US Bureau of Reclamation

WaterSMART Drought Response Program: Drought Contingency Planning Grants for Fiscal Years 2020 and 2021 FOA BOR-DO-20-F003

Drought Response Program



SANTA CLARA VALLEY WATER DISTRICT GRANT PROPOSAL • February 5, 2020 FORM 424B: ASSURANCES – NON-CONSTRUCTION PROGRAMS





February 4, 2020

DROUGHT RESPONSE PLAN

SANTA CLARA VALLEY WATER DISTRICT – STATE OF CALIFORNIA

WaterSMART Drought Response Program:

Drought Contingency Planning Grants

Projects for Fiscal Year 2020 FOA: BOR-DO-20-F003

Applicant/Project Manager: Santa Clara Valley Water District (Valley Water)

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Submitted to:

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SECTION 1: TECHNICAL PROPOSAL: EXECUTIVE SUMMARY

DATE: APPLICANT NAME: CITY/COUNTY: STATE:

February 5, 2020 Santa Clara Valley Water District (Valley Water) City of San Jose, Santa Clara County California

The Drought Response Plan builds resiliency to drought by supporting a proactive drought planning process that considers the risks and uncertainties related to changing hydrology and identifies drought mitigation and response actions. During the recent 2012-2016 drought, Valley Water enacted a comprehensive drought response that included 15 strategies to ensure resiliency of Valley Water's water supply system. The strategies were grouped into four categories: water supply and operations, water use reduction, drought response opportunities, and administrative and financial management. Valley Water's drought response permitted rapid recovery of groundwater basin storage levels, increased water conservation, leveraged opportunities to advance Valley Water's core services (e.g., cleaning recharge ponds, advancing recycled water, increasing public engagement, etc.), and strengthened relationships with key stakeholders. Valley Water's Drought Response Plan will evaluate new approaches for determining when to call for water shortage contingency plan actions, review the science related to early prediction of drought climate conditions, and develop a response framework for the water utility to employ during the next drought. The response framework will be built using the lessons learned from Valley Water's and other water agencies' 2012-2016 drought response. The Drought Response Plan will be complete within 24 months of the award date, spring 2022.

The following projects in the project area (Santa Clara County) have been funded by the U.S. Bureau of Reclamation (Reclamation):

- South Santa Clara County Recycled Water Project (BARWRP), 2008. Program: Title XVI Water Reclamation & Reuse
- City of San Jose, South Bay Water Recycling Program, 1992. Program: Title XVI Water Reclamation & Reuse
- South Bay Advanced Recycled Water Treatment Facility, 2008. Program: Title XVI Water Reclamation & Reuse
- Mountain View, Moffett Area Recycled Water Distribution Systems, 2008. Program: Title XVI Water Reclamation & Reuse
- Bay Area Regional Reliability (BARR), 2015. Program: WaterSMART Drought Response Program: Drought Contingency Planning Grants

Valley Water is requesting Reclamation funding in the amount of \$200,000. This plan will build on the other Reclamation-funded projects to provide a refined approach and drought coordination tool specific to Valley Water assets.



SECTION 2: TECHNICAL PROPOSAL: TECHNICAL PROJECT DESCRIPTION

2.1 Background Data

The Santa Clara Valley Water District (Valley Water), formed in 1929, is an independent, special district that provides wholesale water supply, groundwater management, flood protection and watershed stewardship. Its service area includes all of Santa Clara County, which is located at the southern end of San Francisco Bay, CA. Santa Clara County features a diverse mix of water users and stakeholders, including large urban areas of San Jose and Silicon Valley to the north, and mixed urban and agricultural demands in southern parts of the county.

A reliable supply of clean water is necessary for the environmental, economic, and social wellbeing of Santa Clara County. A safe and reliable water supply extends beyond the significant social requirements of basic health and sanitation. This extension includes economic vitality, environmental needs, agricultural requirements, social benefits, cultural expectations and requirements, and quality of life enhancements. On behalf of the community, Valley Water has made significant investments to manage demands for water and develop water supplies and infrastructure to meet the county's water needs. These investments currently enable Valley Water to manage the natural variability in demands and supply in order to meet the county's current needs in all but critical drought years, when the community will be requested to reduce their water use. However, with continued economic job growth in Silicon Valley and expanded housing developments around the San Francisco Bay Area, Valley Water anticipates the county's need for water will also continue to grow in the future.

Valley Water maintains a Water Supply Master Plan which identifies long-term investment strategies for providing a reliable and sustainable water supply in a cost-effective manner. The Water Supply Master Plan 2040 (WSMP 2040) identifies that current water supplies are sufficient to meet most future demands in normal years, however they will not meet needs in future droughts. The WSMP 2040 describes Valley Water's sustainability strategy which includes these elements: (1) securing existing supplies and infrastructure; (2) increasing water conservation and water reuse; and (3) optimizing the use of existing supplies. These elements guide Valley Water in its portfolio of water supply projects to meet future 'level of service' goals. Current average water demands are approximately 350,000 acre-feet per year (AFY) and Valley Water has projected that water demands will reach nearly 400,000 AFY by 2040. Currently, nearly half of the water used in Santa Clara County is imported.

Valley Water receives water both from the Central Valley Project (CVP), owned and operated by the Bureau of Reclamation (Reclamation), and the State Water Project (SWP), owned and operated by the California Department of Water Resources (DWR). As Santa Clara County's primary water wholesaler, Valley Water provides water and other services to businesses (including the technology industry of Silicon Valley), industrial and agricultural users, and the approximately 2 million residents in Santa Clara County.

