-5), Section 6.2.1 (Page 6-7), and Section 7.2.1 (Page 7-3). Impacts include a threat of more frequent, more intense, and longer lasting droughts, which will result in water deficits continued dryness in the Colorado River Basin, and increased temperatures, which will affect the percentage of precipitation that falls as rain or snow, and the amount and timing of mountain snowpack. Climate change is noted as a factor that affects the ability to estimate existing and future water delivery reliability, especially for imported water from the SWP and CRA, and supports implementation of recycled water projects to increase reliability of local supplies. The UWMP outlines California's concerns, including a reduction in Sierra Nevada Mountain snowpack, increased intensity and frequency of extreme weather events, prolonged drought, water quality issues associated with increase in wildfires, changes in runoff, and rising sea levels causing seawater intrusion of coastal groundwater basins, increased risk of Delta levee failure, and potential cutbacks on the SWP and Central Valley Project. Recycled water projects, like the proposed Project, are proposed to mitigate those impacts.

**IRWMP:** The drought plan portion of the IRWMP considers climate change impacts to water resources and drought in the IRWMP objectives, specifically in Objective WS4: Improve planning and awareness of water supply with consideration for climate change stresses (Section 4.3.3, Page 4-16). Maximizing water recycling is identified in Strategy WS-4-S6 to address climate change impacts to water resources in the region. The proposed recycled water Project implements this strategy to address climate change.

**Proposed Project Supported by an Existing Drought Plan.**

**WSCP:** Section 3.4.2 (Page 3-8 and 3-9) of the WSCP cites "long-term new water supply development or supply reliability enhancement projects" as potential water shortage response action.

**UWMP:** The proposed Project is supported by the UWMP in Chapter 6 (Page 6-27) because it states that demands for recycled water will continue to increase as the District continues to invest in recycled water

infrastructure improvements. Further, Section 6.6.6 outlines an optimization plan for implementation of recycled water projects, including the statement that “The District will continue to conduct feasibility studies for recycled water and seek out creative solutions such as funding, regulatory requirements, institutional arrangement, and public acceptance for recycled water use with MWDOC, [MWD] and other cooperative agencies.” In addition, recycled water supply projections (calculations and planning assumptions) shown in the UWMP include system expansion in the proposed Project area.

**IRWMP:** The proposed Project is included in Appendix F IRWM Project List as a project that is supported by and implements the goals, objectives, and strategies of the IRWMP.

**o Proposed Project Identified as a Potential Mitigation or Response Action.**

**WSCP:** Section 3.4.2 (Page 3-8 and 3-9 of the WSCP discusses supply augmentation as potential water shortage response action and notes “long-term new water supply development or supply reliability enhancement projects” – such as the proposed Project – in addition to supply augmentations made available to the District through MWDOC and MWD.

**UWMP:** Page 7-10 of the UWMP identifies increased use of recycled water as a water management tool and option for the District to maximize local resources and minimize the need to import water.

**IRWMP:** Section 4.3.3 (Page 4-18) discusses the Project as a drought response action by the following, “The IRWM Plan Project List (Appendix F) includes infrastructure improvements, desalting and recycling projects, and water use efficiency programs that are planned for the South Orange County. These projects generate not only drought year water supply, but “regular year” water supply as well. The proposed Project is included in Appendix F and serves a drought response action.

**o Proposed Project Implements a Goal or Need Identified in the Drought Plan.**

**WSCP:** By developing 347 AFY for the Phase II Project, and 1,265 AFY for the overall project of new local recycled water supply, the proposed Project helps to implement several goals identified in the 2020 WSCP, including groundwater sustainability (Section 1.2, Page 1-3); avoiding an extreme water shortage (Section 2.3.1, Page 2-5); and District goals for water supply reliability (Table 3-1, Page 3-7 and Page 3-8).

**UWMP:** The proposed recycled water Project continues to maintain the SBx7-7 goal of reducing urban water use by 20% by 2020 through providing new recycled water supply to reduce the demand on imported potable water. The Project helps maintain the per capita reduction goal (150 gallons per capita per day GPCD goal; 140 GPCD achieved) discussed on pages 5-2 to 5-4 of the UWMP. The Project will develop 347 AFY for the Phase II Project, and 1,265 AFY for the overall project of new local recycled water supply and is identified as a future supply action.

**IRWMP:** The Project implements the South Orange County IRWMP goal to Increase Water Supply, Reliability, and Efficiency. Section 4.3.3 (Page 4-15) identifies Objective: WS2: Increase the supply and use of non-potable water; and Strategy: WS-2-S3-Increase distribution of recycled and non-potable water through pipeline and conversion projects. The goal is met through implementing the objective and strategy for recycled water projects as a means to increase water supply reliability during times of drought.

**o How the Proposed Project is Prioritized in the Referenced Drought Plan.**

**WSCP:** The Project is prioritized in the WSCP by referring to the District’s more detailed 2017 Master Plan (or future adopted plan) that incorporates projects that could address added supply capacity as required by current or future demand projections. The proposed Project is identified in the District’s Infrastructure Master Plan Update (AECOM, 2017) in Section 6.5.3 “Proposed Recycled Water Supply Projects,” “Section 6.9 Summary of Recommended Improvements,” and is listed as the first project in Section 7.2.3 (Page 7-4 and Table 7-4) “Recommended CIP Program – Recycled Water System.”

**UWMP:** The 2020 UWMP identifies recycled water conversion projects as a priority to accomplish water use reduction and decrease the demand on imported water supplies. Section 6.6.5 (Page 6-27) identifies that demand growth is constrained by the limited recycled water infrastructure available to serve customers. In Section 6.9.1 (Page 6-33), District Initiatives, the Project is described under the heading “Recycled Water



System Expansion”. Without the proposed Project that directly alleviates and prevents a “bottleneck” in the supply of recycled water, proposed recycled water conversions would not be possible.

**IRWMP:** The proposed Project is listed in Appendix F IRWMP Project List as a priority project that is supported by and implements the goals, objectives, and strategies of the IRWMP.

#### Evaluation Criterion D - Severity of Actual or Potential Drought Impacts Addressed by the Project

##### Severity of Ongoing or Potential Drought Impacts if No Action is Taken.

The severity of ongoing and potential drought impacts addressed by the Project is significant due to a limited local water supply and a heavy reliance on imported water. SCWD provides water service to approximately 2 million visitors and 36,000 residential, commercial, and institutional customers within the Cities of Dana Point, Laguna Beach, and portions of San Juan Capistrano and San Clemente. Approximately 80% of the District's drinking water supply is imported over hundreds of miles, enhancing the impact of drought conditions and the reality of limited local water supplies. This heightened risk has served as the catalyst for the District's expansion of recycled water service. In response to the 2014 Drought, the Association of California Water Agencies released a report, “2014 Drought Impacts and Strategies for Resilience” (June 2014) that identified the South Orange County region as an area vulnerable to drought because it depends so heavily on imported water, even in a typical year. U.S. Drought Monitor data as of September 14, 2021, shows Orange County in a “severe drought”, with the majority of California in an “extreme” or “exceptional” drought. If no action is taken, the demand on imported potable water for irrigation continues to increase with drought conditions.

##### o Public health concerns or social concerns associated with current or potential drought conditions.

**Public Health Concerns or Social Concerns for DACs:** The Project will provide more reliable recycled water at a lower cost than imported water to DACs for irrigation uses. From a social equality and environmental justice perspective, affordable water rates are important to provide to members of DACs, which are shown in **Figure 2**. During droughts, irrigation water is the first to be reduced, creating more dust and allergens, as well as adding to heat islands, thereby negatively impacting public health. The Project provides more recycled water to meet public health needs. The District is 80% reliant on imported water and would have very limited water supplies if its imported water supply was interrupted.

**Increased Risk of Laguna and Aliso Canyon Wildfires:** The frequency, intensity, and size of wildfires has increased due to drought conditions across the state creating dry vegetation. The Project provides a new local source of recycled water available to combat the increasing threat, duration, and severity of wildfires. As identified in Section 3.8 of the 2018 South Orange County IRWMP, changes in hydrological conditions in the South Orange County region due to climate change include drought, damage to trees, and increased risk of wildfire and erosion. The District's service area includes portions of Laguna Beach and high fire risk areas in Laguna Canyon and Aliso Canyon. The 2019 City of Laguna Beach Wildfire Mitigation and Fire Safety Report describes that nearly all of the City of Laguna Beach and its surrounding 16,000 acres of open space are designated by the state's CalFire agency as a Very High Fire Hazard Severity Zone because of hilly terrain, significant vegetation, hot, dry summer and fall seasons, and high-speed Santa Ana winds. The proposed Project will provide up to 347 AFY of recycled water (1,265 AFY for the overall project) that reduces potable water demand and increases supply available for fire suppression locally and regionally.

