

# Rosedale Phase 2 Wells Project

# R22AS00020 WaterSMART Drought Response Program: Drought Resiliency Project Grants for FY2022 Funding Group II

#### **Prepared For:**

Bureau of Reclamation Financial Assistance Operations Attn: NOFO Team P.O. Box 25007, MS 84-27133 Denver, CA 80225

#### Submitted By:

Santa Clarita Valley Water Agency 26521 Summit Circle Santa Clarita, CA 91350 Matt Stone, General Manager mstone@scvwater.org 661-297-1600

October 5, 2021



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#### **SECTION 1: TECHNICAL PROPOSAL**

A. Executive Summary

Date: October 5, 2021 Applicant Name: Santa Clarita Valley Water

Agency

City: Santa Clarita Valley Water Agency Project Length of Time: 28 months

County: Los Angeles and Ventura Estimated Completion Date: January 2024

Counties

State: California Located on a Federal Facility: No

The Santa Clarita Valley Water Agency (SCV Water) is a Category 'A' applicant. SCV Water will construct the Rosedale Phase 2 Well Project (the Project) consisting of two new high producing groundwater wells in the Kern County Subbasin. The construction of the two new wells will make available a total of 5,000 acre-feet per year (AFY) of drinking water to SCV Water during dry years. This is in direct accordance with the Drought Response Program's objectives of increasing the reliability of water supplies and improving water management to be able to deliver water during droughts. The Project further implements one of the strategies identified in SCV Water's ongoing planning efforts to build resiliency to droughts by making water available in the short and long terms and providing flexibility in current and future years of low water supply. The most recent planning efforts are SCV Water's 2020 Urban Water Management Plan (UWMP) (Appendix B) and 2020 Water Shortage Contingency Plan (WSCP) (Appendix C). The UWMP includes the Reliability Planning and Drought Risk Assessment that identifies water banking as a strategy to bolster drought tolerance of SCV Water's water supply portfolio. SCV Water currently meets all State of California goals of water conservation and this Project is specifically part of the strategy to manage water supply during drought periods. Currently, the SCV Water service area is experiencing Extreme Drought (D3 status) and Exceptional Drought (D4 status) which are the two highest categories on the <u>U.S. Drought</u> Monitor. Droughts have been recurring regularly in the region. During the severe drought of 2014, SCV Water received only 5% of its share of water from the SWP. Most recently, SCV Water received a 20% allocation in 2020 and a 5% allocation in 2021 with a potential 0% allocation forecasted for 2022. The Project will allow SCV Water to access its banked water based on its agreement with Rosedale Rio Bravo Water Storage District (RRB) (the Agreement), which provides that SCV Water may install up to seven wells and extract 20,000 acre-feet per year. The Project will be funded entirely by SCV Water and will be constructed by RRB. The Project in this grant application is expected to take approximately 28 months to design and construct, beginning in September 2021 for the design phase and completing construction in March 2024.

#### B. Project Location

The Project is located in Rosedale, CA, west of Bakersfield. The approximate center of the project area falls at the intersection of Enso Lane (Route 43) and Brimhall Road at latitude 35°22'05.5"N and longitude -119°15'07.6"W. SCV Water has a long-term banking agreement with RRB. At SCV Water's request, RRB completed a Technical Memorandum (Appendix D) to evaluate potential sites to construct the four wells. The Technical Memorandum identified seven



potential sites, where the new wells can be located. SCV Water is currently in the process of selecting the sites for the two wells in this grant application. Based on the screening criteria in the Technical Memorandum SCV Water anticipates building Wells 6 and 11. A map of the project area with the potential well sites is provided in Appendix E.

#### C. Technical Project Description

The SCV Water Rosedale Phase 2 Wells Project will construct two new wells in the Kern County Subbasin. The wells be drilled to an 800-foot depth and will be equipped with 400 horsepower (hp) motors. The specific project components include the following items:

- 1. Well drilling and construction:
  - a. Well drilling to a depth of 800 feet.
  - b. Well casing and other well components.
  - c. Pumping equipment including pump and motor, piping, valves, disinfection, monitoring equipment. Each well is designed for up to 3,500 gallon-per-minute (gpm) or 5,649 AFY capacity. However, as droughts progress lower groundwater elevations along with outages for well maintenance lowers the quantities that can be anticipated to be made available to SCV Water. To be conservative, SCV Water is estimating each well would produce 2,500 AFY year for a total of 5,000 AFY.
  - d. Electrical equipment including switchgear, control panels, variable frequency drive, telemetry, lighting, programming.
  - e. Well discharge to waste piping for use during well testing and start up.
  - f. Control Building. This consists of a Concrete Masonry Unit (CMU) block walls.
  - g. Transmission pipeline to connect to RRB's existing water delivery system.

#### D. Performance Measures

SCV Water's Agreement with RRB currently obligates RRB to supply SCV Water from existing wells that are estimated to have an extraction capacity of 10,000 AFY. Also, in accordance with the Agreement, the construction of the two wells in this project will enable RRB to supply an additional 5,000 AFY during dry years. The 5,000 AFY of water is considered a conservative quantity for the reasons discussed below. The performance measures that will be used to quantify the success of the Project are:

- 1. 5,000 AFY of water in dry years from RRB.
- 2. Cost savings to SCV Water are realized by extracting the 5,000 AFY of banked water from RRB as compared to the cost of purchasing additional imported water supplies. As indicated in Appendix F, the cost for dry year water in 2020 reached \$1,000 AF.

#### E. Evaluation Criteria

#### E.1.1 Evaluation Criterion A — Project Benefits

How will the project build long-term resilience to drought? How many years will the project continue to provide benefits? Over the past 14 years, SCV water has stored approximately 120,500 acre-feet (AF) of available water during wet years in its banking program with RRB. To



date, the Agency has retrieved 39,000 AF from the program to provide dry year supply reliability. SCV Water's initial phase of well construction was completed in 2019 and resulted in extraction capacity of 10,000 AFY. This Project will increase SCV Water's extraction capacity by 5,000 AFY, making at least 15,000 AFY of banked water supply available to SCV Water's service area during dry years. Water recovered from the wells will be conveyed through new transmission pipeline to RRB's water delivery system. From there the water will be transported to the Cross Valley Canal for delivery to the SWP's California Aqueduct for conveyance to SCV Water.

Water supplies from this project would be incorporated into SCV Water's water supply portfolio as described in the 2020 UWMP (Appendix B). The reliability report is based on a variety of assumptions that include the reliability of it SWP supplies, access to local groundwater, the development of recycled water and successful implementation of active water conservation programs. Water demands will continue to grow as the population is projected to grow from 296,200 to 432,200 through 2050 when buildout in SCV Water's service area is anticipated to occur. During this period SCV Water anticipates making additional investments in its water supply portfolio including additional extraction capacity in the RRB water bank. SCV Water's banking agreement with RRB does not have a date certain for termination, rather the program ends once the total quantity of stored and recovered water reaches 200,000 AF. Thus, SCV Water will access RRB banked water when other supplies are insufficient to meet water demands. Under the above described planning assumptions, it is estimated that the program would remain active at least through 2070.

SCV Water's 2021 Water Supply Reliability report incorporates the 2019 State Water Project Delivery Capability Report (2019 DCR issued by the California Department of Water Resources), which indicates SWP contractors, such as SCV Water, for an average year should only anticipate 58% of their contracted amount and that quantity could decrease to 52% by 2040. These studies are based on the historic hydrologic period beginning in 1922 through 2005. In more recent years, the extreme impacts of climate change on snow and rainfall in California have become evident considering droughts are more frequent in incidence and longer in duration. In accordance with the U.S. Drought Monitor, the SCV Water service area encompasses areas experiencing Extreme Drought (D3 status) and Exceptional Drought (D4 status) which are the two highest categories on the <u>U.S. Drought Monitor</u>. The last severe drought to affect the State occurred only seven years ago between 2012-2015 with 2013-2014 having extraordinarily dry conditions. In 2014 during the severe drought for that period, SCV Water received only 5% of its share of water from the SWP. Most recently, SCV Water received a 20% allocation in 2020 and a 5% allocation in 2021 with a potential 0% allocation forecasted for 2022. If these conditions are indicative of future conditions, SCV Water would likely access its RRB banked water more frequently than estimated above.