Valley Water is also a partner in the Bay Area Regional Reliability Drought Contingency Plan

(BARR – DCP). The Bay Area Regional Reliability (BARR) is a partnership among eight of the largest San Francisco Bay Area water agencies that collectively serve more than 6 million people in 6 counties (Figure 1). The BARR-DCP is an integrated *regional* water management and drought mitigation effort. Valley Water's Drought Response Plan will focus specifically on the needs and strategies for Valley Water and the ability to effectively and strategically respond to future droughts, addressing Valley Water's diversity of water supplies and demands. This plan will evaluate new approaches for determining when to call for water shortage contingency plan actions, review the science related to early prediction of drought climate conditions, and develop a response framework for the water utility to employ during the next drought. The DRP will maintain compatibility with key WSMP elements as well as updating Valley Water components of the BARR - DCP and providing improved management tools for the larger San Francisco Bay Area.

Past prominent working relationships between Valley Water and Reclamation include:

- South Santa Clara County Recycled Water Project (BARWRP) Program: Title XVI Water Reclamation & Reuse Funding Opportunity: Title XVI Authorized Projects Location: Santa Clara County, California Year: 2008 Description: The South County Regional Wastewater Authority and the Santa Clara Valley Water District will construct the South Santa Clara County Recycled Water Project recycled water system distribution facilities.
- Santa Clara Valley Water District
 Program: Title XVI Water Reclamation & Reuse
 Funding Opportunity: Title XVI Authorized Projects
 Location: San Jose, California
 Year: 2008
 Description: The City of San Jose, California and the Santa Clara Valley Water District
 constructed the South Bay Advanced Recycled Water Treatment Facility south of the San Francisco Bay.
- Bay Area Regional Reliability Drought Contingency Plan (BARR-DCP) Program: WaterSMART Drought Response Program: Drought Contingency Planning Grants Location: Bay Area Region, California Year: 2015 Description: Development of a regional Drought Contingency Plan in a partnership among eight of the largest Bay Area water agencies that collectively serve more than 6 million people in 6 counties.



2.2 Project Location

The DRP will include all of Valley Water's service area, located at the southern end of San Francisco Bay, CA. Valley Water serves 15 cities and a population of approximately 2 million residents (2019), a number projected to increase to 2.4 million by 2040. Figure 1 shows Valley Water (SCVWD) in relation to the other BARR agencies and encompasses all of Santa Clara County.

2.3 Project Description

Valley Water will develop a Drought Response Plan (DRP; Task A) to improve water supply reliability in Santa Clara County during times of shortage. Valley Water's DRP will develop a response framework for the water utility to employ during the next drought, evaluate new approaches for determining when to request water use reductions, and review the science related to early prediction of drought climate conditions. Importantly, the response framework will integrate lessons learned from Valley Water's and other water agencies' 2012-2016 drought response. Developing a robust approach for requesting water use reductions and improving Valley Water's understanding of early drought warning will improve Valley Water's ability to efficiently and effectively use the drought response framework during future droughts.

2.3.1 Valley Water DRP Elements

The following section describes how each of the required six elements of a drought contingency plan will be addressed. The primary focus of the Valley Water DRP will be the improvement of Valley Water's drought monitoring program, mitigation measures, and County-level response strategy. This will also inform the BARR's - DCP and will apply to broader regional coordination.

2.3.1.1 Drought Monitoring

Valley Water relies on an extensive network of existing monitoring programs to help predict and respond to drought, including U.S. Drought Monitor. Valley Water actively manages three groundwater sub-basins and three drinking water treatment plants to provide potable water supplies to approximately 1.9 million people. To augment groundwater storage and provide treated water, Valley Water owns and operates 10 surface reservoirs in Santa Clara County and has contracts with imported water supplies from the SWP and CVP. The local surface reservoirs are monitored and managed in response to drought conditions. Valley Water also uses data provided by the California Cooperative Snow Surveys and information from SWP and CVP operations staff to help predict water availability and drought risk. This plan will include research related to early prediction drought methodologies for the Bay Area and include strategies implemented by Valley Water operators during the prior drought. The DRP will summarize existing and planned monitoring programs used by Valley Water to assess drought conditions and identify potential improvements. Valley Water will then use the monitoring data to evaluate whether there are early warnings of drought through climatic and other signals.

The Bay Area Regional **Reliability (BARR)** effort is a partnership among Bay Area water agencies to cooperate and develop regionwide solutions to *improve water supply* reliability, and to prepare for uncertain and limited water supply conditions. Valley Water is a partner in BARR and assisted with development of the **Reclamation-funded** regional Drought Contingency Plan in 2015. Valley Water's proposed DRP will help refine BARR planning elements to its service area and will add additional drought coordination and planning tools.





Figure 1. BARR agencies including Valley Water (SCVWD).

2.3.1.2 Vulnerability Assessment

A vulnerability assessment will be performed as part of the DRP. Valley Water will assess risks to critical water resources and infrastructure that helps Valley Water provide a reliable water supply. The vulnerability assessment will include changes in supplies and operational flexibility related to climate change and potential future regulations. Overall, the assessment will look at how different hydrologic conditions, potential regulations, and water shortage scenarios may impact Valley Water water supply reliability.