**Imported Drinking Water Impacts from Interruptions:** The Project increases water supply reliability by providing 347 AFY of recycled water supply in place of drinking water supply (and 1,265 AFY for the overall project). The drought has impacted drinking water supplies in the District by decreasing the reliability of imported water. MWDOC's 2018 South OC Reliability Study highlighted the vulnerability of the District to prolonged interruptions of imported water deliveries and was prompted in part by the December 13, 1999 failure of the Allen-McColloch Pipeline, which interrupted imported water delivery for eight days. The District

only has one point of delivery of treated imported water from MWD, which makes it vulnerable to seismic events and droughts that could result in no treated imported water for up to 60 days. Providing system reliability benefits is crucial for combatting the ongoing drought conditions.

**San Juan Groundwater Basin Impacts:** If the District's water service is interrupted by a wildfire or earthquake, the District has only the San Juan Basin or recycled water sources for the community. The San Juan Basin is one of the only groundwater basins in South Orange County, is utilized by four agencies, and has extremely limited capacity estimated at 27,000 AF. The Project will reduce drought impacts on the overdrafted San Juan Basin by providing a new source of recycled water supply for irrigation. As the drought persists, imported water supplies will be limited, and groundwater use will increase. Recharge of the Basin is from flow in San Juan Creek, Oso Creek, and Arroyo Trabuco, as well as rainfall and irrigation infiltration. However, the drought and voluntary and mandatory reduced irrigation with potable water has decreased the recharge to the basin. Some of the storage capacity cannot be used because of potential sea water intrusion, economic considerations, and increasingly poor water quality. As less water recharges the basin due to the drought, the potential for sea water intrusion and poor water quality increase. The drought conditions will continue to cause decreased groundwater quality and quantity due to reduced stream flow and natural recharge. The Basin's reduced supply and storage capacity limits regional local resources.

**o Ongoing or Potential Environmental Impacts - Natural Area Environmental Impacts.** Drought decreases water quality for habitats throughout the region. Dry and unusually windy winters and early springs threaten the habitat as the fire potential increases. Locally, the proposed Project will benefit the recovery of federally listed Steelhead Trout in the San Juan Creek by ensuring irrigation flows make their way to creeks and streams to enhance water quality and support local habitat. By providing up to 1,265 AFY of recycled water, the Project ensures irrigating landscaping upstream of the natural ecosystems will be available to support the natural habitats, including coastal sage scrub, and water quality. Coastal sage scrub has been negatively impacted by the extended drought punctuated by intense rainfall Goldstein, Leah and Suding, Katherine M. "Intra-annual rainfall regime shifts competitive interactions between coastal sage scrub and invasive grasses" (2014) the Ecological Society of America). Therefore, the Project's recycled water protects local habitat for fish and vegetation in the San Juan Creek watershed.

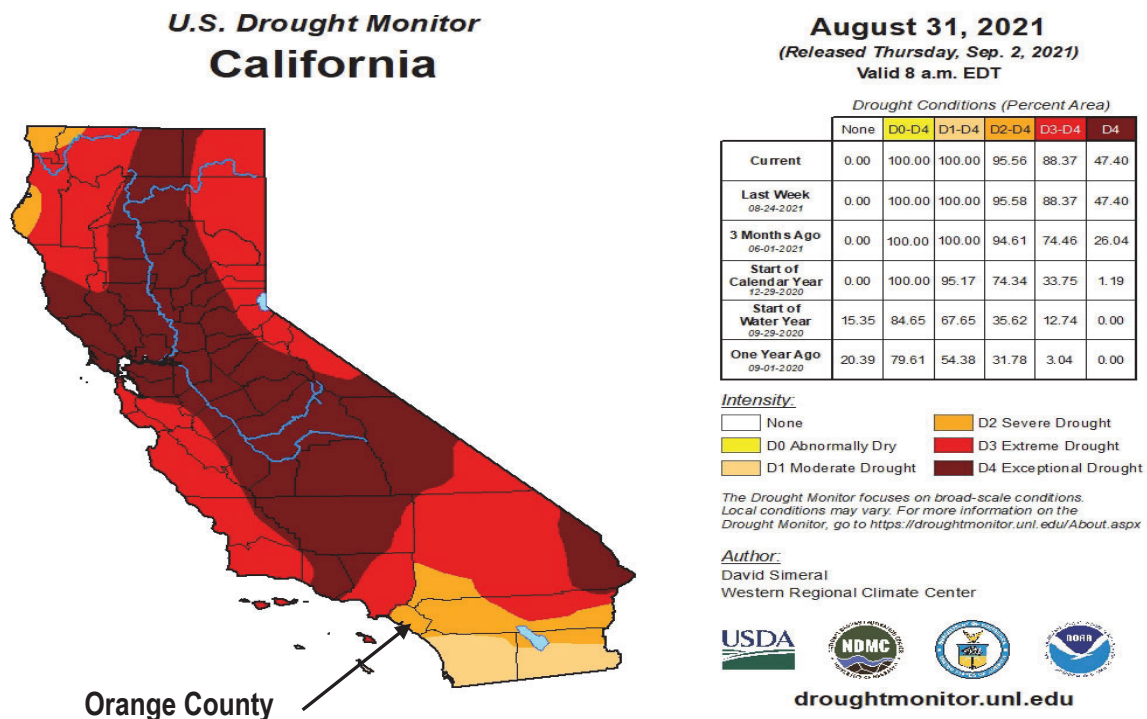
**o Economic Losses and Impacts Associated with Drought Conditions - Recreation & Tourism.** The Project alleviates economic losses by providing recycled water for irrigation in place of imported water; recycled water is available even during times of drought since it is dependent on wastewater, which will continue to be produced due to continuous toilet flushing and washing purposes. The District is currently 80% reliant on imported water supplies for its potable water supply, and therefore a large portion of the District's water supply is threatened by current drought conditions. Without the Project providing a reliable source of recycled water, the District's tourism and recreational areas may face economic losses. MWDOC retained the services of the Orange County Business Council and found that the economic impacts from droughts ranged up to \$1.7 billion, depending on shortage scenario. Even a relatively short 10-day 20% reduction carries a projected impact of over \$60 million. These numbers illustrate the tremendous potential cost from water system outages or short-term drought.

The District's service area hosts over 2 million visitors annually due to the recreational areas of Doheny State Beach Park, the Dana Point Harbor, and other area beaches that serve as heavily-used year-round recreation destinations. The estimated total overnight guest spending in Dana Point alone is \$450 million per year, and this does not include hotels and resorts in south Laguna Beach, which is part of the District's service area. This tourism industry depends on a secure, reliable water supply to meet the needs of their clientele and help support the local economy. The Doheny State Beach and surrounding park sites provide a valuable recreational, educational, and cultural resource for all users, including the DAC population who visit the park. Doheny State Beach is accessible via public transit (Orange County Transit Authority bus and Metrolink) and does not charge an entrance fee for walk-in visitors. In 2002, out of 1,833,838 visitors, 25% were free visitors

who did not drive into the park. A survey conducted in 1999 indicated that 26% of the park users had an income of less than \$30,000. In January 2005, the park began to provide free Wi-Fi at Doheny State Beach, which will also provide a valuable educational resource for its visitors, especially for individuals who may not have access to internet at their homes. These recreational areas are an ideal option for inexpensive, quality recreational, educational and cultural experiences for both local residents and DACs.

**o Other Drought-Related Impacts - Tensions Over Imported Water and Groundwater Supplies.** The Project addresses heightened competition for finite water supplies by increasing recycled water to offset limited imported water and groundwater supplies. Drought conditions result in a heightened competition for imported water within MWD's service area and limited groundwater supplies in the San Juan Basin. The District is 80% reliant on imported water from MWD and MWDOC for its potable water supplies. With over 19 million people in MWD's service area, Southern California is heavily reliant on imported water supplies to meet demands. The Bureau of Reclamation forecasted that demands will exceed available supply in the Colorado River. This can result in competition for limited water supplies through the Delta and the Colorado River Basin. Locally, the San Juan Basin's groundwater supply is shared among SCWD, SMWD, MNWD, and San Juan Capistrano. As described previously, the drought has decreased the recharge to this basin, and some of the storage capacity cannot be used because of potential sea water intrusion, economic considerations, and increasingly poor water quality; this has caused tension among local agencies over limited available local supply. The Project reduces tension locally because it increases local water supply reliability by reducing the need for potable water from imported and groundwater sources.

**Describe existing or potential drought conditions in the project area.** Existing and potential drought conditions in the Project area are shown in Figure 3.