Will the project make additional water supplies available? If so, what is the estimated quantity of additional supply the project will provide and how was this estimate calculated? Provide this quantity in acre-feet per year as the average annual benefit over ten years (e.g., if the project captures flood flows in wet years, provide the average benefit over ten years including dry vears). This Project will increase SCV Water's extraction capacity by 5,000 AFY, making at least 15,000 AFY of banked water supply available to SCV Water's service area during dry



years. Under the existing RRB Banking program, SCV Water can store up to 20,000 AFY. Over the past 14 years, SCV water has stored approximately 120,500 acre-feet (AF) of available water during wet years in its banking program with RRB. To date, SCV Water has retrieved 39,000 AF from the program to provide dry year water supply reliability. SCV Water's initial phase of well construction was completed in 2019 and resulted in extraction capacity of 10,000 AFY.

SCV Water completed a Technical Memorandum (Appendix D) that recommends a maximum capacity of up to 3,500 gpm for each well. This value is based on median production quantities for nearby existing wells. However, as droughts progress lower groundwater elevations reduce yield. Additionally operational consideration such as maintenance on wells facilities and conveyance outages can lower available water supplies. After considering operation of the Phase 1 wells in 2020 and 2021, being conservative, SCV Water is estimating each well would produce 2,500 AFY for a total of 5,000 AFY.

The wells will also be available to RRB and its other banking partners on a second priority basis as a supplemental source to replace surface water when it is in short supply in dryer years when SCV Water is not using these wells, though these benefits are not quantified in this proposal.

What percentage of the total water supply does the additional water supply represent? How was this estimate calculated? According to SCV Water's 2020 UWMP, SCV Water's total demand in 2020 was 66,630 AF. Therefore, the 5,000 AFY of new water source equates to approximately 7.5% of the SCV Water's total water supply available to meet demands.

Provide a brief qualitative description of the degree/significance of the benefits associated with the additional water supplies. The Project will make available to SCV Water a reliable, committed and fixed source of water in dry years, achieving the following benefits:

- 1. Help SCV Water further its goal of building resiliency to droughts by providing a reliable and sustainable source of water in the amount of 5,000 AFY in dry years.
- 2. The additional source of water gives SCV Water more flexibility in supplying water during droughts, thereby enabling it to better manage its water resources.
- 3. Partially mitigate for increased regulatory/environmental flow requirements for the Sacramento San Joaquin Delta.
- 4. Reduce the need to purchase expensive imported water supplies during exceptionally dry periods when this resource is at lowest available quantity.
- 5. Optimize the use of water supplied by SWP during wet years when it is available to recharge groundwater in the Kern County Subbasin per agreement with RRB.
- 6. Improves groundwater sustainability.

Will the project improve the management of water supplies? For example, will the project increase efficiency, increase operational flexibility, or facilitate water marketing (e.g., improve the ability to deliver water during drought or access other sources of supply)? The Project will improve the management of SCV Water's water supply by furthering the capabilities of an existing program that incorporates a reliable and sustainable source of water during droughts. This enables SCV Water to have more operational flexibility should unforeseen circumstances reduce currently available supplies or by reducing the need to purchase expensive imported water supplies during exceptionally dry periods. If circumstances allow, the Project could



provide SCV Water the ability to provide exchange water or transfer water to other SWP contractors under the recently enacted water management amendment to the SWP Water Supply Contracts and also improves marketing during drought by giving SCV Water access to an additional source to deliver water to its service area customers.

How will the project increase efficiency or operational flexibility? The main sources of water for SCV Water are summarized in the table below based on 2020 supply:

Source	Quantity (AF)	Percentage of Total Supply
Groundwater	17,332	26%
Recycled Water	468	1%
Imported Water	25,871	39%
Exchange & Banking Programs	22,957	34%
TOTAL	66,628	100%

Table 1. SCV Water Supply

The Project makes available an additional 5,000 AFY as an alternative source of water during droughts. This in turn gives SCV Water operational flexibility in managing its other sources of water such as SWP water and improves local groundwater management. Under the proposed Groundwater Sustainability Plan there is the potential that groundwater pumping may need to be curtailed to avoid impact to groundwater dependent ecosystems. The Project would provide flexibility to switch to an alternative supply should sustainability criteria in the groundwater management plan be reached. Additionally, as discussed above, extreme droughts in combination with constraints to other water supplies may result in SCV Water having to purchase expensive transfer water. Mainly, the operational flexibility will come in the form of less reliance on imported SWP water, which has unpredictable variability, especially during droughts. As noted above, SCV Water received only 5% of its share of water from the SWP. Most recently, SCV Water received a 20% allocation in 2020 and a 5% allocation in 2021 with a potential 0% allocation forecasted for 2022. Both the SCV Water service area and the source region of SWP water in Northern California are currently experiencing extreme to exceptional drought conditions.

What is the estimated quantity of water that will be better managed as a result of this project? How was this estimate calculated? Provide this quantity in acre-feet per year as the average annual benefit over ten years (e.g., if the project captures flood flows in wet years, provide the average benefit over ten years including dry years). The Project will make an additional 5,000 AFY of water available to SCV Water in dry years and create a corresponding opportunity to store water. Assuming dry conditions 5 times in a 10-year period, the project would make 25,000 AF available to SCV Water or 2,500 AF on an average annual basis.

What percentage of the total water supply does the water better managed represent? How was this estimate calculated? The 5,000 AFY of this alternate source of water directly translates into better management of the same amount of water, most likely in imported SWP water. According to SCV Water's 2020 UWMP, SCV Water's total demand in 2020 was 66,630 AF. Therefore,



the 5,000 AFY of new water source equates to approximately 7.5% of SCV Water's total water supply available to meet demands.

Provide a brief qualitative description of the degree/significance of anticipated water management benefits. Droughts in the SCV Water service area have been a regular occurrence in recent years. Today, SCV Water's service area encompasses areas experiencing Extreme Drought (D3 status) and Exceptional Drought (D4 status) which are the two highest categories on the U.S. Drought Monitor. Droughts have a direct impact on both imported SWP water and local groundwater supplies. Currently, the Sierra Nevada Mountain Ranges (main source of SWP water) are also currently experiencing drought conditions. This reduced supply of imported water forces SCV Water to increase its local groundwater pumping and access stored groundwater supplies from its water banks.

The 5,000 AFY of water that the Project will make available during droughts represents a significant benefit to SCV Water to manage its water supply portfolio to minimize cost to its customers by avoiding expensive water purchases, while enhancing flexibility to accommodate disruption in other water supply programs. These disruptions may include, more frequent and lower SWP allocations and local groundwater availability due to climate change and groundwater contamination from constituents such as PFAS and Perchlorate, more frequent wildfires, imported water disruptions caused by failures in the Sacramento San Joaquin River Delta or subsidence impacts on the California Aqueduct north of RRB.

Will the project make new information available to water managers? If so, what is that information and how will it improve water management? The Project will equip the wells with monitoring technology that will provide RRB with valuable information such as total water use per well, groundwater elevation and extraction data. The data will provide information for the management of the available supply, as well as specific information for calculating changes in groundwater storage and sustainable yield.

*Wells:* What is the estimated capacity of the new well(s), and how was the estimate calculated? Please see response to this question above.

How much water do you plan to extract through the well(s), and how does this fit within state or local laws, ordinances, or other groundwater governance structures applicable to the area? The two new wells will be primarily used in dry years to supply RRB's banking partner agencies with water. The wells will have a capacity of up to 3,500 gpm each and a minimum effective annual yield of 2,500 AFY each. Therefore, the two wells are anticipated to produce up a minimum of 5,000 AFY to 11,300 AFY available to SCV Water. The SCV Water banking program with RRB was part of program covered the RRB's July 2001 Master Environmental Impact Report Groundwater Storage, Banking Exchange, Extraction and Conjunctive Use Program (SCH#2000101059).

Will the well be used as a primary supply or supplemental supply when there is a lack of surface supplies? The two new wells will be used as one of the primary sources of supplies during drought conditions.





Please provide information documenting that proposed well(s) will not adversely impact the aquifer it/they are pumping from (overdraft or land subsidence). The RRB Management Area (RRBMA) is primarily rural in nature with the exception of urban development in the eastern portions of the management area. Please see Figure 1 below. There are approximately 41,000 acres of irrigated agriculture and 3,000 acres developed for residential, commercial and industrial uses. The undeveloped areas are mostly used for water banking facilities, which include storage basin berms, water control structures, canals, groundwater wells, and power lines. The water banking area totals approximately 2,500 acres. There are no federal or state properties other than road easements. The RRBMA is dependent on groundwater as the primary source of water supply. There are approximately 350 wells in the RRBMA (4.7 wells/square mile). Approximately 135 of these wells are agricultural, 29 banking, 24 municipal, and 162 domestic. Figure 2 depicts the densities of wells and shows surface water resources in the RRBMA.