2.3.1.3 Mitigation Actions

Valley Water's primary water storage asset outside of Santa Clara County is the Semitropic Groundwater Banking Program (Semitropic) in Kern County. Valley Water can store and recover its imported water supplies, both SWP and CVP, in Semitropic via complex exchanges largely based on the project's water supply availability. During the 2012-2016 drought, Valley Water implemented mitigation actions such as working with DWR and Semitropic to develop alternative operations that maximized access to banked supplies in Semitropic and accelerating development of a potable reuse program. In addition, Valley Water's WSMP 2040 includes preliminary mitigation measures that would build long term resiliency to drought. This plan will identify, evaluate, and prioritize the potential mitigation measures used in the 2012-2016 drought and measures included in the 2040 WSMP, to verify how these actions performed and if additional or revised measures may be needed for future droughts.

2.3.1.4 Response Actions

During the 2012-2016 drought, the Governor of California mandated state-wide reduction of urban water use compared to 2013 levels. Valley Water implemented the following drought response actions to assist water retailers, cities, and Santa Clara County to achieve the requested water use reduction targets:

- Requested water use reductions in accordance with Valley Water's 2015 Urban Water Management Plan's (UWMP) drought contingency plan components,
- Increased rebates for landscape conversions, irrigation hardware upgrades, graywater laundry to landscape systems, and many commercial fixtures,
- Created the Water Waste Reporting and Inspection Program,
- Direct mail letters encouraging participation in conservation programs,
- Used stored SWP and CVP supplies, and
- Secured imported water transfers and exchanges, as was needed.

This plan will evaluate the effectiveness of actions taken during the 2012-2016 drought and identify additional Response Actions. All Response Actions identified in the DRP will be evaluated and prioritized.

The DRP will also use the historic and modeled data from the Drought Monitoring and Vulnerability Assessment to develop a new approach for determining when to request water use reductions from the community. The current approach, referred to as the drought contingency plan in the 2015 UWMP, does not adequately consider the diversity of water supplies and the different uses throughout the county (e.g., southern Santa Clara County is entirely groundwater dependent while northern Santa Clara County has access to treated surface water supplies). The goal of developing a new approach is to better align with the geography, water supply operations, the retailers and stakeholders of Santa Clara County and Valley Water.

2.3.1.5 Operational and administrative framework

The DRP will develop an operational framework for Valley Water's water utility response to drought conditions. To inform the framework, the project team will perform a benchmark study

of Valley Water's and other agencies' responses to the 2012-2016 drought to determine successful and unsuccessful actions during the most recent drought. Then, a framework will be developed to identify key subject matter experts and their roles; the types of data and analyses that should occur; existing databases or other resources that should be leveraged to support drought response actions; staff support needs; and drought opportunities (e.g., recharge pond maintenance) that can improve drought and post-drought operations. The framework will also identify personnel responsible for implementing each element of the DRP, including public outreach for mitigation and response actions.

2.3.1.6 Plan Development and Update Process

The DRP will describe the process undertaken to develop the plan, including stakeholder engagement. The DRP will also explain how comments were addressed throughout the DRP development process. Monitoring the DRP will occur annually. Valley Water's WSMP 2040 includes an annual Monitoring and Assessment Program (MAP), through which staff will monitor and update our DRP vulnerability assessment and mitigation actions, as needed. A complete review and update of the DRP will occur every five years by Valley Water staff.

SECTION 3: TECHNICAL PROPOSAL: EVALUATION CRITERIA

3.1 Evaluation Criterion A – Need for a Drought Contingency Plan or Plan Update (45 points)

Valley Water provides wholesale water to Santa Clara County's approximately 2 million residents and diverse water users. Much of Santa Clara County is often referred to as Silicon Valley, where water supply supports a healthy economy and high quality of life. However, Valley Water's local reservoirs and natural groundwater recharge do not provide enough water to meet Santa Clara County's demands. To supplement local supplies, Valley Water imports 45% of its water from the SWP and CVP. Valley Water's supply portfolio is vulnerable to future severe droughts since it relies primarily on storage and has limited drought resilient supplies. Valley Water's significant dependence on local surface water and imported SWP and CVP supplies also makes it vulnerable to increased water shortages related to climate change. SWP and CVP supplies are heavily reliant on snowpack, which may decrease in the future as temperatures warm. Additionally, much of the older SWP and CVP infrastructure was constructed for snowpack hydrology and may not adapt well to permanent changes in hydrologic conditions. Overall, Valley Water's planning efforts and experience during the 2012-2016 drought have established that demands exceed supplies during extended droughts. Therefore, it is imperative that Valley Water prepare for future droughts so that we continue to achieve our mission of providing Silicon Valley with safe, clean water for a healthy life, environment and economy.

3.1.1 Severity of risks to water supplies that will be addressed in the Drought Response Plan

3.1.1.1 Water Quality

The DRP will consider drought-related vulnerabilities to the water quality of surface supplies stored in Valley Water's local reservoirs and for imported SWP and CVP water supplies stored in San Luis Reservoir and Semitropic. Poor water quality conditions impact Valley Water's ability to send surface water to water treatment plants and to our managed groundwater recharge ponds. Of concern during droughts is increased algal blooms in surface water reservoirs. In addition, water quality concerns in the Delta related to salinity intrusion from the San Francisco Bay due to decrease Sacramento and San Joaquin River outflows, which can reduce Valley Water's ability to move imported water supplies through the Delta. The DRP may study how drought-related limitation on through-Delta water operations may impact potential operations and drought mitigation actions.