**o Is the project in an area that is currently suffering from drought or which has recently suffered from drought?** The proposed Project is located in South Orange County, an area that is currently suffering from drought. California faced unmatched drought conditions in 2015 and 2016 after experiencing the hottest year on record in 2014 and the driest year ever recorded in 2013. 2015 had some of the warmest and driest

months on record, including a record low snowpack in the Sierra Nevada. Even with the storms of 2020, the U.S. Drought Monitor declared the County of Orange, California, as in severe drought in 2021 as shown in **Figure 3**, and the majority of California is experiencing extreme to exceptional drought conditions. The drought's impacts have been felt by communities in the District's service area since 2014 when Governor Brown issued a drought emergency. In July 2021, Governor Newsom signed an executive order calling on all Californians to voluntarily reduce their water use by 15% compared to 2020 levels and proclaimed the regional drought state of emergency in 50 of 58 total California counties.

**o Projected Increases in Severity or Duration of Drought from Climate Change:** The California Department of Water Resources, based on historical data, forecasts that snowpack in the Sierra Nevada will fall 25 to 40% below the historical average by 2050. The California Climate Science and Data for Water Resources Management (DWR, June 2015), identifies how droughts are likely to become more frequent and persistent during this century. The California Climate Science and Data for Water Resources Management projections include: A) Temperature Projections - Scripps Institution of Oceanography indicates that by 2060-2069 mean temperatures will be 3.4 to 4.9 °F higher across the state than they were in the period 1985-94. B) Precipitation Projections – Most climate model precipitation projections for the state anticipate drier conditions in Southern California, with heavier and warmer winter precipitation in Northern California. C) Snowpack Projections - Based on modeling research at Scripps Institution of Oceanography, by the end of the century, the Sierra snowpack may experience a 48-65% loss from the 1961-1990 average. Rising temperatures are expected to increase evapotranspiration from vegetation and increase water loss due to evaporation in reservoirs. These factors will worsen the imbalance between increasing water demand from rapid population growth and decreasing water supplies from the Colorado River. This has increased the urgency of local resource development in the District's service area. Since the District's potable water supply is 80% imported water from the SWP and CRA systems, recycled water projects like the proposed Project are needed to address future drought conditions.

### Evaluation Criterion E – Project Implementation

**Project Implementation.** The Project is capable of proceeding immediately after execution of the agreement with Reclamation. **Table 3** shows the Project schedule with a start date of July 2021, construction beginning September 2022, and completion of the Project by August 2023. The tasks outlined in this section demonstrate how the Project will be implemented. No new policies are required, but District Board approval of the construction contract will be required. The following presents the Project scope of work:

**Task 1: Project Management.** Under this task, the District will prepare documentation relating to Project funding, manage internal/external forces responsible for the preparation of necessary reports and contract documents, manage interface between various Project stakeholders, including the City of Dana Point and County of Orange, administer the construction contract, coordinate necessary testing, and monitor Project progress.

**Task 2: Reporting.** With the support of District personnel, the District's consultant, Soto Resources will prepare progress reports detailing work completed during each reporting period. Reporting will be performed on a semiannual basis, including submittal of Financial Reports and Interim and Final Performance reports, as well as Financial Reimbursement Requests using the online Automated Standard Application for Payments (ASAP) system through the System for Award Management (SAM). Interim Performance and Final Performance Reports will be in accordance with requirements included in the financial assistance agreement. Performance Reports will include information regarding the status of the Project's Performance Measures.

**Task 3: CEQA Documentation.** California Environmental Quality Act (CEQA) compliance for the Project was initially met with the preparation of a Mitigated Negative Declaration, Mitigation and Monitoring Program, and Notice of Determination completed in 2017. The California State Water Resources Control Board (SWRCB) is currently reviewing these documents for environmental and cultural compliance to meet CEQA



plus federal cross cutter requirements to comply with National Environmental Policy Act (NEPA) for potential California Clean Water State Revolving Fund (CWSRF) loan funding. The SWRCB is taking the federal lead role for CEQA plus compliance NEPA compliance, as shown in Task 9 and will complete consultation with State Historic Preservation Office (SHPO), as SWRCB's cultural review is already underway as part of the Project's SWRCB CWSRF loan application process. The District anticipates a Finding of No Significant Impact (FONSI) would be issued for the Project.

**Task 4: Permitting.** It is anticipated that encroachment permits from the City of Dana Point will be required for work that will take place within the public right-of-way. Final approval from the District Board of Directors will be required prior to proceeding with the Project.

**Task 5: Design.** Pre-design activities started in 2017, and a Preliminary Design Report was prepared by Dudek in December 2017. Therefore, no costs for pre-design are included. Final design is currently underway and is anticipated to be completed in May 2022. Final design will include completing 100% plans and specifications that will be used to bid the Project to contractors.

**Task 6: Contract Services.** Activities necessary to secure a contractor and award the contract include development of bid documents, preparation of advertisement and contract documents for construction contract bidding, conducting of pre-bid meeting, bid opening and evaluation, selection of the contractor, award of contract, and issuance of notice to proceed.

**Task 7: Construction Administration.** The District will administer the construction contract for installation of the pipelines and connections including completed facility testing, and coordinate necessary cross connection testing and construction of the PRV. District will provide and coordinate engineering support services and information or clarification as requested by the contractor. Inspection of the construction will be performed by District staff.

**Task 8: Construction/Implementation Activities.** Construction activities will conform to applicable Standard Plans and Specifications for SCWD, Public Works Construction, County of Orange, and applicable State and federal laws. Construction will meet SCWD Design Criteria and all applicable standards, including those of the American Water Works Association. Construction activities include:

**Subtask 8a: Mobilization.** This subtask includes the acquisition of necessary bonds and insurance, preparing submittals for review, ordering materials, moving contractor facilities and equipment to predetermined staging areas and other similar miscellaneous activities.

**Subtask 8b: Project Construction.** The Project construction shall begin once the contractor has site preparation work completed and at the direction of the District. The work to be performed is the installation of 5,700 feet of new 14-inch diameter recycled water pipelines and PRV, and startup of operations.

**Subtask 8c: Performance Testing and Demobilization.** Periodic testing of installed pipelines will occur throughout the Project. As individual reaches pass testing, they may be put into service. Demobilization of contractors' facilities will occur once the facilities pass final testing requirements. Demobilization will include removal of material and equipment, cleanup of the site, restoration of damaged areas to their original conditions and other similar activities.

**Task 9: Environmental and Regulatory Compliance.** This task includes environmental and regulatory compliance review by Reclamation or the recipient in complying with environmental regulations including NEPA, National Historic Preservation Act (NHPA), and SHPO) applicable to a Reclamation grant, including costs associated with required documentation of environmental compliance, analyses, permits, or approvals. This task includes work separate from Task 3, CEQA Documentation.

**Table 3** below presents the Project schedule and shows the stages and duration of the proposed work, including major tasks, milestones, and dates.

**Table 3. Project Schedule with Dates**

Project Task	Start Date	End Date
Anticipated Award Timeframe	Late 2021	Early 2022
Task 1: Project Management	July 2021	August 2023
Task 2: Reporting	September 2022	May 2023
Task 3: CEQA Documentation	August 2021	December 2021
Task 4: Permitting	July 2022	September 2022
Task 5: Final Design	July 2021	May 2022
Task 6: Contract Services	July 2021	August 2023
Task 7: Construction Administration	June 2022	August 2023
Task 8: Construction/Implementation Activities	September 2022	May 2023
Subtask 8a: Mobilization and Demobilization	September 2022	May 2023
Subtask 8b: Project Construction	September 2022	May 2023
Subtask 8c: Performance Testing and Demobilization	April 2023	May 2023
Task 9: Environmental and Regulatory Compliance	June 2022	May 2023

#### Evaluation Criterion F – Nexus to Reclamation

**Water Service, Repayment, or O&M Contract with Reclamation.** No, the District does not have a water service, repayment, or operations and maintenance (O&M) contract with Reclamation.

**Applicant Receipt of Reclamation Water.** Yes, the District receives Reclamation water from MWD via MWDOC, which currently relies on the CRA and the SWP as its primary sources of water. Reclamation manages the Colorado River system from which MWD imports water.