The RRBMA is located within the Kern County Subbasin of the San Joaquin Valley Groundwater Basin. The subbasin covers the western third of Kern County and includes Kern River and Poso Creek. Geologically, San Joaquin Valley is a structural trough created by tectonic forces and filled with older marine and younger continental sediments that were eroded from the surrounding mountains. These continental sediments derived from the alluvial processes form a wedge of deposits that thicken toward the center of the valley.

The sedimentary deposits of the valley have been estimated to range in thickness from 175 to 2,900 ft with an average of approximately 600 ft (DWR, 2006). Specific yield, the amount of water in storage in the ground that will drain under the influence of gravity and a measurement of water available for human use, ranges from about 3 - 12% in silts, 15 - 27% in sands and as high as 31% for gravels in the interval from surface down to 300 to 600 ft deep. The highest specific yield measurements are associated with sediments of the Kern Fan west of Bakersfield, including those in RRBMA.

The well sorted sandy sediments have higher specific yields than finer grained silts and clays. For most of the basin, excluding the area of the Kern Fan, there are two water bearing units that are separated by an aquitard known as the Corcoran Clay, which restricts vertical groundwater flow between the overlying unconfined aguifer and the underlying confined aguifer. The hydrogeology of the Kern Fan region is characterized by thick alluvial deposits with an upper unconfined aquifer and areas where there are semi-confined conditions. A semi-confined aquifer is also referred to as a leaky aguifer where the confining layer is not continuous and vertical flow occurs between the upper unconfined aguifer and the lower aguifer. Some estimates indicate a total water storage capacity of 40 million AF.

The upper aguifer is considered to be unconfined and extends down to a depth of approximately 200 to 400 ft. The upper unconfined aquifer consists of interbedded silts, sands, with some minor deposits of clay. In the Kern Fan area west of Bakersfield, the Corcoran Clay is not generally present although there are numerous discontinuous clay layers that can locally restrict vertical flow creating a separation between a shallow unconfined aquifer and a deeper semi-confined aquifer. The lower semiconfined aquifer, on average, extends to a depth of approximately 600 ft though in some areas can be quite deeper.



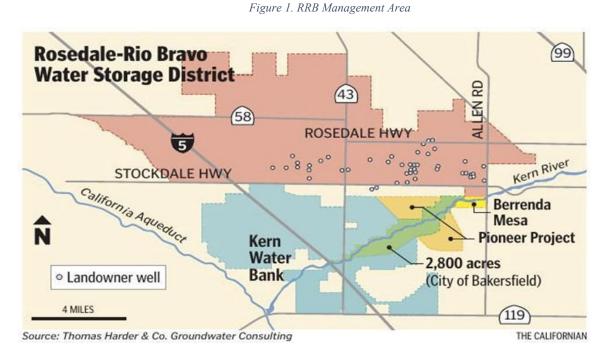
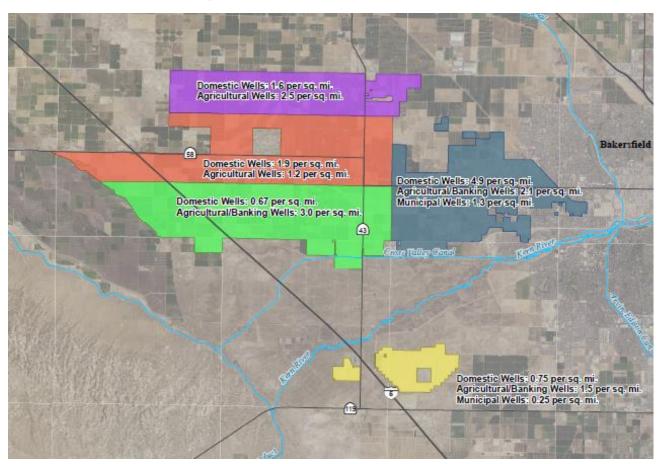


Figure 2. Well Densities and Surface Water Bodies





Please describe the groundwater monitoring plan that will be undertaken and the associated monitoring triggers for mitigation actions. RRB has a robust groundwater monitoring network in place based on its desire to effectively manage groundwater. It has bolstered such efforts in relation to its operation of groundwater banking projects on behalf of itself and program partners. The groundwater monitoring network is designed to:

- 1. Record level and quality trends by monitoring zone.
- 2. Depict groundwater surface, flow directions, and hydraulic gradients.
- 3. Monitor annual groundwater storage changes.
- 4. Evaluate groundwater depletion.
- 5. Determine the rate of subsidence.

In addition, the two proposed wells will be equipped with monitoring instrumentation of their own. The Project is part of a larger water banking program between RRB and SCV Water. Under this program water is first stored in the program and then extracted to assure that the program does not contribute to overdraft of the basin. Additionally, a minimum loss factor 11% is applied to all water delivered to the program by SCV Water which contributes to the groundwater basin balance.

The SCV Water banking program with RRB was part of program covered the RRB's July 2001 Master Environmental Impact Report Groundwater Storage, Banking Exchange, Extraction and Conjunctive Use Program (SCH#2000101059).

Describe how the mitigation actions will respond to or help avoid any significant adverse impacts to third parties that occur due to groundwater pumping. To support groundwater extraction and use, RRB imports surface water from various sources, including federal, state, and local supplies, through unbalanced exchange agreements, purchase, temporary transfers or other means as available. Sources include the Central Valley Project (CVP), the SWP, Kern River and appropriative water rights.

RRB's groundwater recharge project was initially developed to take advantage of the Goose Lake channel, which traversed the RRBMA from east to west. The channel of the Goose Lake slough has been modified for use as a water conveyance and groundwater recharge canal. RRB also participated in the initial construction and expansion of the Cross-Valley Canal and has constructed a network of groundwater recharge basins and channels as a part of its project that as of the end of 2017 covers approximately 1,770 gross acres and 1,180 net wetted acres. In addition to the direct recharge facilities, there are a number of diversion points from RRB and neighboring Buena Vista Water Storage District facilities that are capable of conjunctive use operations of up to 20,000 AFY, which would replace groundwater pumping demands with surface water deliveries.

#### E.1.2. Evaluation Criterion B — Sustainability and Supplemental Benefits

Climate Change: In addition to drought resiliency measures, does the proposed project include other natural hazard risk reductions for hazards such as wildfires or floods?



By constructing the proposed Project, SCV Water will also have the ability to utilize the additional 5,000 AFY of water for firefighting purposes during drought season when it is needed most.

Does the proposed project include green or sustainable infrastructure to improve community climate resilience such as, but not limited to, reducing the urban heat island effect, lowering building energy demands, or reducing the energy needed to manage water? Not applicable.

Will the proposed project establish and use a renewable energy source? Not applicable.

Does the proposed project seek to reduce or mitigate climate pollutions such as air or water pollution? Severe drought conditions can negatively affect air quality (Centers for Disease Control and Prevention). Drought, create an increased risk for wildfires and dust storms Particulate matter suspended in the air from these events can irritate the bronchial passages and lungs. Some drought-related health effects are experienced in the short-term and can be directly observed and measured. Additionally, the slow rise of drought can also result in longer term, indirect health implications. By reducing dependence on imported water and making those supplies more available to mitigate drought impacts (firefighting, irrigation, etc.) the proposed Project can help to reduce air pollution and reduce resulting detrimental effects on Air Quality. Additionally, the Project's utilization of groundwater will generate lesser greenhouse gases than the alternative imported water supply, which will also reduce air pollution.

Will the proposed project reduce greenhouse gas emissions by sequestering carbon in soils, grasses, trees, and other vegetation? Not applicable.

Does the proposed project have a conservation or management component that will promote healthy lands and soils or serve to protect water supplies and its associated uses? Water supplies from the Project will offset the need to extract water from local groundwater supplies during periods when groundwater supplies are stressed due to lack of local precipitation. It is part of an integrated water management strategy laid out in SCV Water's 2020 UWMP (Appendix B) and the draft Groundwater Sustainability Plan for the Upper Santa Clara River Groundwater Basin (GSP). Specifically, Project water will support SCV Water meeting Sustainable Management Criteria (SMCs) contained in the GSP that support groundwater dependent ecosystems, avoid long-term declines in groundwater elevations and storage and avoids subsidence.

Does the proposed project contribute to climate change resiliency in other ways not described above? Climate change has become evident in California with hotter summers and more frequent droughts with longer durations. In its various planning efforts, SCV Water thoroughly considers the effects of climate change and develops policies, strategies, and specific projects to build resiliency to climate change. The Project is part of SCV Water's strategy to adapt to climate change and achieves the following benefits:



- Improves operational efficiency, flexibility and transfers in dry years brought on by climate change.
- Supports long term and regional water management planning.
- This Project is part of a sustainable conjunctive use program, to recharge groundwater in wet years for use in dry years.