3.1.1.2 Environmental Concerns

Many of Santa Clara County's local creeks support federally endangered steelhead trout, among other non-endangered species. Droughts threaten streamflows that support these endangered fish. The DRP may analyze how mitigation project could improve streamflows during droughts, which would help endangered steelhead.

3.1.1.3 Local Economic Losses and Other Risks

Valley Water supports a diversity of industries that depend on a reliable water supply. Southern Santa Clara County has a thriving agricultural industry and northern Santa Clara County is home to many of the United States' large technology firms, such as Facebook and Google. Reliable, clean groundwater and surface water supplies help these industries prosper. In addition, Valley Water manages the groundwater sub-basins to prevent overdraft conditions and subsidence, which would have significant impacts to the County's infrastructure and industry. If drought results in a water shortage, groundwater-dependent companies may be restricted on how much they can pump so prevent subsidence. As a result, there may be tensions among stakeholders related to who receives treated supplies and who is permitted to pump groundwater (e.g., urban versus agricultural demand concerns).

3.1.2 Existing or Potential Drought Conditions to be Addressed in the DRP

The geographic region addressed by the DRP is not currently experiencing drought. Valley Water's last significant drought was from 2012-2016, during a time which most of California was also plagued by drought conditions. Figure 2 shows the percent area in drought for Santa Clara County, with intermittent short periods through January 2019. The 2012-2016 drought resulted in decreased groundwater storage and decreased SWP and CVP deliveries. The Fourth Climate Assessment of California is projecting that droughts will become more severe and that Sierra Nevada Mountain snowpack, which is integral to our SWP and CVP supplies, will decline to less than two thirds of its historical average by 2050. The negative water supply impacts of low precipitation during severe droughts will be further compounded by increased air temperatures, which increases evaporation from Valley Water's surface reservoirs and increases water quality issues.

3.1.3 Status of Existing Planning Efforts

Through BARR, Valley Water participated with other regional agencies to develop the BARR-DCP. The BARR-DCP focuses on developing regional projects that provide enhanced water supply reliability during droughts. However, the BARR plan does not focus on the drought response measures of each individual agency; rather, it looks at drought indicators and measures on a regional scale for the San Francisco Bay Area. Therefore, Valley Water's DRP would develop a response framework for the water utility to employ during the next drought, refined to the Santa Clara County scale, to evaluate new approaches for determining when to request water use reductions and review the science related to early prediction of drought climate conditions.

While the WSMP 2040 provides projections of future demands and recommends investments needed to meet the future demands, it does not provide a framework for responding to droughts nor does it develop an approach for determining when to call for water use reductions during droughts. Water supply projects recommended in the WSMP 2040 may be included as mitigation actions in the DRP if they help reduce drought risks identified in the vulnerability assessment. WSMP elements will be used to inform proposed DRP elements, providing a useful supplement planning tool to incorporate drought contingency components into the WSMP effort.

3.2 Evaluation Criterion B— Inclusion of Stakeholders (25 points)

- 1. *Identify stakeholders in the planning area who have committed to be involved in the planning process.*
- 2. Describe stakeholders in the planning area who have expressed their support for the planning process, whether or not they have committed to participate.
- 3. Describe what efforts that you will undertake to ensure participation by a diverse array of stakeholders in the development of a plan or plan update.

Valley Water will involve several groups of stakeholders owing to its diverse array of water users in Santa Clara County, including water retailers, the local agricultural community, environmental advocacy organizations, and community members interested in conservation. During the first three months after the award, Valley Water will develop a Technical Advisory Committee (TAC) that will

include interested representative(s) from each of the key stakeholder groups mentioned above. Currently, the Bay Area Water Supply and Conservation Agency (BAWSCA), which includes eight of our retailers, the Santa Clara County Open Space Authority, California Water Service, Great Oaks Water Company, the Cities of Morgan Hill and Gilroy, and the San Jose Water Company have agreed to participate in the planning process. Valley Water is confident that during the initial planning stage of the DRP, other water retailers will agree to join the technical advisory committee and commit to be involved in the planning process.

Valley Water will provide updates on the planning process to the larger community of stakeholders at Valley Water Board Committee and Board of Director meetings. Valley Water has an Agricultural Water Advisory Board Committee and a Demand Management Board Committee that generally meet quarterly. The Board committee and Board of Director meetings are open to the general public while the Board committee meetings have external stakeholders with specific expertise on the committee topic as committee members. Staff will present progress on the DRP and solicit feedback at these Board Committee meetings and at Board of Director meetings. By presenting early and frequently at Board Committee meetings and Board of Director meeting, Valley Water can further encourage active participation by retailers, agricultural stakeholders, and others.

3.3 Evaluation Criterion C— Project Implementation (10 points)

Developing the Valley Water DRP will consist of three major tasks: 1) project administration, 2) plan development, and 3) stakeholder outreach. Table 1 provides a summary of the tasks and major anticipated deliverables.

Project administration includes executing the financial assistance agreement with Reclamation, selecting a consultant to develop the Valley Water DRP, and grant reporting. The deliverables include an executed financial assistance agreement, a consultant contract, and required grant reports. All required reports will be provided to Reclamation consistent with the terms of the financial assistance agreement.

3.3.1 Describe how each of the six required elements of a Drought Contingency Plan, as applicable, will be addressed within the two-year timeframe.