**Project Benefits to a Reclamation Project Area or Activity.** The proposed Project will benefit Reclamation's water supply in the Colorado River through its nexus with the District's Reclamation-funded Doheny Ocean Desalination Project, the Santa Ana Watershed Basin Study, and Reclamation's Colorado River Basin Study by making up to 1,265 AFY of potable water available through reducing imported water demands. The Project supports the District's Doheny Ocean Desalination Project via the cooperative agreement with Reclamation's WaterSMART: Desalination Construction Projects under the WIIN Act (executed in 2019). The Project's shared goal is to reduce dependence on imported water and protect San Juan Basin groundwater supplies. The proposed Project is connected to this project because it will decrease potable water used for irrigation throughout the District's service area, expanding water use efficiency to protect the San Juan Basin and reduce demand on imported supplies from the CRA. The Project, located in Orange County, also directly supports adaptation strategies in the Santa Ana Watershed Basin Study (a partnership between the Santa Ana Watershed Project Authority and Reclamation) by reducing demand on imported water and promoting ongoing implementation of the state's 20x2020 Water Conservation Plan. Lastly, the Project will increase the availability of Reclamation's water supply in the Colorado River Basin. The Colorado River Basin Plan includes ideas to resolve the supply and demand imbalance, including water recycling. Reclamation manages the Colorado River system from which MWD imports water. The Project is associated with the Colorado River Basin, as the District receives approximately 80% of its supply from MWD via MWDOC, which relies on the CRA and the SWP as its primary sources of water. Imported water savings associated with the Project translate to more water remaining in these two fragile systems. The Project benefits Reclamation by reducing imported water supplies from the Colorado River and northern California; thereby protecting the Colorado River Basin. By reducing the amount of water imported, this water in effect remains in the basin from which it originates or is made available to meet other demands.

**Tribal Designation.** The District is not a Tribe.

## Project Budget

The project budget includes: 1) Funding Plan and Letters of Commitment, 2) Budget Proposal, (3) Budget Narrative.

## Funding Plan and Letters of Commitment

**Describe how the non-Federal share of project costs will be obtained.**

The District has the capacity to fund the non-Reclamation Project costs from allocated budget for the Project. The District applied for and has been selected to receive loan funding through the California Clean Water State Revolving Fund CWSRF . In Fiscal Year FY) 2019, the District issued \$25 million in bond financing and in FY 2020, the District issued \$32 million in bond financing to fund Capital Improvement Program projects with useful lives exceeding 30 years, taking into consideration that ratepayers through the years would pay their proportionate share of the asset. Therefore, District-acquired bond funding and/or CWSRF loan funding will provide the non-federal source to fund the proposed Project.

**Please identify the sources of the non-Federal cost share contribution for the project:**

- ***Any monetary contributions by the applicant towards the cost-share requirement and source of funds (e.g., reserve account, tax revenue, and/or assessments):***

The District will provide its total non-federal cost share from the District Bond Funding in the amount of \$2,331,353.

- ***Any costs that will be contributed by the applicant.*** None beyond the Bond Funding cost share.
- ***Any third-party in-kind costs (i.e., goods and services provided by a third party).*** None
- ***Any cash requested or received from other non-Federal entities.*** None
- ***Any pending funding requests (i.e., grants or loans) that have not yet been approved and explain how the project will be affected if such funding is denied.*** Since the CWSRF Funding will not likely be secured prior to potential Reclamation award, the District is committed to using its Bond Funding to provide the total non-federal cost share.
- There are no funding partners.

**Please identify whether the budget proposal includes any project costs that have been or may be incurred prior to award.**

The Budget Proposal includes cost beginning in July 2021 for Tasks 1, 3, 5, and 6. Since award is anticipated late-2021 to early-2022, costs in these tasks are anticipated to include six to eight months prior to award.

**For each cost, describe:**

### Task 1. Project Management

**The Project expenditure and amount:** \$3,000

**The date of cost incurrence:** July 2021 – date of award

**How the expenditure benefits the Project:** Project Management activities support development of the Project and activities to easily move the Project forward upon award of grant funding.

### Task 3. CEQA Documentation

**The Project expenditure and amount:** \$4,620

**The date of cost incurrence:** July 2021 – date of award

**How the expenditure benefits the Project.** Under CEQA, a Mitigated Negative Declaration, Mitigation and Monitoring Program, and Notice of Determination have been prepared for the Project. Completion of the

CEQA plus compliance activities is anticipated to result in a FONSI due to the bulk of the work being completed within existing street right of way and/or within an existing District facility. This work will allow the Project to begin promptly upon award of funding.

#### **Task 5. Final Design**

**The Project expenditure and amount:** \$10,000

**The date of cost incurrence:** July 2021 – date of award. Although final design has begun, costs for final design are only included in the Project budget beginning in July 2021.

**How the expenditure benefits the Project:** Since pre-design is complete, continuing with Final Design work during the pre-award period will allow the Project to quickly be implemented upon award of funding.

#### **Task 6. Contract Services**

**The Project expenditure and amount:** \$500

**The date of cost incurrence:** July 2021 – date of award

**How the expenditure benefits the Project:** Activities during the pre-award period to prepare for bid-documents, advertisement and contract documents, pre-bid meeting, and bid opening and evaluation will allow the Project to quickly move forward with acquisition of consultants and contractors upon award of funding.

### **Budget Proposal**

The District will fund 53.8% (\$2,331,353) of the Project costs, and the District is requesting the remaining 46.2 % (\$2,000,000) of the total Project costs as shown in **Table 4**. **Table 5** provides the summary of funding sources.

**Table 4. Total Project Costs**

<b>Source</b>	<b>Amount</b>
Costs to be reimbursed with the requested Federal funding	\$2,000,000
Costs to be paid by the applicant	\$2,331,353
Value of third-party contributions	\$0
<b>TOTAL PROJECT COST</b>	<b>\$4,331,353</b>

**Table 5. Summary of Project Federal and Non-Federal Funding Sources**

	<b>Amount</b>
Non-Federal Entities	
SCWD Bond Funding	\$2,331,353
<b>Non-Federal Subtotal</b>	<b>\$2,331,353</b>
<b>Other Federal Subtotal</b>	<b>\$0</b>
<b>Requested Reclamation Funding</b>	<b>\$2,000,000</b>

**Table 6** provides the Budget Detail by cost categories Budget Item Description . No In-Kind funding is proposed or included. Salaries and Wages are consistent with the detail shown in **Table 7**, and Contractual/Construction costs are consistent with **Table 8** and **Table 9**, which provides the detail to those costs. Subsequent pages present the Budget Narrative.



**Table 6. Project Budget Estimate**

Budget Item Description	Computation		Quantity Type	Total Cost
	\$/Unit	Quantity		
Salaries and Wages				
Taryn Kjolsing	\$85.0962	680	Hours	\$57,865.42
Contracts Manager	\$53.6039	10	Hours	\$536.04
Senior Construction Inspector	\$62.1600	290	Hours	\$18,026.40
Construction Inspector	\$44.0100	290	Hours	\$12,762.90
Distribution System Supervisor	\$62.1600	20	Hours	\$1,243.20
Recycled Water/Conservation Manager	\$70.3200	20	Hours	\$1,406.40
Distribution System Operator	\$33.4717	20	Hours	\$669.43
Subtotal				\$92,510
Fringe Benefits				
Not included for this grant				\$0
Travel				
None				\$0
Equipment				
None – included in Contractor costs				\$0
Supplies and Materials				
None – included in Contractor costs				\$0
Contractual/Construction				
Consultant A – Grant Reporting	\$165	60.6	Hours	\$9,995
Consultant B – CEQA Documentation Environmental	\$2,940	1	LS	\$2,940
Consultant C – CEQA Documentation Cultural	\$1,680	1	LS	\$1,680
Consultant D – Design Engineer	\$350,000	1	LS	\$350,000
Consultant E – Construction Manager/Inspector	\$300,000	1	LS	\$300,000
Construction Contractor	\$3,574,228	1	LS	\$3,574,228
Subtotal				\$4,238,843
Other				
Not applicable				\$0
TOTAL DIRECT COSTS				\$4,331,353
Indirect Costs				
Not applicable				\$0
TOTAL ESTIMATED PROJECT COSTS				\$4,331,353

## Budget Narrative

### Salaries and Wages

Indicate the Project Manager and other key personnel by name and title; others by title alone. Indicate salaries and wages, estimated hours or % time, and rate of compensation. The labor rates should identify the direct labor rate separate from the fringe. Labor rates & hours shall be displayed by task.

The Project Manager and other key District personnel are shown by Project task in **Table 7** along with estimated hours, rate of compensation, and total Salaries and Wages costs for each task for the Project duration, consistent with the Project Schedule in **Table 3**. **Table 7** is consistent with the totals by District personnel included in **Table 6**. Salaries and Wages costs total \$92,510. Only labor rates are shown for this proposal; no fringe benefits are proposed, as the District is proposing to carry the cost of fringe benefits. The labor rates were implemented by the District on July 1, 2021, and can be found on the District website.