Climate change impacts have become evident in recent years with frequently recurring droughts with longer durations in the western United States. Snow and rainfall in the Sierra Nevada Mountain range is a direct determinant of the amount of water available to the many SWP member agencies. In drought years, the available amount is severely reduced. The Project takes advantage of wet years for banking purposes. In dry years, SCV has access to 5,000 AFY of stored water. This is an effective strategy to help build resiliency against the effects of climate change.

**Disadvantaged or Underserved Communities:** Will the proposed project serve or benefit a disadvantaged or historically underserved community? Benefits can include, but are not limited to, public health and safety through water quality improvements, new water supplies, or economic growth opportunities. SCV Water's service area has approximately 10,000 acres (or 8% of its service area) designated as a disadvantaged community. The implementation of the Project will allow SCV Water to provide clean, and reliable water services to its DAC customers and allow the SCV Water service area economy to thrive despite on-going drought and subsequent water shortages.

If the proposed project is providing benefits to a disadvantaged community, provide sufficient information to demonstrate that the community meets the applicable state criteria or meets the definition in Section 1015 of the Cooperative Watershed Act.

As per the California Department of Water Resources DAC Mapping Tool, the median income of those identified as DACs (by 2018 Census Tracts) in SCV Water's service area range from \$46,458 - \$56,518 per year as compared to the State annual MHI of \$75,235.

If the proposed project is providing benefits to an underserved community, provide sufficient information to demonstrate that the community meets the underserved definition in E.O. 13985, which includes populations sharing a particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life. The DWR identified DACs within SCV Water's service area is determined by the California Office of Environmental Health Hazard Assessment (OEHHA) <u>CalEnviroScreen 3.0</u>. The CalEnviroScreen 3.0 is a mapping tool that provides a ranking system of each census tract to designate tracts as DACs or non-DACs. This tool takes into consideration a variety of economic, social, and environmental factors and provides each census tract a score from 0 to 100 with 100 being the worst conditions. Census tracts ranked from 80 - 100 are designated as DACs.

**Tribal Benefits:** The Department of the Interior is committed to strengthening tribal sovereignty and the fulfillment of Federal tribal trust responsibilities. The President's memorandum, "Tribal



Consultation and Strengthening Nation-to-Nation Relationships," asserts the importance of honoring the Federal government's commitments to Tribal Nations. Not applicable.

Does the proposed project support tribal resilience to climate change and drought impacts or provide other tribal benefits such as improved public health and safety through water quality improvements, new water supplies, or economic growth opportunities? Not applicable.

Does the proposed project support Reclamation's tribal trust responsibilities or a Reclamation activity with a Tribe? Not applicable.

**Ecological Value:** Does the project seek to improve ecological climate change resiliency of a wetland, river, or stream to benefit to wildlife, fisheries, or habitats? Do these benefits support an endangered or threatened species? SCV Water receives its surface water imports primarily from the SWP. SWP transports water that originates in the Sierra Nevada Mountains, flows through a network of rivers and streams and is stored in lakes and reservoirs. The water from the lakes and reservoirs then flows down natural river channels into the Sacramento – San Joaquin River Delta (the Delta). The Delta is a complex network of channels and reclaimed islands at the confluence of the Sacramento and San Joaquin Rivers. The SWP and the federal Central Valley Project (CVP) use Delta channels to convey water to the southern Delta for diversion, making the Delta a focal point for water distribution throughout the State. The Delta is ecologically sensitive habitat, which is home to various species listed under the Federal and State Endangered Species Acts.

In extreme drought conditions when SWP supplies are drastically reduced, SCV Water has resorted to purchase of additional surface water beyond its SWP allocation from water districts located north of the Sacramento – San Joaquin River Delta (the Delta). The Project will make available to SCV Water 5,000 AFY of water in dry years that would otherwise be delivered from northern Delta water agencies. Therefore, the Project would reduce the reliance on imported water thereby reducing the impacts on Delta and riparian habitats.

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?

SCV Water's water supply resiliency has been severely affected by prolonged droughts and the subsequent variability in its annual SWP allocations. Considering SCV Water's primary water supply is provided through the SWP and the increasing variability of annual SWP allocations, SCV Water has been diversifying water supply portfolio by expanding access to its other water resources. This Project will allow SCV Water to mitigate for the reduced reliability/reliance of on SWP as a direct source of water in dry years as more water is being allocated to fragile Delta species. Some of the endangered species in the Delta include the Delta Smelt, Chinook Salmon and Sacramento Splittail.

Will the proposed project reduce the likelihood of a species listing or otherwise improve the species status? The Project will increase SCV Water's local water supply resiliency which will



enable SCV Water to reduce its reliance on the SWP as a direct source of water in dry years. This will benefit all aquatic species in the Delta during dry years.

**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? Not applicable to this Project as there are no interstate agreements.

Will the project benefit multiple sectors and/or users (e.g., agriculture, municipal and industrial, environmental, recreation, or others)? SCV Water serves approximately 289,000 people that reside within its service area. The service area includes commercial, industrial, institutional, recreational and customers with a total of 73,542 connections. RRBs agricultural water users would benefit from RRB's secondary access to the wells either through reduced costs or greater reliability.

SCV Water's service area is also home to popular recreation facilities such as Castaic Lake State Recreation Area, Placerita Canyon Nature Center, Rocky Mountain Recreation, and several parks that all depend on a healthy source of water for survival. The Six Flags Magic Mountain and Hurricane Harbor amusement parks are the largest water customers in the service area.

Will the project benefit a larger initiative to address sustainability of water supplies?

California Governor Gavin Newsome issued Executive Order Number N-10-19, which is an initiative to develop resiliency to droughts and better manage the state's water resources. To implement the Governor's Executive Order, the state issued the California Water Resilience Portfolio in July 2020. The Portfolio establishes policies and objectives to prepare the state for a water sustainable future. Some of the objectives of the Portfolio are to maintain and diversify water supplies, protect and enhance natural ecosystems and be prepared. The Project contributes to all three of these state objectives, thus furthering this larger initiative.

#### E.1.3. Evaluation Criterion C — Drought Planning and Preparedness

Attach a copy of the applicable drought plan, or sections of the plan, as an appendix to your application. These pages will not be included in the total page count for the application. SCV Water has a long history of guiding its water management activities and diversifying its water portfolio by adding sustainable sources through comprehensive and collaborative planning efforts. With the recurrence of droughts and their increasing intensity and duration, response to drought and water sustainability have become the focal point of planning documents developed by SCV Water. Reliability Planning and Drought Risk Assessment are part of SCV Water's 2020 UWMP (Appendix B) and 2020 WSCP (Appendix C).

Explain how the applicable plan addresses drought. Proposals that reference plans clearly intended to prepare for and address drought will receive more points under this criterion. Explain whether the drought plan was developed with input from multiple stakeholders. Was the drought plan developed through a collaborative process? Both the 2020 UWMP and the 2020



WSCP directly address response to drought. The UWMP is a comprehensive document that evaluates all of the opportunities and challenges SCV Water is presented regarding water management through the year 2050. The UWMP analyzes every possible resource available to supply water in an efficient and sustainable manner. More specifically, to respond to drought, the UWMP details two scenarios. The first is the single-year dry year scenario and the second is the multiple (five-year) dry year scenario. The UWMP makes specific allocation quantities for each of the available sources of water to be able to realistically respond to drought through the year 2050 for each scenario. The UWMP draws on the experience from past droughts, such as in 2014, when the SWP water allocation to SCV Water was only 5% of SCV Water's share. In fact, the UWMP has been using this percentage for this particular water source in its water allocations for the dry year scenarios since this source is the most vulnerable with the highest demand and unpredictable availability. In other words, the UWMP shifts from a source that may not be available in droughts and focuses on other sustainable sources such as groundwater, water banking and exchange programs.

The 2020 WSCP is the monitoring and implementation plan for drought response. The WSCP builds upon the analysis in the UWMP and outlines the actual steps to be taken in case of a drought. The WSCP provides detailed actions to undertake on a month-by-month basis throughout the year from January to December to ensure that the water supply conditions are accurately assessed and the correct actions are implemented to maintain adequate service.