A consultant, to be determined after grant award, will work with Valley Water and stakeholders on the TAC to develop the elements of the DRP beginning winter 2020. Valley Water will coordinate at least two workshops that include the consultant and the TAC. The TAC will provide input on the development of the DRP elements at the first workshop. The vulnerability assessment and mitigation measures analyses will be presented at the second workshop. A third workshop may be desired by the TAC to review the draft DRP. The TAC and other interested stakeholders will provide feedback on the initial analyses and the draft report. The final report is anticipated to be completed by April 2022.

Valley Water will present the analyses and draft report to interested stakeholders, including the public, at quarterly Board Committee meetings. By presenting regular updates at Board Committee meetings, stakeholders will be able to provide feedback throughout the DRP development process. Materials for the Board committee meetings will include written updates, presentations, and when needed, factsheets. Valley Water will also update its website with DRP

progress to help the public stay informed. The draft and final reports will be posted to Valley Water's website for public review.

It is anticipated that the DRP development will take two years form the grant award date, with the financial assistance agreement being executed by July 2020. Phase 1 will be completed by December 2020 and include TAC establishment, consultant selection, and development of a detailed work plan. Phase 2 will be complete by July 2022 and includes the development of the Valley Water DRP and stakeholder outreach.

Task	Start Date	End Date	
Project Administration	May 2020	July 2022	
Execute agreement with Reclamation	May 2020	July 2020	
Work plan approved by Reclamation	October 2020	December 2020	
Grant reporting	July 2020	July 2022	
Select consultant	July 2020	October 2020	
Establish TAC	November 2020	November 2020	
Development of Valley Water DRP	January 2021	July 2022	
Drought monitoring (compile data, analysis)	January 2021	April 2021	
Compile data	January 2021	January 2021	
Drought prediction analysis	February 2021	April 2021	
Vulnerability assessment	January 2021	May 2021	
Mitigation action evaluation and prioritization	May 2021	November 2021	
Response actions	February 2021	November 2021	
Operational and administration framework	January 2021	January 2022	
Draft report	February 2022	April 2022	
Final report	May 2022	July 2022	

Table	1.	Sched	lule for	[.] maior	tasks	and	milestones.
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3.3.2 Existing Data and Models

Valley Water collects and has access to the data necessary to complete the drought monitoring and vulnerability assessment and develop response actions. Valley Water manages several databases that house local hydrologic data, precipitation data, and water use data. In addition, Valley Water has a water supply operations model for long-term planning, and demand model to project future water demands. The planning model includes information on recreational and environmental water needs and uses demand scenarios that are developed in the demand model. The demand model uses demographic, economic, and historic water use data to develop demand projections. In addition, Valley Water collaborates with climate experts to develop downscaled dataset from 16 climate models for Santa Clara County reservoir inflows, temperature, and precipitation for mid and late century. In addition, Valley Water has CalSim II model results that provide information on potential future changes to Valley Water's imported supplies. Valley Water also has access to state-level climatic data and hydrologic data, such as Sierra Nevada Mountain snowpack (snow water content), historic SWP and CVP contract allocations, and SWP and CVP reservoir storage.

Valley Water will use all available data to inform the drought monitoring element of the DRP. The data may be statistically analyzed to establish effective practices for monitoring near and long-term water availability, and if possible, to develop an approach for predicting the probability of future droughts and confirming existing droughts. The available data and models will be used to complete the vulnerability assessment, analyze the mitigation actions, and evaluate the effectiveness of response actions. Valley Water will look at different future conditions using the climate change datasets and analyzing a range of supply and demand assumptions using the planning and demand models.

3.3.3 Staff Technical Expertise

Valley Water has senior and associate engineers and water resources specialists that will support the data collection, modeling, and analysis. A senior engineer with expertise in Valley Water's utility operations will provide input on potential operational decisions related to mitigation and drought response actions. A senior and associate water resources specialist will provide input on imported water supplies and future delivery projections. A senior and associate water resources specialist will provide expertise in the water supply and demand modeling and mitigation action evaluation and prioritization. The water resources specialists currently maintain Valley Water's planning and demand models and Valley Water's water supply database. Valley Water will use Reclamation to review their Phase 1 work plan and their final DRP.

3.4 Evaluation Criterion D—Nexus to Reclamation (10 points)

Describe the nexus between the proposed project and a Reclamation project or activity, including:

3.4.1 Is there a Reclamation project, facility, or activity within the planning area?

Valley Water has water rights with Reclamation's Central Valley Project. As mentioned in the Executive Summary, there are four projects in the planning area that have received Reclamation grant funding, as provided in the link below:

https://usbr.maps.arcgis.com/apps/MapJournal/index.html?appid=043fe91887ac4ddc92a4c0f427 e38ab0

3.4.2 Is the planning area in the same basin as a Reclamation project, facility, or activity?

Santa Clara County does not have a Reclamation project, as of January 16, 2020. (https://www.usbr.gov/projects/)

3.4.3 In what way will the proposed project benefit a basin where a Reclamation project, facility, or activity is located?

This DRP will benefit both the Sacramento and San Joaquin River Basins as it will allow Valley Water to become more resilient to droughts and limit the reliance on the CVP.

3.4.4 Does the proposed project support implementation of a relevant Department of the Interior initiative?

This DRP will support Reclamation's initiative to manage and protect water resources by developing further analyses to protect the limited water resources during periods of water shortage. The findings of the early prediction models may inform other Reclamation initiatives.