**Table 7. Project Budget for Salaries and Wages by Task**

Task	Activity & Employee	Hours	Rate	Total Costs
Task 1	Project Management <b>Project Manager Taryn Kjolsing)</b>	160	\$85.0962	\$13,615.39
Task 2	Grant Management and Reporting <b>Project Manager Taryn Kjolsing)</b>	60	\$85.0962	\$5,105.77
Task 3	CEQA Documentation <b>Project Manager Taryn Kjolsing)</b>	20	\$85.0962	\$1,701.92
Task 4	Permitting <b>Project Manager (Taryn Kjolsing)</b>	10	\$85.0962	\$850.96
Task 5	Final Design <b>Project Manager (Taryn Kjolsing)</b>	150	\$85.0962	\$12,764.43
Task 6	Contract Services <b>Project Manager (Taryn Kjolsing)</b>	20	\$85.0962	\$1,701.92
	<b>Contracts Manager</b>	10	\$53.6039	\$536.04
Task 7	Construction Administration <b>Project Manager (Taryn Kjolsing)</b>	80	\$85.0962	\$6,807.70
Task 8a	Mobilization <b>Project Manager (Taryn Kjolsing)</b>	20	\$85.0962	\$1,701.92
Task 8b	Project Construction <b>Project Manager (Taryn Kjolsing)</b>	100	\$85.0962	\$8,509.62
	<b>Senior Construction Inspector</b>	250	\$62.1600	\$15,540.00
	<b>Construction Inspector</b>	250	\$44.0100	\$11,002.50
	<b>Distribution System Supervisor</b>	20	\$62.1600	\$1,243.20
	<b>Distribution System Operator</b>	20	\$33.4717	\$669.43
	<b>Recycled Water/Conservation Manager</b>	20	\$70.3200	\$1,406.40
Task 8c	Performance Testing and Demobilization <b>Project Manager (Taryn Kjolsing)</b>	20	\$85.0962	\$1,701.92
	<b>Senior Construction Inspector</b>	40	\$62.1600	\$2,486.40
	<b>Construction Inspector</b>	40	\$44.0100	\$1,760.40
Task 9	Environmental and Regulatory Compliance <b>Project Manager (Taryn Kjolsing)</b>	40	\$85.0962	\$3,403.85
<b>TOTAL SALARIES AND WAGES</b>				<b>\$92,510.00</b>

A summary of the salaries and wages by task and the estimated time to complete each task is identified in **Table 7**, based on the project schedule in **Table 3**, and are described below:

**Task 1. Project Management:** The Project Manager is responsible for the overall success of the Project. This includes managing the various staff members, consultants and contractors that are required to complete the Project. A total of 160 hours is allocated directly for project management in the Project budget.

**Task 2. Reporting:** The Project Manager will oversee the work of Consultant A, shown below in Table 8, for all activities related to grant management and reporting. Reporting will consist of a review of documentation prepared for Reclamation submittal. A total of 60 hours is allocated for review and consultation for the duration of the grant term.

**Task 3. CEQA Documentation:** The Project Manager will oversee preparation of CEQA plus documentation by Consultants B and C. Work will consist of completing CEQA Plus for the Project and providing all applicable documentation to the California SWRCB. A total of 20 hours is estimated for the Project Manager for this effort.

**Task 4. Permitting:** The Project Manager will oversee acquisition of the necessary permits for the Project, including encroachment permits and final approval from the District Board of Directors. A total of 10 hours is estimated for the Project Manager this effort.

**Task 5. Final Design:** The Project Manager will oversee all design work conducted by Consultant D to prepare the final design documents. A total of 150 hours is estimated for the Project Manager for this effort.

**Task 6. Contract Services:** The Project Manager and the Contracts Manager are anticipated to spend a total of 30 hours during the Project for developing, reviewing and executing contracts associated to reporting, design, and construction activities. Activities include, where required, development of bid documents, preparation of advertisement and contract documents for construction contract bidding, conducting of pre-bid meeting, bid opening and evaluation, selection of the contractor, award of contract, and issuance of notice to proceed.

**Task 7. Construction Administration:** The Project Manager will be responsible for administering the construction contract for the installation of the pipelines and connections, PRV construction, including completed facility testing, and coordinate necessary cross connection testing. The Project Manager is anticipated to spend a total of 80 hours to provide and coordinate engineering support services and information or clarification as requested by the contractor.

**Tasks 8a and 8b: Mobilization and Construction:** Construction is anticipated for a 9-month period, taking the majority of the time on the Project. An estimated combined total of 680 hours of Construction Management by District staff will be required based on prior project experience.

The Project Manager will spend approximately 20 hours for mobilization and approximately 11 hours per month on the Project during construction. Anticipated activities include site visits; responding to contractor questions; reviewing/approving submittals and progress payments; negotiating change orders; and ensuring overall compliance with the Project plans and specifications.

Inspection of the construction will be performed by District staff. The Senior Construction Inspector and the Construction Inspector will each spend approximately 28 hours per month on the Project, for a total of 250

hours each, during construction. Both Inspectors will be on site each day overseeing the contractor and his work to ensure compliance with the Project plans and specifications.

Construction of this Project will involve staff from the District's Operations Department, including the Distribution System Supervisor and Distribution System Operator. These staff members will be required during shutdown of the existing recycled water mains so that the tie in of the new construction can occur. It is anticipated that this work will take a total of approximately 20 hours each.

The Recycled Water Conservation Manager will be on site while the new recycled water services are being installed. A total of 20 hours is estimated for this effort.

**Task 8c. Performance Testing and Demobilization:** The Project Manager is estimated to spend 20 hours during performance testing and demobilization. The Senior Construction Inspector and the Construction Inspector are anticipated to spend 40 hours each during performance testing and demobilization. Work will include ensuring the newly installed recycled water mains and associated appurtenances are per District standards, site cleanup, and various punch list items.

**Task 9. Environmental and Regulatory Compliance:** The Project Manager will spend an estimated 40 hours complying with environmental and regulatory requirements. The Project Manager will provide submittals as required and answer inquiries from various regulatory agencies regarding the Project.

**The budget proposal and narrative should include estimated hours for compliance with reporting requirements, including final project and evaluation.**

Reporting activities will be completed in Task 2 by various SCWD staff and Consultant A, Soto Resources. Estimated hours for reporting are based on the approximately Project schedule as shown in **Table 3** and the level of effort on similar District projects. Reporting hours and costs are shown in **Table 6** and **Table 7** as Task 2 for each staff member and consultant, and include negotiation, execution and management of the financial assistance agreement with Reclamation, semiannual submission of Federal Financial Reports and Project Performance Reports, and final Project evaluation.

**Generally, salaries of administrative and/or clerical personnel will be included as a portion of the stated indirect costs. If these salaries can be adequately documented as direct costs, they should be included in this section; however, a justification should be included in the budget narrative.**

The District rates, including administrative personnel, are included as direct costs and are supported by the District Pay Schedule Effective July 1, 2021, available on the District's webpage. These salaries are documented as direct costs for the administrative personnel because they will include directly related, Project-specific efforts required to accomplish the Project, such as initiating purchase requisitions for contract services for vendor/consultant/contractor. Upon approval by the District, Purchase Orders would then be executed for the Project. No indirect costs are proposed for the Project.

#### ***Fringe Benefits***

**Indicate rates/amounts, what costs are included in this category, and the basis of the rate computations.**

Fringe benefits are not included for the Project.



### **Travel**

No travel costs are included for the Project.

### **Equipment**

All equipment will be the responsibility of the contractor and will not be purchased separately by the District. Therefore, no equipment costs are included for the Project.

### **Materials and Supplies**

Itemize supplies by major category, unit price, quantity, and purpose, such as whether the items are needed for office use, research, or construction. Identify how these costs were estimated i.e., quotes, past experience, engineering estimates, or other methodology). *Note: If the materials/supplies will be furnished and installed under a construction contract, the equipment should be included in the construction contract cost estimate.*

No materials and supplies costs are included for the Project.

### **Contractual/Construction**

Identify all work that will be accomplished by consultants or contractors, including a breakdown of all tasks to be completed, and a detailed budget estimate of time, rates, supplies, and materials that will be required for each task. For each proposed contract, identify the procurement method that will be used to select the consultant or contractor and the basis for selection. Please note all procurements with an anticipated aggregate value that exceeds the Simplified Acquisition Threshold (currently \$10,000) must use a competitive procurement method see 2 CFR §200.320 – *Methods of procurement to be followed* . Only contracts for architectural/engineering services can be awarded using a qualifications-based procurement method. If a qualifications-based procurement method is used, profit must be negotiated as a separate element of the contract price. See 2 CFR §200.317 through §200.327 for additional information regarding procurements, including required contract content.