Does the drought plan include consideration of climate change impacts to water resources or drought? Yes. The UWMP considers the effects of climate change in developing the strategies for effective management of the supply and demand. Section 1.7 of the UWMP details the effects of climate change on securing adequate resources. This section cites the California Water Plan, which analyzes three potential future scenarios taking climate change into account. The most likely scenario for future climate in California is increased temperatures, which will reduce the Sierra Nevada snowpack, which large parts of the State heavily rely on for their water supply. SWP water supplies are based on the DWR 2019 Delivery Capability Report which incorporates climate change. Further, the groundwater supply estimates incorporate climate change factors consistent with State guidelines for preparing groundwater sustainability plans.

UWMP considers climate change as one of the main reasons for limited water resources and bases its projections for water resource availability on a changing climate. The dry year scenarios analyzed in the plan consider the conditions encountered in the region during the most recent drought, as well future conditions based on available science. Also, the 2020 SCV-GSA Draft Water Budget Development Tech Memo (GSI, 2021) incorporated an updated climate change analysis consistent with DWR guidance for preparation of groundwater sustainability plans that was also utilized in development of the discussions and strategies noted in the UWMP.

Describe how your proposed drought resiliency project is supported by and existing drought plan. In accordance with the agreement with RRB, SCV Water can develop up to four additional wells to increase its dry year water from RRB by 10,000 AFY from its current 10,000 AFY for a



total of 20,000 AFY. The development of the additional wells is identified in Section 4.5.2 of the UWMP. Also, the 10,000 AF of additional water is part of the water supply to be used in a dry year as shown in Table 7-3 of the Plan. Therefore, the additional 5,000 AFY in this project is part of an essential resource that SCV Water will be using to effectively respond to droughts.

The development of the additional four wells is also identified on page 4 of the WSCP. On page 8 of the WSCP, implementation of the early recovery of water from banking programs is one of the strategies to be used for response to droughts in a low precipitation year.

Does the drought plan identify the proposed project as a potential mitigation or response action? The UWMP identifies the construction of additional wells to secure an additional 10,000 AFY of water for SCV Water in dry years. This project constructs two of the four wells. Furthermore, the UWMP specifically identifies the 5,000 AFY of water that the Project will make available as a component of the supply to be provided in the single-year dry year scenario and the multiple (five-year) dry year scenario.

Does the proposed project implement a goal or need identified drought plan? The UWMP identifies the need for sources of water in droughts as an alternative to SWP supply. Water banking is discussed in detail and is one of the alternatives identified for use in droughts. The Project makes available 5,000 AFY of water in droughts, which is quantified in the dry year supply scenarios and constitutes a significant proportion of the overall water supply. In the 2020 WSCP, water banking is a strategy selected for response to droughts.

Describe how the proposed project is prioritized in the referenced drought plan? In the UWMP, the use of banked water in dry years that the Project makes available is an essential component of the overall water supply composition. In the WSCP, implementation of the early recovery of water from banking programs is one of the main actions for implementation during droughts.

# E.1.4. Evaluation Criterion D — Severity of Actual or Potential Drought Impacts to be addressed by the Project

#### Describe the severity of the impacts that will be addressed by the project:

What are the ongoing or potential drought impacts to specific sectors in the project area if no action is taken (e.g., impacts to agriculture, environment, hydropower, recreation and tourism, forestry), and how severe are those impacts? Impacts should be quantified and documented to the extent possible. For example, impacts could include, but are not limited to:

According to the U.S. Drought Monitor, the SCV Water service area is currently experiencing Extreme Drought (D3) and Exceptional Drought (D4) status, which are the most severe drought categories. The current drought began in January 2020 with low precipitation rainy season and worsened ever since to the current most severe designations. This is only a few years after the 2012-2015 drought that gripped California, with 2013-2014 water year being one of the driest years on record in the state. Water is not only needed for the survival of humans but is also an



essential element in everyday life from hygiene to irrigation for agriculture. Water is also the life blood of a successful economy that can support a community.

The objective of the Project is to provide a sustainable source of water that the community can rely on in droughts. The SWP has provided water to communities for decades, but with recent droughts, it has become evident that this resource is vulnerable and is reaching strained levels. With climate change, severe and prolonged droughts are predicted for California and with the current projection of a 0% SWP allocation for 2022, SCV Water will still be responsible for supplying water to all of its customers and specifically to the business such as the Six Flags Magic Mountain and Hurricane Harbor amusement parks with over 10,000 visitors per day that provide economic sustainability for the area.

Further, the 2020-2021 (Oct-Sept) water year was the worst on record with SCV Water's service area receiving only 3.4inches of precipitation compared to the average of 17.5 inches per year.

Whether there are public health concerns or social concerns associated with current or potential drought conditions (e.g., water quality concerns including past or potential violations of drinking water standards, increased risk of wildfire, or past or potential shortages of drinking water supplies? Does the community have another water source available to them if their water service is interrupted?). The region is currently in drought conditions again and water supply from the SWP is unpredictable. Also, the groundwater table could get low if dry years persist. Therefore, banking programs provide a reliable alternative where wet years are taken advantage of by storing and recharging groundwater.

If water is in short supply during a drought, which the Project is designed to mitigate, the following public health and social concerns can occur:

- Reduced quantity of drinking water.
- Impacts to sanitation and hygiene.
- Reduced water usage for the irrigation of landscaping can result in higher dust and related particles, which may exacerbate respiratory conditions such as asthma.
- Reduced fire suppression capabilities

Whether there are ongoing or potential environmental impacts (e.g., impacts to endangered, threatened or candidate species or habitat). As detailed under Evaluation Criterion E.1.2 above, the Sacramento – San Joaquin River Delta, where SWP water is diverted for human use is an ecologically sensitive habitat for several endangered species. Reduction of reliance on potential water purchases to supplement reduced SWP water during droughts directly benefits the endangered species in the Delta.

Whether there are local or economic losses associated with current drought conditions that are ongoing, occurred in the past, or could occur in the future (e.g., business, agriculture, reduced real estate values). Water is the life blood of a vibrant and successful economy. Shortages in water result in higher prices of the water itself. SCV Water serves a diverse array of sectors such





as residential, industrial, commercial, and institutional users. SCV Water serves users in the Santa Clarita Valley which, according to the Los Angeles County Economic Development Corporation (LACEDC), "the Santa Clarita Valley boasts a thriving economy ranked by major banks, publications, and research authorities as one of California's strongest." Due to the Santa Clarita Valley's proximity to major economic hubs such as Los Angeles, many people and businesses have emerged in SCV Water's service area. Since 2010, SCV Water's service area grew from 253,000 to 296,200. This represents a 17% increase as compared to the State's overall population increase of 6% in the same time period. Major industries that are hosted in the Santa Clarita Valley are aerospace defense, bioscience and medical devices, advanced manufacturing, digital and entertainment, information technology, and corporate headquarters. Any hinderance in SCV Water's ability to provide safe, and reliable water service will ultimately negatively affect SCV Water customers and hinder economic growth within the Santa Clarita Valley.

Whether there are other drought-related impacts not identified above (e.g., tensions over water that could result in a water-related crisis or conflict). Water in California is a very scarce resource and allocating it to the various agencies has always been a complex and challenging task that gets more difficult during droughts. The Project aims to provide an alternative source other than SWP water in dry years that is reliable and sustainable. Reducing reliance on SWP water, especially during dry years, is expected to reduce the potential for tensions and conflict with other SWP member agencies. Actually, some of the Northern California agencies are filing a lawsuit against the State Water Resources Control Board over an emergency drought order issued in August 2021 to curtail water diversions.

Describe existing or potential drought conditions in the project area. Is the project in an area that is currently suffering from drought or which has recently suffered from drought? Please describe existing or recent drought conditions, including when and the period of time that the area has experienced drought conditions (please provide supporting documentation, [e.g., Drought Monitor, droughtmonitor.unl.edu]). According to the U.S. Drought Monitor, the SCV

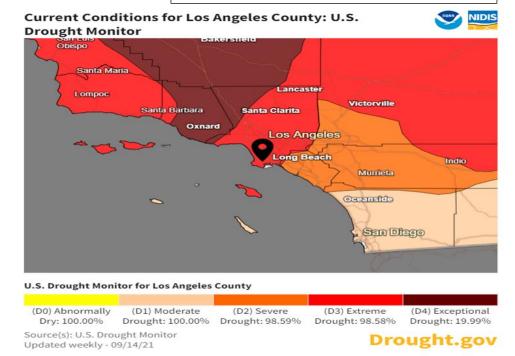


Water service area is currently experiencing

Figure 3. Current Drought Conditions for Los Angeles County

Extreme Drought (D3 status) and Exceptional Drought (D4 status), the highest categories.