3.5 Evaluation Criterion E—Department of the Interior Priorities (10 points)

3.5.1 Creating a conservation stewardship legacy second only to Teddy Roosevelt

The Drought Response Plan will develop planning evaluation tools, and response and mitigation actions to effectively manage water supplies during water shortage years, while also preserving the natural environment through careful management of the water supply system. This will assist Valley Water to stretch limited water supplies and provide more sustainable, drought-resistant alternative water supply solutions. This plan will help better leverage available water resources now and into the future, while adapting to a changing climate and variability in water supplies.

A broad representation of stakeholders, including water retailers, local organizations and the agricultural community, will foster the necessary relationships to assess the diverse needs of the region.

3.5.2 Utilizing our natural resources

Water is one of our most precious natural resources, as demonstrated by the recent multi-year droughts throughout the western U.S. over the last decade. This plan supports maximizing this precious resource by evaluating new approaches for determining when to call for water shortage contingency plan actions and reviewing the science related to early prediction of drought climate conditions. This will provide for the development of a response framework that will protect this precious resource during the next drought.

3.5.3 Restoring trust with local communities

This plan is supported by our local community and retailer partners. The San Francisco Bay Area has shown its commitment to regional management of our scarce water resources through BARR. The results of this plan will benefit BARR and the larger regional network of water agencies.

3.5.4 Striking a regulatory balance

In 2014 the California Department of Fish and Wildlife and the National Marine Fisheries Service began a voluntary drought initiative to protect endangered species in the Russian River basin, with an emphasis on coho salmon and steelhead. The voluntary initiative identified tributaries of importance to the preservation of endangered species and worked with other parties to provide instream flows for fish, monitoring and potential fish rescue actions. Using scientific

technological advances in predicting water shortage conditions, Valley Water can better manage water supplies for a range of water demands, including environmental needs and requirements.

3.5.5 Modernizing our infrastructure

This DRP is not proposing construction of new infrastructure. However, drought conditions can potentially create new maintenance opportunities. This plan will assess what operational or maintenance opportunities that may be created during shortage conditions.

SECTION 4: PROJECT BUDGET

4.1 Funding Plan

The total project budget is \$400,000 and the funding plan is summarized in tables 2 and 3. Funding for the DRP will be from this Reclamation grant and Valley Water in-kind contributions. There will be no additional funding sources. Valley Water's funding will be available July 2020 and there are no time constraints on the availability of funds through the duration of the 2-year project schedule.

Table 2. Total Project Cost

Funding Sources	Total Amount
Federal: Requested Reclamation	\$200,000
funding	
Non-federal: In-kind local	\$200,000
contribution (Valley Water)	

Table 3. Summary of non-federal and federal funding sources

Funding Sources	Amount
Non-federal entities	
Valley Water	\$200,000
Non-federal subtotal	\$200,000
Requested Reclamation funding	\$200,000

4.2 Budget Proposal

Per the grant funding announcement, the budget proposal in table 4 is only for phase 1. Phase 1 will consist of salaries, wages, and fringe benefits for the project manager and Valley Water staff. The funding for Phase 1 will come from Valley Water. No other costs are anticipated for Phase 1 of the DRP.

Table 4. Budget Proposal

Budget Item Description	\$/Unit	Quantity	Quantity	Total Cost
			Туре	
Salaries, Wages, Benefits				
Project Manager: Samantha Greene,	68.57	200	Hour	\$13,714
Senior Water Resources Specialist				
Senior Water Resources Specialist	68.57	100	Hour	\$6,857
Associate Water Resources Specialist	60.88	200	Hour	\$12,176
Fringe Benefits		82%	Percent	\$26,853
Total Estimate Phase 1 Cost				\$59,600

4.2.1 Salaries and Wages

The total cost for salaries and wages is \$32,747. Valley Water staff will include the project manager, a senior water resources specialist, and an associate water resources specialist. The project manager will be Samantha Greene, a senior water resources specialist.

4.2.2 Fringe Benefits

Fringe benefits for phase 1 are anticipated to cost \$26,853. The fringe benefit rate is 82% of staff salary. Fringe benefits for staff include health insurance, employer paid Medicare taxes, unemployment insurance, employer pension contributions, employer contributions to deferred compensation retirement accounts, life insurance, and disability insurance.

SECTION 5: REQUIRED PERMITS OR APPROVALS

No permits or additional approvals will be required to complete the DRP. Any projects or programs that may be identified through this process will be required to obtain all necessary environmental documentation, permits and approvals prior to implementation.

SECTION 6: EXISTING DROUGHT CONTINGENCY PLAN (if applicable)

Valley Water does not currently have a drought response plan. Valley Water refers to the thresholds provided in the latest 2015 UWMP drought contingency plan to determine when to call for water use reductions. Additional drought water supply analysis, as it pertains to long-term water supply reliability, is provided in Valley Water's WSMP 2040.

SECTION 7: LETTERS OF PROJECT SUPPORT

Letters of support are included in Appendix A.

SECTION 8: OFFICIAL RESOLUTION

Valley Water's official resolution will be submitted within 30 days of application submittal, as permitted.

Appendix A Letters of Support

US Bureau of Reclamation Policy and Administration WaterSMART Drought Response Program: Drought Contingency Planning Grants for Fiscal Years 2020 and 2021

Subject: Support for Valley Water's WaterSMART Drought Response Program Grant Application

Dear Sir/Madam:

This letter is to express support for Santa Clara Valley Water District's (Valley Water) submittal of a proposal to the WaterSmart Drought Response Program. This grant funding would support the development of a Drought Response Plan that would guide efficient and effective coordination among stakeholders during droughts and provide a strategy for mitigating potential drought impacts to Valley Water's water supply reliability.