Contractual activities by consultants/contractor are shown in **Table 8**. Contractual activities to be performed by the selected consultants/contractor will include Task 2: Grant Management and Reporting, Task 3: CEQA Documentation, Task 5: Design, and Task 8: Construction/Implementation Activities. Please refer to the Technical Project Description section for a description of each task. Qualified consultants/contractor will be selected for the Project implementation through an established District competitive bid process.

**Consultant A** – Soto Resources will provide grant management and reporting for the duration of the grant term under Task 2. Grant management and reporting is estimated at \$9,995.

**Consultant B** – Environmental Consultant will provide Environmental Compliance Services for the Project. Services will be included in Task 3: CEQA Documentation and a total cost of \$2,940 is included in the budget.

**Consultant C** – Cultural Consultant will provide Environmental Compliance Services for the Project. Services will be included in Task 3: CEQA Documentation and a total cost of \$1,680 is included in the budget.

**Consultant D** – Design Engineer's budget is approximately 8% of the total Project cost. The estimate is based on the District's experience with similar projects and preliminary proposals received from consultants as a result of a competitive bid process. Pre-design activities started in 2017, and a Preliminary Design Report

was prepared by Dudek in December 2017. Therefore, no costs for pre-design are included. Final Design has begun, although only costs for Final Design beginning in July 2021 are included in the budget.

**Consultant E** – Construction Manager/Inspector will provide inspection during construction. The construction inspection budget is approximately 7% of the total Project cost. The estimate is based on the District's experience with similar projects.

**Construction Contractor** – The District, through a competitive bid process, will select a qualified consultant/contractor from the District's pre-approved construction contractors list based on experience with similar projects. The Construction Contractor's budget is approximately 83% of the total Project cost. Cost estimates were developed based on similar projects within the District.

Task budget estimate detail by each Consultant/Contractor is shown in **Table 8**. Lump sum cost estimates are based on actual costs in Phase I of the overall project. Once contracts are in place for each Consultant/Contractor, detailed/line-item costs can be provided to support cost estimate.

The total contractual/construction cost is estimated at \$4,238,843.

**Table 8. Project Contractual/Construction Costs**

Consultant	Task	Activity	Units/ Hours	Rate	Total Costs
Consultant A - Soto Resources Grant Management	Task 2	Grant Management and Reporting	60.6	\$165	\$9,995
	Subtotal				\$9,995
Consultant B – Environmental	Task 3	CEQA Documentation 5% contingency cost included in total costs.	1	LS	\$2,940
Consultant C – Cultural			1	LS	\$1,680
		Subtotal			\$4,620
Consultant D – Design Engineer	Task 5	Final Design 10% contingency cost included in total costs.	1	LS	\$300,000
	Task 8b	Project Construction 10% contingency cost included in total costs.	1	LS	\$50,000
	Subtotal				\$350,000
Consultant E – Construction Manager/Inspector	Task 8	Project Construction 10% contingency cost included in total costs.	1	LS	\$300,000
	Subtotal				\$300,000
Construction Contractor	Task 8	Project Construction 20% contingency cost included in total costs. See Table 9 for construction cost detail.	1	LS	\$3,574,228
	Subtotal				\$3,574,228
TOTAL CONTRACTUAL/CONSTRUCTION					\$4,238,843

Total Project Implementation costs were based on preliminary engineering estimates performed by the District. **Table 9** provides an overview of the cost estimates.

**Table 9. Preliminary Project Construction Cost Estimate**

Item Description	Quantity	Unit	Cost per Unit	Total
Mobilization/Demobilization, Surveying, General Conditions, Testing	1	LS	\$170,000	\$170,000
Potholing, Verification of Utility Locations, and Field Dimensions	1	LS	\$50,000	\$50,000
Stormwater Pollution Prevention	1	LS	\$15,000	\$15,000
Excavation Safety Measures	1	LS	\$30,000	\$30,000
Traffic Control Plans and Measures	1	LS	\$45,000	\$45,000
PRV Improvements	1	LS	\$156,000	\$156,000
6-inch Pipeline Abandonment	2,678	LF	\$15	\$40,170
8-inch Pipeline Abandonment	1,953	LF	\$20	\$39,060
12-inch Pipeline Abandonment	1,065	LF	\$25	\$26,625
14-inch PVC Pipe	5,696	LF	\$250	\$1,424,000
14-inch Recycled Water Valve	9	EA	\$8,500	\$76,500
Sawcut, Remove, and Dispose of Existing Asphalt and Concrete Surfaces for Utility Installation 2-inch Recycled Water Irrigation Service	5,696	LF	\$20	\$113,920
2-inch Recycled Water Irrigation Service	9	EA	\$10,000	\$90,000
Relocate 2-inch Recycled Water Irrigation Service	6	EA	\$11,000	\$66,000
Re-pipe 4-inch Recycled Water Irrigation Service	2	EA	\$20,000	\$40,000
Abandon 2-inch Recycled Water Irrigation Service	1	EA	\$5,000	\$5,000
Asphalt Pavement Replacement	5,696	LF	\$40	\$227,840
Grinding Asphalt Pavement within City of Dana Point Right-of-Way	68,352	SF	\$4	\$273,408
Restore Traffic Loops and Pavement Markings	1	LS	\$20,000	\$20,000
Miscellaneous Work	1	LS	\$70,000	\$70,000
			<b>Subtotal</b>	<b>\$2,978,523</b>
			Contingency 20%	\$595,705
			<b>Construction Subtotal</b>	<b>\$3,574,228</b>
			Salaries and Wages	\$92,510
			Grant Management and Reporting	\$9,995
			CEQA Documentation	\$4,620
			Consulting Engineering	\$350,000
			Consulting Inspection	\$300,000
			<b>Total Project Cost</b>	<b>\$4,331,353</b>

### Third-Party In-Kind Contributions

Identify all work that will be accomplished by third-party contributors, including a breakdown of all tasks to be completed, and a detailed budget estimate of time, rates, supplies, and materials that will be required for each task. Third-party in-kind contributions, including contracts, must comply with all applicable administrative and cost principles criteria, established in 2 CFR Part 200, available at [www.ecfr.gov](http://www.ecfr.gov), and all other requirements of this FOA.

The Project Budget does not include third-party in-kind contributions.

### Environmental and Regulatory Compliance Costs

#### ***D.2.2.5.3.8. Environmental and Regulatory Compliance Costs***

Prior to awarding financial assistance, Reclamation must first ensure compliance with Federal environmental and cultural resources laws and other regulations “environmental compliance”). Every project funded under this program will have environmental compliance activities undertaken by Reclamation and the recipient. Depending on the potential impacts of the project, Reclamation may be able to complete its compliance activities without additional cost to the recipient. Where environmental or cultural resources compliance requires significant participation by Reclamation, some costs incurred by Reclamation will be added as a line item to the budget during development of the financial assistance agreement and cost shared accordingly i.e., withheld from the Federal award amount . Any costs to the recipient associated with compliance will be identified during the process of developing a final project budget for inclusion in the financial assistance agreement. If the applicant is securing a consultant to perform any sort of compliance action (cultural surveys, document preparation, etc.), this must be included as a budget line item and will be cost-shared appropriately.

The California SWRCB (acting under the federal Environmental Protection Agency) is taking the federal lead role for CEQA plus compliance (NEPA compliance) and will complete consultation with SHPO, as SWRCB’s cultural review is already underway as part of the Project’s SWRCB CWSRF loan application process. The District anticipates that a FONSI would be issued for the Project. The budget does not include Environmental Compliance Costs based on experience with environmental and regulatory requirements for similar District projects and based on email correspondence with Mr. Doug McPherson, Environmental Protection Specialist, Bureau of Reclamation, Southern California Area Office. As presented in **Table 6** and **Table 7**, the CEQA Compliance Task 3) includes consultant effort per cultural review for CEQA plus compliance per CWSRF Loan application review process, and Task 9 includes District staff effort to coordinate Reclamation’s Environmental Compliance.

### Other Expenses

No other expenses are included for the Project.

### Environmental and Cultural Resources Compliance

To allow Reclamation to assess the probable environmental and cultural resources impacts and costs associated with each application, all applicants must respond to the following list of questions focusing on 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.

CEQA and NEPA documentation will be provided, as required. A Mitigated Negative Declaration, Mitigation and Monitoring Program, and Notice of Determination have been prepared for the overall project. The



SWRCB is currently reviewing these documents for environmental and cultural compliance to meet CEQA plus (federal cross cutter requirements to comply with NEPA requirements for CWSRF loan funding.

**1 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.**

No, the Project will not impact the surrounding environment. The proposed Project includes installing approximately 5,700 linear feet of 14-inch diameter transmission within existing paved streets and improved public right-of-way located in a residential community and replacement of an existing PRV.