The current drought began in January 2020 with a low precipitation rainy season and worsened over the past couple of years to the current most severe designations. This is only a few years after the 2012-2017 drought that



gripped California, with 2013-2014 being one of the driest years on record in the state.

Currently, Approximately 46% of California is in the Exceptional Drought condition. A study posted on the Drought.gov website, sponsored by the National Oceanic and Atmospheric Administration (NOAA) Climate Program Office and NASA, states that a "dry future is likely unavoidable for the Southwest". The study puts the likelihood of 21-year mega drought events at a roughly 50% chance through 2100. Substantial research on climate change points to a dryer and hotter Western U.S. Therefore, water sustainability projects like this one are critical.

Describe any projected increases to the severity or duration of drought in the project area resulting from changes to water supply availability and climate change. Provide support for your response (e.g., reference a recent climate informed analysis, if available). As mentioned above, a NOAA/NASA study is predicting a significant likelihood of megadroughts, which last over 20 years at a time. To discuss the urgency of climate crisis, the National Integrated Drought Information System (NIDIS) is hosting a "Southwest Drought Virtual Forum". The forum is a four-day long discussion assembling stakeholders, decision makers and drought experts for a dialogue on worsening drought conditions in the Southwest, as well as response and relief effort. This indicates the extent to which droughts are becoming common and the urgency of the response and actions needed from all the stakeholders.

The evidence is mounting that California and the Western U.S. are getting hotter and dryer with more intense and longer duration droughts. This is demonstrated in the recent drought of 2012-2017, followed by the current drought only a few years later.



#### E.1.5. Evaluation Criterion E — Project Implementation

Describe the implementation plan of the proposed project. The Project has completed the planning stage, as well a Technical Memorandum delineating suitable project sites and detailing the technical project specifications for the well design. The selection process for a specific project site is underway and the construction of the Project is targeted to begin upon entering into an award agreement for this application.

Estimated Project Schedule					
No.	Task/Milestone	Start Date	Completion Date		
1	Property Acquisition	September 2021	January 2022		
2	Plans, Specifications and Estimate	January 2021	July 2022		
4	Project Permits	February 2022	May 2022		
	NEPA & CEQA Environmental				
5	Documentation	Feb. 2022	June 2022		
	Procure Construction Contract	July 2022	September 2022		
6	Construction	September 2022	September 2023		
7	Project Closeout	October 2023	January 2024		

Describe any permits that will be required, along with the process for obtaining such permits.

All work will be completed in accordance with regulations and standards of SCV Water, RRB, the California Department of Water Resources and State Water Resources Control Board Division of Drinking Water (DDW). The following permits are required for the construction and operation of the wells. The permits will be obtained during the design phase of the Project in accordance with the above schedule and no issues are anticipated in securing the permits.

- 1. Grading permit from the County of Kern.
- 2. Electrical permit from Pacific Gas & Electric.
- 3. Well construction permit from Kern County

Identify and describe any engineering or design work performed specifically in support of the proposed project. A Technical Memorandum has been completed for the Project. The Memorandum identified suitable project sites and details the technical specifications for the wells, which enables the final design to proceed.

Describe any new policies or administrative actions required to implement the project. No new polices or administrative actions are required to implement the Project.

#### E.1.6. Evaluation Criterion F — Nexus to Reclamation

Does the applicant have a water service, repayment, or O&M contract with Reclamation? No.

*If the applicant is not a Reclamation contractor, does the applicant receive Reclamation water* through a Reclamation contractor or by any other contractual means? SCV Water receives a substantial portion of its water from the SWP. The Project will produce 5,000 AFY of groundwater, which will allow SCV Water to mitigate for and reduce reliance on the SWP due to



increasingly stringent regulatory and operating criteria in dry years. In particular, this project will allow SCV Water to utilize an alternate source of supply to in part mitigate for dry-year reductions associated with the amended (in 2018) Coordinated Operations Agreement between the Bureau of Reclamation and the California Department of Water Resources for the Central Valley Project and the State Water Project.

Will the proposed work benefit a Reclamation project area or activity? The Project will benefit Reclamation by reducing reliance on north of Delta water transfers that otherwise would supplement SCV Water's SWP water potentially making more water available to CVP contractors to transfer in dry years.

*Is the applicant a Tribe?* No.



### **SECTION 2: PROJECT BUDGET**

#### Standard Form 424 Budget Information C

Submitted separately with all other relevant SF-424 forms.

#### A. Funding Plan and Letters of Commitment

Describe how the non-Federal share of project costs will be obtained. Reclamation will use this information in making a determination of financial capability.

SCV Water has allocated the matching funds required for this grant and additional funding to complete the project. The sources of the cost share are from SCV Water Capital Improvement Program funds supplied from wholesale water rate connection fees and/or property tax revenues.

As shown in the SCV Water Board Resolution, SCV Water is committed to providing the remaining matching fund to complete the Project effective immediately.

Commitment letters from third-party funding sources should be submitted with your application. If commitment letters are not available at the time of the application submission, please provide a timeline for submission of all commitment letters. Cost-share funding from sources outside the applicant's organization (e.g., loans or State grants), should be secured and available to the applicant prior to award.

SCV Water will be providing the matching funding from its own budget. Therefore, no third party funding is included.

Reclamation will not make funds available for an award under this NOFO until the recipient has secured non-Federal cost-share. Reclamation will execute a financial assistance agreement once non-Federal funding has been secured or Reclamation determines that there is sufficient evidence and likelihood that non-Federal funds will be available to the applicant subsequent to executing the agreement.

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

- Any monetary contributions by the applicant towards the cost-share requirement and source of funds (e.g., reserve account, tax revenue, and/or assessments).
- Any costs that will be contributed by the applicant.
- Any third-party in-kind costs (i.e., goods and services provided by a third party).
- Any cash requested or received from other non-Federal entities.
- 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.



Table 2. Total Project Cost

SOURCE	AMOUNT
Costs to be reimbursed with the requested Federal funding	\$1,458,987
Costs to be paid by the applicant	\$1,458,987
Value of third-party contributions	\$0
Totals	\$2,917,974

Table 3. Summary of Non-Federal and Federal Funding Sources

FUNDING SOURCES	AMOUNT	%		
Non-Federal Entities				
SCV Water	\$1,458,987	50.0%		
Non-Federal Subtotal	\$1,458,987	50.0%		
Other Federal Entities				
None	\$0	-		
Other Federal Subtotal	\$0	-		
REQUESTED RECLAMATION FUNDING	\$1,458,987	50.0%		

In addition, please identify whether the budget proposal includes any project costs that have been or may be incurred prior to award. For each cost, describe:

- The project expenditure and amount
- The date of cost incurrence
- How the expenditure benefits the project

SCV Water is not requesting costs that have been incurred prior to award.



# B. Budget Proposal

Table 4. Project Budget Proposal

BUDGET ITEM DESCRIPTION	COMPUTATION			QUANTITY TYPE	TOTAL COST	
		nit	Quantity			
Salaries and Wages					\$	13,344
Project Manager	\$ 6	59.50	192	Hours	\$	13,344
Fringe Benefits					\$	7,146
Project Manager	\$ 3	37.22	192	Hours	\$	7,146
Travel					\$	-
N/A						
Equipment for both wells					\$	-
N/A						
Supplies/Materials					\$	-
N/A						
Contractual/Construction					\$	2,892,483
Construction Contract						
Mobilization	\$ 100	0,334	1	LS	\$	100,334
Demobilization	\$ 52	2,094	1	LS	\$	52,094
Develop and Provide Water Supply	\$ 22	2,455	1	LS	\$	22,455
Prepare, Maintain, and Restore Access Routes	\$ 25	5,136	1	LS	\$	25,136
Finish Grading of Project	\$ 5	5,000	1	LS	\$	5,000
Environmental Compliance and Permitting	\$ 6	5,795	1	LS	\$	6,795
Bond Costs	\$ 28	3,132	1	LS	\$	28,132
Well Drilling	\$ 728	3,861	2	LS	\$	1,457,722
Well Equipping	\$ 465	5,931	2	LS	\$	931,862
Contingency (10%)					\$	262,953
Environmental					\$	-
N/A						
Other					\$	-
N/A						
TOTAL DIRECT COSTS				\$	2,912,974	
Indirect Costs					\$	5,000
BOR Environmental Review	\$ 5	5,000	1	LS	\$	5,000
TOTAL ESTIMATED PROJECT COSTS				\$	2,917,974	



#### C. Budget Narrative

#### **Salaries and Wages & Fringe Benefits**

The Program Manager for this project will be Rick Viergutz, PE (who is a Principal Water Resource Planner for SCV Water) throughout design and construction. He will coordinate with RRB staff that will oversee the design and construction of the wells.