The Bay Area Water Supply and Conservation Agency (BAWSCA) is a special district that provides regional water supply planning, resource development, and conservation program services for 26 cities, water districts, and private water utilities which collectively serve over 1.8 million residents in San Mateo, Santa Clara and Alameda Counties. Eight of BAWSCA's member agencies are located in Santa Clara County and are also retail agencies of Valley Water.

BAWSCA is specifically interested in Valley Water developing a Drought Response Plan so that Valley Water will be better prepared to work with retailers and other stakeholders to minimize the impacts of the drought on delivering a reliable water supply.

BAWSCA encourages the US Bureau of Reclamation to award funding for this proposal that will improve drought resiliency, local groundwater sustainability, and the County's water supply management.

Sincerely, Tom Francis

Water Resources Manager

Cc: Samantha Greene, Senior Water Resources Specialist, Valley Water

www.bawsca.org

CALIFORNIA WATER SERVICE

Conservation Department 2632 West 237th Street, Torrance, CA 90505 *Email:* conservation@calwater.com

January 28, 2020

U.S. Bureau of Reclamation Policy and Administration WaterSMART Drought Response Program Drought Contingency Planning Grants for Fiscal Years 2020 and 2021

Subject: Support for Valley Water's WaterSMART Drought Response Program Grant Application

Dear Sir/Madam:

This letter is to express support for Santa Clara Valley Water District's (Valley Water) submittal of a proposal to the WaterSmart Drought Response Program. This grant funding would support the development of a Drought Response Plan that would guide efficient and effective coordination among stakeholders during droughts and provide a strategy for mitigating potential drought impacts to Valley Water's water supply reliability.

The Santa Clara Valley Water District (Valley Water) is the wholesale water provider to Santa Clara County's (County) 1.9 million residents, including the 13 water retailers and independent groundwater pumpers (e.g., agricultural users). To provide a reliable water supply, Valley Water actively manages the County's groundwater storage, operates ten surface reservoirs, and provides treated water.

California Water Service (Cal Water) is specifically interested in Valley Water developing a Drought Response Plan so that Valley Water will be better prepared to work with retailers and other stakeholders to minimize the impacts of drought on delivering a reliable water supply.

We urge the US Bureau of Reclamation to award funding for this proposal that will improve drought resiliency, local groundwater sustainability, and the County's water supply management.

Sincerely,

Ken Jenkins Director of Water Resource Sustainability

Quality. Service. Value. calwater.com

City of Gilroy Mayor's Office

City Hall 7351 Rosanna Street Gilroy, California 95020-6197 Roland Velasco, Mayor roland.velasco@cityofgilroy.org City Hall Office (408) 846-0227 Cell Phone (408)710-8508 www.cityofgilroy.org

January 16, 2020

US Bureau of Reclamation Policy and Administration WaterSMART Drought Response Program: Drought Contingency Planning Grants for Fiscal Years 2020 and 2021

Subject: Support for Valley Water's WaterSMART Drought Response Program Grant Application

Dear Sir/Madam:

This letter is to express support for Santa Clara Valley Water District's (Valley Water) submittal of a proposal to the WaterSmart Drought Response Program. This grant funding would support the development of a Drought Response Plan that would guide efficient and effective coordination among stakeholders during droughts and provide a strategy for mitigating potential drought impacts to Valley Water's water supply reliability.

The Santa Clara Valley Water District (Valley Water) is the wholesale water provider to Santa Clara County's (County) 1.9 million residents, including the 13 water retailers and independent groundwater pumpers (e.g., agricultural users). To provide a reliable water supply, Valley Water actively manages the County's groundwater storage, operates ten surface reservoirs, and provides treated water. We are specifically interested in Valley Water developing a Drought Response Plan so that Valley Water will be better prepared to work with retailers and other stakeholders to minimize the impacts of the drought on delivering a reliable water supply.

The City of Gilroy urges the US Bureau of Reclamation to award funding for this proposal that will improve drought resiliency, local groundwater sustainability, and the County's water supply management.

Sincerely, Roland Velasco

Roland Velasco Mayor, City of Gilroy

January 29, 2020

US Bureau of Reclamation Policy and Administration WaterSMART Drought Response Program: Drought Contingency Planning Grants for Fiscal Years 2020 and 2021

Subject: Support for Valley Water's WaterSMART Drought Response Program Grant Application

Dear Sir/Madam:

This letter is to express support for Santa Clara Valley Water District's (Valley Water) submittal of a proposal to the WaterSmart Drought Response Program. This grant funding would support the development of a Drought Response Plan that would guide efficient and effective coordination among stakeholders during droughts and provide a strategy for mitigating potential drought impacts to Valley Water's water supply reliability.

The Santa Clara Valley Water District (Valley Water) is the wholesale water provider to Santa Clara County's (County) 1.9 million residents, including the 13 water retailers and independent groundwater pumpers (e.g., agricultural users). To provide a reliable water supply, Valley Water actively manages the County's groundwater storage, operates ten surface reservoirs, and provides treated water. The City of Morgan Hill is specifically interested in Valley Water developing a Drought Response Plan so that Valley Water will be better prepared to work with retailers and other stakeholders to minimize the impacts of the drought on delivering a reliable water supply. Morgan Hill relies on groundwater as the single source of water supply making the City particularly vulnerable to drought. In addition, Morgan Hill is surrounded by agricultural users that depend on water to operate, thus making the demand for water during a drought less flexible.