The proposed Project will be located within existing streets and will not cause soil erosion or the loss of topsoil. Soil that is excavated and not used as backfill for the pipe trench will be disposed of off-site in a legal manner.

Because the immediate surrounding area is already developed and has existing water related improvements, the impacts caused by construction of the Project will be mitigated by typical dust control, runoff containment, traffic control, cultural resources protection measures, noise and air emissions controls. Storm water pollution prevention protection plans will be enforced. Animal habitat will not be impacted and the contractor will be required to take special precautions. Construction impacts are expected to be limited in nature and controlled.

The intent of the proposed Project is to improve water supply reliability. Therefore, the proposed Project is considered consistent with the region's Air Quality Management Plan. No air quality impacts would occur and no mitigation is expected to be required.

The Project site will not create an adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulation, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service. Due to the location of the site and being within existing paved streets and improved right-of-way, no impacts on wetlands or wildlife will occur. No conflicts with local policies, ordinances or provisions of adopted biological resource plans will occur due to the Project being located within paved streets and improved right-of-way.

As the Project is located in the streets, there are no riparian or wetland areas that may be directly impacted. Due to its location, the Project will not interfere with the movement of wildlife or impede native wildlife nursery sites. The Project is in conformance with the local policies instituted to protect the biological resources in the area. The Project does not create conflicts with the provisions of local and/or regional habitat conservation plans.

**2 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?**

No known species listed or proposed to be listed as a Federal endangered or threatened species, or designated critical habitats have been identified within the Project area.

**3 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 project may have.**

No, there are not wetlands or other surface waters inside the Project boundaries that potentially fall under CWA jurisdiction as "Waters of the United States." No associated impacts would occur and no mitigation is required.

**4 When was the water delivery system constructed?**

The original water delivery system was built in 1932.

**5 Will the 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.**

No, the Project will not result in any modification of or effect to individual features of an irrigation system.

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

No, there are no buildings, structures, or features listed or eligible for listing on the National Register of Historic Places within the Project site.

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

No, known archeological sites have been identified within the Project area.

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

No, the Project will not have a disproportionately high and adverse effect on low income or minority populations. The Project has the potential to provide positive benefits to low income and minority populations by increasing water supply reliability to their communities.

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

No, it is not anticipated that the Project will limit access to and ceremonial use of Indian sacred sites or results in other impacts on tribal lands; Per Assembly Bill 52, tribal cultural resources will be researched and addressed during CEQA and NEPA compliance. The majority of the Project is located within already disturbed areas such as within existing street right of way for the pipelines and within the RW-2 site for the PRV.

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

No, the Project will not contribute to the introduction, continued existence, or spread of noxious weeds or non-native species known to occur in the area.

### **Required Permits or Approvals**

As identified in the Technical Project Description section of this application, it is anticipated that encroachment permits from the City of Dana Point will be required for the work that will take place within the public right-of-way. Final approval from the District Board of Directors will also be required to approve the contract for the construction contractor.

### **Existing Drought Contingency Plan**

Portions of the District's 2020 WSCP, 2020 UWMP and the 2018 South Orange County IRWMP serve as the drought contingency plan and are attached as Appendix A. Refer to Evaluation Criterion C – Drought Planning and Preparedness for more detail on the specific sections attached from each Plan.

### **Letters of Project Support**

Letters of Project support were provided by Representative Mike Levin of California's 49th Congressional District, Senator Patricia Bates of the 36th District, Supervisor Lisa Bartlett of the Orange County Board of Supervisors for the 5<sup>th</sup> District, the City of Dana Point Chamber of Commerce, and the Dana Hills High School. Copies of these letters are included in Appendix B.

### **Official Resolution**

A draft official resolution of the SCWD Board of Directors is included in Appendix C. The resolution is scheduled for adoption at the October 14, 2021, SCWD Board of Directors meeting. The final resolution will be provided to Reclamation within 30 days of the application submittal deadline. The resolution verifies the District's legal authority to enter into an agreement, the Board of Directors has reviewed and supports submittal of this application, the capability of the District to provide the amount of funding and in-kind contributions specified in the Funding Plan, and that the District will work cooperatively with Reclamation to meet established deadlines for entering into a cooperative agreement.

### **Appendices**

Appendices are attached in the following pages.

**Appendix A – Drought Contingency Plan**

**Appendix B – Letters of Support**

**Appendix C – Draft Resolution**

## **Appendix A – Drought Contingency Plan**



## **Appendix B – Letters of Support**



**Congress of the United States**  
**House of Representatives**  
**Washington, DC 20515**

September 20, 2021

Mr. Matthew Reichert  
Bureau of Reclamation  
P.O. Box 25007, MS 84-27133  
Denver, CO 80225

Dear Mr. Reichert,

I write to request full consideration of the Recycled Water Distribution Improvements Project Phase II submitted by the South Coast Water District (SCWD), which will help fund the replacement of old transmission lines that are at the end of their usable lives. This allows for an increase in the delivery of recycled water, thus reducing dependency on potable imported water for irrigation.

SCWD's project, which includes upsizing water distribution pipelines, would resolve the bottleneck that occurs when demand for recycled water increases during summer months, causing negative pressure in the distribution system. This effort is focused in high traffic areas such as the local high school, which would reduce dependency on potable water imported for irrigation in the city of Dana Point.

Furthermore, the project would allow for the completion of a larger program that produces 1,350-acre feet per-year of additional recycled water, thus reducing dependence on potable water for irrigation uses. The goal of this project, bringing more recycled water into the district and increasing long-term recycled water reliability, will greatly benefit the community.

I appreciate the Bureau of Reclamation's attention to this grant submission. Please contact my office if you have any questions or if we can be of assistance.

Sincerely,

A handwritten signature in black ink that reads "Mike Levin".

MIKE LEVIN  
Member of Congress

CAPITOL OFFICE  
STATE CAPITOL, ROOM 3063  
SACRAMENTO, CA 95814  
TEL (916) 651-4036  
FAX (916) 651-4936

DISTRICT OFFICES  
24031 EL TORO ROAD  
SUITE 201A  
LAGUNA HILLS, CA 92653  
TEL (949) 598-5850  
FAX (949) 598-5855

169 SAXONY ROAD  
SUITE 103  
ENCINITAS, CA 92024  
TEL (760) 642-0809  
FAX (760) 642-0814

SENATOR.BATES@SENATE.CA.GOV  
WWW.SENATE.CA.GOV/BATES

# California State Senate

SENATOR  
PATRICIA C. BATES

THIRTY-SIXTH SENATE DISTRICT



## COMMITTEES

APPROPRIATIONS  
VICE CHAIR

ENVIRONMENTAL QUALITY  
VICE CHAIR

HOUSING  
VICE CHAIR

RULES  
VICE CHAIR

TRANSPORTATION  
VICE CHAIR

BUSINESS, PROFESSIONS AND  
ECONOMIC DEVELOPMENT

INSURANCE

September 10, 2021

Mr. Rick A. Shintaku, PE  
General Manager  
South Coast Water District  
31592 West Street  
Laguna Beach, California 92651

Dear Mr. Shintaku,


As the state senator for California's 36th Senate District, which includes most of South Orange County, I support the South Coast Water District's (SCWD) Phase II application for a grant from the U.S. Bureau of Reclamation's WaterSMART Drought Response Program: Drought Resiliency Projects for Fiscal Year 2022.

This grant would help fund SCWD's Recycled Water Distribution Improvements Project - Phase II, as part of its long-term goal of enhanced water recycling and supply reliability to reduce dependence on imported supplies. The project will expand SCWD's ability to supply recycled water in place of potable water within the City of Dana Point.

The project includes upsizing recycled water distribution pipelines to resolve a "bottleneck" issue that occurs in the system during some months when the demand for recycled water is high, but negative pressures in SCWD's distribution system prevent delivering recycled water to certain customers. Therefore, this project would alleviate the bottleneck issue while enabling SCWD to deliver an additional 347 acre feet of water (AFY) of recycled water, and ultimately 1,350 AFY of additional recycled water upon completion of the larger project, to reduce the dependency on potable imported water for irrigation.

SCWD has provided reliable and safe drinking water to its customers since 1932. I support efforts to enhance water recycling and supply reliability. If you have any questions about this letter, please contact Rhonda Reardon at my Laguna Hills office at 949.598.5850.