#### **Travel**

Not applicable.

#### **Equipment**

The Project will require the purchase of a substantial amount of equipment as detailed in Table 4 above. The construction contract will include the purchase of equipment to be done by the selected contractor.

#### **Materials and Supplies**

Similar to above, materials and supplies for the Project will be part of the construction contract.

#### Contractual/Construction

#### **Design Consultant**

An engineering design firm will be procured for the Project in accordance with SCV Water's and RRB purchasing procedures and federal procedures. RRB will issue a Request for Proposals to solicit proposal from qualified engineering firms. The competitive bid process will evaluate proposals received from consultants based on qualifications, experience, expertise and other factors. The contract will include a qualified Project Manager to oversee the design contract, prepare Plans, Specs & Estimates (PS&E) (construction documents), design calculations, permit applications and assistance with construction bidding of the Project and to provide support during the project construction phase.

#### **Construction Contractor**

Through a competitive bid process in compliance with State Contract Code and federal procedures, a qualified Contractor will be selected to complete the Project. The construction contract breakdown is shown in Table 4 above. The construction contract will also include the purchase of all equipment and materials needed to complete the Project.

#### **Third-Party In-Kind Contributions**

Not applicable.

#### **Environmental and Regulatory Compliance Costs**

The cost to preparation of the environmental document will be part of the design component of the Project. All costs that will be incurred in acquiring permits and any required mitigation measures will be borne by the contractor as shown in Table 4 above.



#### **Other Expenses**

All Project costs are captured in Table 4 above.

#### **Indirect Costs**

None.

#### **Total Costs**

The total cost of the Project is \$2,917,974. The federal cost share amount is \$1,458,987 (about 50%) and the non-federal cost share amount is \$1,458,987 (about 50%).



# SECTION 3: ENVIRONMENTAL AND CULTURAL RESOURCES COMPLIANCE

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.

The Project is not expected to impact the surrounding environment other than dust and noise during construction. The construction contractor will be required to follow mitigation measures determined in the environmental document to reduce impact to the community to less than significant.

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?

There are no known species listed as a Federal threatened or endangered species in the Project area. The anticipated Mitigated Negative Declaration (MND) for the Project will require adherence to certain mitigation measures such as construction outside the breeding season or conducting a bird survey that will be adhered to.

Are there wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdiction as "Waters of the United States?" If so, please describe and estimate any impacts the proposed project may have.

There are no wetlands or other surface waters inside the project boundaries.

#### When was the water delivery system constructed?

Construction of the SWP facilities occurred in the 1970s with the construction of the Cross Valley Canal following providing a connection to SWP for RRB. SCV Water's distribution system and Earl Schmidt Filtration plant in 1980, allowed transmission of SWP and other imported supplies to commence to SCV Water's service area.

Will the proposed project result in any modification of or effects to, individual features of an irrigation system (e.g., headgates, canals, or flumes)? If so, state when those features were constructed and describe the nature and timing of any extensive alterations or modifications to those features completed previously.

The Project will not result in any modification of individual features of an irrigation system.

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.

There are no buildings, structures, or features in the Project area that are listed or eligible for listing on the National Register of Historic Places within this project area.



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

There are no known archeological sites in the Project area.

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

The Project will not have a negative or adverse effect on low income or minority populations.

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

The Project will not have any impacts on sacred sites or tribal lands.

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

The Project will not contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species.



### **SECTION 4: REQUIRED PERMITS OR APPROVALS**

Applicants must state in the application whether any permits or approvals are required and explain the plan for obtaining such permits or approvals. Note that improvements to Federal facilities that are implemented through any project awarded funding through this NOFO must comply with additional requirements. The Federal government will continue to hold title to the Federal facility and any improvement that is integral to the existing operations of that facility. Please see P.L. 111-11, Section 9504(a)(3)(D). Reclamation may also require additional reviews and approvals prior to award to ensure that any necessary easements, land use authorizations, or special permits can be approved consistent with the requirements of 43 CFR Section 429, and that the development will not impact or impair project operations or efficiency.

All work will be completed in accordance with regulations and standards of SCV Water, RRB, the California Department of Water Resources and State Water Resources Control Board Division of Drinking Water (DDW). The following permits are required for the construction and operation of the wells. The permits will be obtained during the design phase of the Project in accordance with the above schedule and no issues are anticipated in securing the permits.

- 1. Grading permit from the County of Kern.
- 2. Electrical permit from Pacific Gas & Electric.
- 3. Well construction permit form Kern County



# SECTION 5: EXISTING DROUGHT CONTINGENCY PLAN

Reliability planning and Drought Risk Assessment is part of the SCV Water's 2020 Urban Water Management Plan (UWMP) - Section 7 that is included as Appendix B and the 2020 WSCP as Appendix C.



# **SECTION 6: LETTERS OF SUPPORT**

All letters of support for the Project can be found in Appendix A.



#### SECTION 7: OFFICIAL RESOLUTION

The below Resolution is a draft that will be approved by the SCV Water Board of Directors on November 2, 2021.

#### RESOLUTION NO. \_\_\_\_

A RESOLUTION OF THE BOARD OF DIRECTORS
OF THE SANTA CLARITA VALLEY WATER AGENCY AUTHORIZING AN
APPLICATION FOR GRANT FUNDING BY THE BUREAU OF
RECLAMATION'S WATERSMART DROUGHT RESPONSE PROGRAM FOR
THE ROSEDALE PHASE 2 WELLS PROJECT

WHEREAS, the Santa Clarita Valley Water Agency (the "Agency") (as successor to the Castaic Lake Water Agency) and the Rosedale Rio- Bravo Water Storage District (Rosedale) have entered into a November 15, 2005 Agreement for a Water Banking and Exchange Program (Program); and

WHEREAS, water pumped from the Program is delivered to the California Aqueduct and then to the Agency for treatment and distribution to Agency customers; and

WHEREAS, the Agency may store up to 200,000 AF in the Program and may construct up to seven wells to extract up to 20,000 AF per year from the Program for use during droughts; and

WHEREAS, in 2019, the Agency and Rosedale completed construction of three of the seven wells and these wells, along with other facilities, provide for the return of 10,000 AF during drought years; and

WHEREAS, Rosedale, on behalf of the Agency, has completed a siting study for the four remaining wells; and

WHEREAS, the Agency, on June 16, 2021, adopted an update to its Urban Water Management Plan that calls for construction of the four remaining wells for use during drought periods; and

WHEREAS, a second phase of well construction, the Rosedale Phase 2 Wells Project (Project), is desired to make available an additional 5,000 AF of drought supplies to the Agency, which would be accomplished by construction of two additional wells and the accompanying transmission facilities; and

WHEREAS, the United States Department of the Interior offers financial assistance in the form of grant funding through its Bureau of Reclamation's WaterSMART (Sustain and Manage America's Resources for Tomorrow) Drought Response Program (DRP): Drought Resiliency Projects Program for this type of project. The program provides two levels of funding and up to a maximum of \$2,000,000 in grant funding for longer term projects and \$500,000 for other projects, but not to exceed 50% of the total project cost; and

**WHEREAS**, the Agency desires to fund part of the cost of the Rosedale Phase 2 Wells Project with grant funding from the WaterSMART DRP Program.

**NOW, THEREFORE,** the Board of Directors of the Santa Clarita Valley Water Agency hereby finds, determines, declares and resolves as follows:

 The Board hereby supports a grant application to the WaterSMART DRP Program for the Project.



- The Board hereby authorizes and directs the General Manager, or his or her designee, to complete, review, sign and submit for and on behalf of the Agency, a grant application from the Bureau of Reclamation's WaterSMART DRP Program for the Project up to the amount of \$2,000,000.
- The General Manager, or his or her designee, is designated to provide the assurances, certifications, and commitments required for the grant application, including executing a financial assistance or similar agreement with the Bureau of Reclamation within established deadlines and any amendments or changes thereto.
- 4. The General Manager, or his or her designee, is designated to represent the Agency in carrying out the Agency's responsibilities under the grant agreement, including certifying disbursement requests on behalf of the Agency and compliance with applicable state and federal laws.
- 5. If a grant award is made by the Bureau of Reclamation, the Agency commits, pending Board compliance with the California Environmental Quality Act and approval of the Project, to providing a minimum of 100% in matching funds (\$2,000,000) for the Project, and up to the balance of funds needed to complete the construction of the Project.
- 6. This Resolution shall take effect immediately.