Sincerely,

  
PATRICIA C. BATES  
Senator, 36<sup>th</sup> District



**LISA A. BARTLETT**  
ORANGE COUNTY BOARD OF SUPERVISORS  
SUPERVISOR, FIFTH DISTRICT

ORANGE COUNTY HALL OF ADMINISTRATION  
333 W. SANTA ANA BLVD.  
10 CIVIC CENTER, SANTA ANA, CALIFORNIA 92701  
PHONE (714) 834-3550 FAX (714) 834-2670  
<http://bos.ocgov.com/fifth/>

September 17, 2021

Rick A. Shintaku, PE  
General Manager  
South Coast Water District  
31592 West Street,  
Laguna Beach, California 92651  
[rshintaku@scwd.org](mailto:rshintaku@scwd.org)  
(949) 342-1152 Office

Re: Letter of Support for Funding South Coast Water District's **Recycled Water Distribution Improvements Project - Phase II** grant application for the United States Department of the Interior, Bureau of Reclamation's WaterSMART Drought Response Program: Drought Resiliency Projects for FY 2022

Dear Mr. Shintaku:

We understand that the South Coast Water District (District) is submitting a WaterSMART Drought Response Program: Drought Resiliency Projects grant application for consideration by the United States Bureau of Reclamation for Fiscal Year 2022. This grant would help fund the District's Recycled Water Distribution Improvements Project - Phase II, as part of its long-term goal of enhanced water recycling and local water supply reliability to reduce dependence on imported water supplies. The three-year Project will expand the District's recycled water system to supply recycled water in place of potable water within the City of Dana Point, Orange County, California. The Project includes upsizing recycled water distribution pipelines to resolve a "bottleneck" issue that occurs in the system during some months when the demand for recycled water is high, but negative pressures in the District's distribution system prevent delivering recycled water to certain customers. Therefore, this Project would alleviate this bottleneck issue while enabling the District to deliver an additional 347 AFY of recycled water, and ultimately 1,350 AFY of additional recycled water upon completion of the larger project, to reduce the dependency on potable imported water for irrigation.

The District has been providing reliable, safe drinking water to its customers since 1932. This letter is being submitted to support the Project and the District's efforts to enhance water reuse/recycling and water supply reliability. If you have any questions or need additional information regarding our support of this project, please do not hesitate to contact me by email at [Lisa.Bartlett@ocgov.com](mailto:Lisa.Bartlett@ocgov.com) or via telephone at 714-834-3550.

Sincerely,

A handwritten signature in blue ink, reading "Lisa A. Bartlett".

Lisa Bartlett  
Supervisor, Fifth District  
Orange County Board of Supervisors





September 10, 2021

Rick A. Shintaku, PE  
General Manager  
South Coast Water District  
31592 West Street,  
Laguna Beach, California 92651  
rshintaku@scwd.org  
(949) 342-1152 Office

Re: Letter of Support for Funding South Coast Water District's **Recycled Water Distribution Improvements Project - Phase II** grant application for the United States Department of the Interior, Bureau of Reclamation's WaterSMART Drought Response Program: Drought Resiliency Projects for FY 2022

Dear Mr. Shintaku:

We understand that the South Coast Water District (District) is submitting a WaterSMART Drought Response Program: Drought Resiliency Projects grant application for consideration by the United States Bureau of Reclamation for Fiscal Year 2022. This grant would help fund the District's Recycled Water Distribution Improvements Project - Phase II, as part of its long-term goal of enhanced water recycling and local water supply reliability to reduce dependence on imported water supplies. The three-year Project will expand the District's recycled water system to supply recycled water in place of potable water within the City of Dana Point, Orange County, California. The Project includes upsizing recycled water distribution pipelines to resolve a "bottleneck" issue that occurs in the system during some months when the demand for recycled water is high, but negative pressures in the District's distribution system prevent delivering recycled water to certain customers. Therefore, this Project would alleviate this bottleneck issue while enabling the District to deliver an additional 347 AFY of recycled water, and ultimately 1,350 AFY of additional recycled water upon completion of the larger project, to reduce the dependency on potable imported water for irrigation.

The District has been providing reliable, safe drinking water to its customers since 1932. This letter is being submitted to support the Project and the District's efforts to enhance water reuse/recycling and water supply reliability. If you have any questions or need additional information regarding our support of this project, please do not hesitate to contact me by email at [vickie@danapointchamber.com](mailto:vickie@danapointchamber.com) or via telephone at 949.496.1555.

Sincerely,

A handwritten signature in black ink, appearing to read "Vickie", with a long, flowing horizontal line extending to the right.

Vickie McMurchie  
Executive Director

September 8, 2021

Rick A. Shintaku, PE  
General Manager  
South Coast Water District  
31592 West Street,  
Laguna Beach, California 92651  
rshintaku@scwd.org  
949) 342-1152 Office

Re: Letter of Support for Funding South Coast Water District's **Recycled Water Distribution Improvements Phase II Project** grant application for the United States Department of the Interior, Bureau of Reclamation's WaterSMART Drought Response Program: Drought Resiliency Projects for FY 2022

Dear Mr. Shintaku:

We understand that the South Coast Water District (District) is submitting a WaterSMART Drought Response Program: Drought Resiliency Projects grant application for consideration by the United States Bureau of Reclamation for Fiscal Year 2022. This grant would help fund the District's Recycled Water Distribution Improvements Project - Phase I, as part of its long-term goal of enhanced water recycling and local water supply reliability to reduce dependence on imported water supplies. The three-year Project will expand the District's recycled water system to supply recycled water in place of potable water within the City of Dana Point, Orange County, California. The Project includes upsizing recycled water distribution pipelines to resolve a "bottleneck" issue that occurs in the system during some months when the demand for recycled water is high, but negative pressures in the District's distribution system prevent delivering recycled water to certain customers. Therefore, this Project would alleviate this bottleneck issue while enabling the District to deliver an additional 347 AFY of recycled water, and ultimately 1,350 AFY of additional recycled water upon completion of the larger project, to reduce the dependency on potable imported water for irrigation.

The District has been providing reliable, safe drinking water to its customers since 1932. This letter is being submitted to support the Project and the District's efforts to enhance water reuse/recycling and water supply reliability. If you have any questions or need additional information regarding our support of this project, please do not hesitate to contact me by email at [bwbaker@capousd.org](mailto:bwbaker@capousd.org) or via telephone at (949-496-6666).

Sincerely,

Dr. Brad Baker, Principal

**Appendix C – Draft Resolution**

## **SOUTH COAST WATER DISTRICT**

### **RESOLUTION NO. 12-21/22**

#### **A RESOLUTION OF THE BOARD OF DIRECTORS OF SOUTH COAST WATER DISTRICT ENDORSING WATERSMART DROUGHT RESPONSE PROGRAM: DROUGHT RESILIENCY PROJECTS FOR FISCAL YEAR 2022**

**WHEREAS**, the United States Bureau of Reclamation is currently offering grant opportunities through the WaterSMART Drought Response Program: Drought Resiliency Projects for Fiscal Year 2022 and

**WHEREAS**, said WaterSMART Drought Response Program: Drought Resiliency Projects for Fiscal Year 2022 is a cost-shared program emphasizing drought resiliency; and

**WHEREAS**, the Board of Directors of South Coast Water District (“Board” supports the submission by the South Coast Water District “District”) of a grant application for Recycled Water Distribution Improvements Phase II Project (also referred to as “Bottleneck No. 2” , prepared and approved by the District, to the WaterSMART Drought Response Program: Drought Resiliency Projects for Fiscal Year 2022; and

**WHEREAS**, the District is capable of providing the amount of matching funds of up to \$2,331,353 in cash and/or in-kind contributions specified in the grant application’s funding plan; and

**WHEREAS**, if selected for a WaterSMART Drought Response Program: Drought Resiliency Projects for Fiscal Year 2022, the District will work with the United States Bureau of Reclamation to meet established deadlines for entering into a cooperative agreement;

#### **NOW, THEREFORE, SOUTH COAST WATER DISTRICT BOARD OF DIRECTORS DOES HEREBY RESOLVE, ORDER AND DETERMINE AS FOLLOWS:**

**Section 1:** The Board approves the submission of the application for the WaterSMART Drought Response Program: Drought Resiliency Projects for Fiscal Year 2022 by the District for fiscal year 2021-22, fiscal year 2022-23, and fiscal year 2023-24.

**Section 2:** In the event grant funding is provided by the United States Bureau of Reclamation, the Board authorizes the General Manager of the District or his designee to accept the grant and sign any contract for administration of the grant funds and delegate the Chief Financial Officer to act as a fiscal agent for any grant funding received.

**Section 3:** This resolution shall take effect immediately.

**Section 4:** The Secretary shall certify to the adoption of this resolution and henceforth and thereafter the same shall be in full force and effect.



**PASSED AND ADOPTED** this 14<sup>th</sup> day of October, 2021.

ATTEST:

\_\_\_\_\_  
President

\_\_\_\_\_  
Secretary