# **SECTION 8: PROOF OF SAM REGISTRATION**

#### **REGISTRATION STATUS: ACTIVE**

# PAYMENTS FOR CONTRACTS & GRANTS WILL NOT BE AWARDED OR PROCESSED AFTER: 01-04-2022

#### Santa Clarita Valley Water Agency

Renew Registration Now

Cheryl Fowler

Legal Business Name: Santa Clarita Valley Water Agency

<u>Legal Business Address:</u> 27234 BOUQUET CANYON RD SANTA CLARITA, undefined, USA, 91350-2173

> Email: FOUO Only Phone: FOUO Only Fax: FOUO Only

Mailing Address: 27234 BOUQUET CANYON RD SANTA CLARITA, CA, USA, 91350-2173

> DUNS: 116914762 CAGE: 7BF03

> > Status: Active

Purpose Of Registration: Federal Assistance Awards



### **APPENDICES**

Appendix A: Letters of Support

Appendix B: SCV Water 2020 Urban Water Management Plan Appendix C: SCV Water 2020 Water Shortage Contingency Plan

Appendix D: Technical Memorandum

Appendix E: Well Sites Map

Appendix F: Mojave Zone 7 Water Purchase Agreement



#### APPENDIX A: LETTERS OF SUPPORT



23920 Valencia Boulevard • Santa Clarita, California 91355-2196 Phone: (661) 259-2489 • FAX: (661) 259-8125 www.santa-clarita.com

September 28, 2021

U.S. Bureau of Reclamation Attn: Ms. Sheri Looper Mail Code: MP-400 2800 Cottage Way Sacramento, CA 95825

Dear Ms. Looper:

Subject: Letter of Support for the Santa Clarita Valley Water Agency's Rosedale Phase 2 Wells Project

The City of Santa Clarita (City) is writing to show our support for the Santa Clarita Valley Water Agency's (SCV Water) grant application for the FY2022 Drought Resiliency Projects for their Rosedale Phase 2 Wells Project (Project).

The City relies on SCV Water to provide clean, safe, and reliable drinking water for its 213,000 residents. This Project is directly in line with SCV Water's duty to provide clean, safe, and reliable drinking water and assuring a reliable water supply in times of drought. The Project consists of drilling, construction, development, and testing of two new wells which will allow SCV Water to recover an additional 5,000 acre-feet per year of drought supply from its water banking programs.

The City is supportive of the Project as it enhances water supply reliability and advances the common goal of providing clean, safe, and reliable water to the citizens of Santa Clarita.

On behalf of the City, please accept this letter of support for this well construction project and the continuing efforts of SCV Water.

Sincerely

Robert G. Newman Director of Public Works

RGN:tp

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Santa Clarita Valley Water Agency City of Santa Clarita Los Angeles County Flood Control District Santa Clarita Valley Sanitation District San Gabriel and Los Angeles Rivers and Mountains Conservancy

September 29, 2021

U.S. Bureau of Reclamation Attn: Ms. Sheri Looper Mail Code: MP-400 2800 Cottage Way Sacramento, CA 95825

RE: Letter of Support for the Santa Clarita Valley Water Agency's Rosedale Phase 2
Wells Project

Dear Ms. Looper,

I am writing to show our region's strong support of the Santa Clarita Valley Water Agency's (SCV Water) grant application for the FY2022 Drought Resiliency Projects for their Rosedale Phase 2 Wells Project (Project).

The SCV Water service area, like much of California, has been extremely affected by on-going and recurrent drought conditions present in California. In order to ensure SCV Water achieves their goal of providing clean, safe, and reliable drinking water to its service area, SCV Water has invested in groundwater banking programs to mitigate the effects of drought.

The Project includes drilling, construction, development, and testing of two new wells located in Rosedale, California. These wells will provide for return of an additional 5,000 acre-feet per year (AFY) of banked groundwater to the SCV Water service area to utilize as drought conditions occur.

The USCR Integrated Regional Water Management Plan (IRWM Plan) lays out a number of strategies to meet our watershed's core objectives. For example, this Project meets key objectives of the IRWM Plan, including increasing water supply by improving water system operational flexibility.

On behalf of the Upper Santa Clara River IRWM, please accept this letter of support for this well construction project and continuing efforts of SCV Water.

Sincerely,

Rick Viergutz, Chair,

Upper Santa Clara River IRWM

cc: USCR IRWM RWMG

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Water Resources & Outreach

26501 Summit Circle, Santa Clarita, CA 91350-3049

(661) 297-1600 | yourSCVwater.com

September 29, 2021

U.S. Bureau of Reclamation Attn: Ms. Sheri Looper Mail Code: MP-400 2800 Cottage Way Sacramento, CA 95825

RE: Letter of Support for the Santa Clarita Valley Water Agency's Rosedale Phase 2
Wells Project

Dear Ms. Looper,

As the General Manager of Santa Clarita Valley Water Agency (SCV Water), I am writing with regard to our grant application for the FY2022 Drought Resiliency Projects for the Rosedale Phase 2 Wells Project (Project).

SCV Water continues to pursue the goal of enhancing and maintaining a diverse portfolio of drinking water supplies to ensure ongoing water reliability and resiliency for our 273,000 customers. To this end, SCV Water participates in water banking programs to store excess water in wet years to be utilized in times of drought. Over the past 14 years, SCV water has stored approximately 120,500 acre-feet (AF) of available water during wet years in our banking program with Rosedale Rio Bravo Water District. To date, we have retrieved 39,000 AF from the program to manage dry year supply reliability. The agreement provides that we may install up to 20,000 acre feet per year (AFY) of annual extraction capacity. The initial phase of extraction capacity (10,000 AFY) was completed in September 2019. This Phase 2 project will increase our capacity by 5,000 AFY to retrieve water that is already in storage. This funding opportunity will allow SCV Water to further fulfill this pursuit by investing in additional extraction facilities to return banked water to its service area in dry years.

The Project consists of constructing two new wells with a targeted operational production of 5,000 AFY. The work will include, but is not limited to, drilling, construction, development, and testing of each new well along with equipping these new wells and providing pipelines to connect to existing conveyance facilities which deliver the recovered water through the California Aqueduct to SCV Water for treatment and distribution to SCV Water customers.



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On behalf of SCV Water, please accept this letter requesting your consideration of the Rosedale Phase 2 Wells Project and our continuing efforts to ensure supply reliability for our community.

Sincerely,

- DocuSigned by

Matthew 6 Stone

Matthew Stone General Manager



# APPENDIX B: Santa Clarita Valley Water Agency 2020 Urban Water Management Plan

Please see attached Attachment 2 of this application on grants.gov submission package.



# **APPENDIX C: Santa Clarita Valley Water Agency Water Shortage Contingency Plan**

Please see attached Attachment 3 of this application on grants.gov submission package.

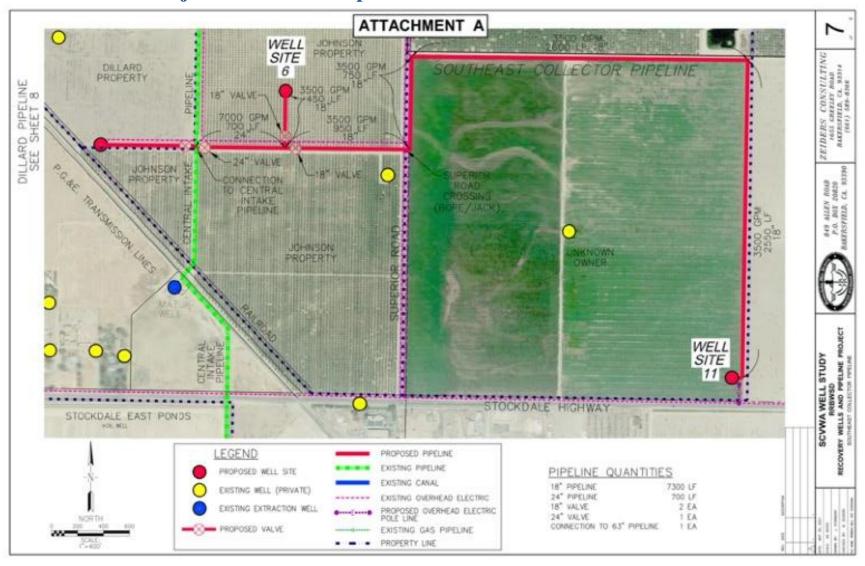


# **APPENDIX D: Well Study Technical Memorandum**

Please see attached Attachment 4 of this application on grants.gov submission package.



# **APPENDIX E: Project Location Map**





# **APPENDIX F: Mojave Zone 7 Water Purchase Agreement**

Please see attached Attachment 5 of this application on grants.gov submission package.