The City of Morgan Hill urges the US Bureau of Reclamation to award funding for this proposal that will improve drought resiliency, local groundwater sustainability, and the County's water supply management.

Sincerely,

anthony Eulo

Anthony Eulo Program Administrator City of Morgan Hill

UTILITIES DEPARTMENT

250 Hamilton Avenue. 3rd Floor Palo Alto. CA 94301 650 329 2241

January 31, 2020

US Bureau of Reclamation

Policy and Administration

WaterSMART Drought Response Program: Drought Contingency Planning Grants for Fiscal Years 2020 and 2021

Subject: Support for Valley Water's WaterSMART Drought Response Program Grant Application

Dear Sir/Madam:

This letter is to express support for Santa Clara Valley Water District's (Valley Water) submittal of a proposal to the WaterSmart Drought Response Program. This grant funding would support the development of a Drought Response Plan that would guide efficient and effective coordination among stakeholders during droughts and provide a strategy for mitigating potential drought impacts to Valley Water's water supply reliability.

The Santa Clara Valley Water District (Valley Water) is the wholesale water provider to 1.9 million residents in Santa Clara County (County), including 13 water retailers and independent groundwater pumpers (e.g., agricultural users). To provide a reliable water supply, Valley Water actively manages the County's groundwater storage, operates ten surface reservoirs, and provides treated water. Although the City of Palo Alto does not currently purchase water from Valley Water, we are specifically interested in Valley Water developing a Drought Response Plan so that Valley Water will be better prepared to minimize the impacts of the drought on the groundwater basin which we may rely on during droughts or for emergency supplies.

The City of Palo Alto urges the US Bureau of Reclamation to award funding for this proposal that will improve drought resiliency, local groundwater sustainability, and the County's water supply management.

Sincerely, DocuSigned by:

Dean Batchelor Dean Batchelor Director of Utilities

January 30, 2020

Corporation Yard 221 Commercial Street Sunnyvale, CA 94088-3707 TDD/TYY 408-730-7501 sunnyvale.ca.gov

US Bureau of Reclamation Policy and Administration WaterSMART Drought Response Program: Drought Contingency Planning Grants for Fiscal Years 2020 and 2021

Subject: Support for Valley Water's WaterSMART Drought Response Program Grant Application

Dear Sir/Madam:

This letter is to express support for Santa Clara Valley Water District's (Valley Water) submittal of a proposal to the WaterSmart Drought Response Program. This grant funding would support the development of a Drought Response Plan that would guide efficient and effective coordination among stakeholders during droughts and provide a strategy for mitigating potential drought impacts to Valley Water's water supply reliability.

The Santa Clara Valley Water District (Valley Water) is the wholesale water provider to Santa Clara County's (County) 1.9 million residents, including the 13 water retailers and independent groundwater pumpers (e.g., agricultural users). To provide a reliable water supply, Valley Water actively manages the County's groundwater storage, operates ten surface reservoirs, and provides treated water. We are specifically interested in Valley Water developing a Drought Response Plan so that Valley Water will be better prepared to work with retailers and other stakeholders to minimize the impacts of the drought on delivering a reliable water supply.

The City of Sunnyvale urges the US Bureau of Reclamation to award funding for this proposal that will improve drought resiliency, local groundwater sustainability, and the County's water supply management.

Sincerely.

Mansour Nasser P.E. Water & Sewer Division Manager

GREAT OAKS WATER COMPANY

P. O. BOX 23490 SAN JOSE, CA 95153 (408) 227-9540

January 16, 2020

US Bureau of Reclamation Policy and Administration WaterSMART Drought Response Program: Drought Contingency Planning Grants for Fiscal Years 2020 and 2021

Subject: Support for Valley Water's WaterSMART Drought Response Program Grant Application

Dear Sir/Madam:

This letter is to express support for Santa Clara Valley Water District's (Valley Water) submittal of a proposal to the WaterSMART Drought Response Program. This grant funding would support the development of a Drought Response Plan that would guide efficient and effective coordination among stakeholders during droughts and provide a strategy for mitigating potential drought impacts to Valley Water's water supply reliability.

The Santa Clara Valley Water District (Valley Water) is a wholesale water provider to many of Santa Clara County's (County) 1.9 million residents. In addition, Valley Water actively manages the County's groundwater storage, operates ten surface reservoirs, and provides treated water to many of the water utilities in Santa Clara County.

Great Oaks Water Company (Great Oaks) is a water utility regulated by the California Public Utilities Commission providing water service to a population of approximately 100,000 located primarily in San José, Santa Clara County, California. Great Oaks does not purchase treated water from Valley Water, but instead sources the water supplied to its customers from groundwater produced by Great Oaks' wells. Great Oaks has been actively involved in Valley Water's conservation efforts, especially during the most recent drought period.

Great Oaks is specifically interested in Valley Water developing a Drought Response Plan so that Valley Water will be better prepared to work with Great Oaks and other stakeholders to minimize the impacts of the drought on delivering a reliable water supply.

Great Oaks urges the US Bureau of Reclamation to award funding for this proposal that will improve drought resiliency, local groundwater sustainability, and water supply management for Santa Clara County.

Respectfully submitted,

Timothy S. Guster Vice President and General Counsel Legal and Regulatory Affairs

January 30, 2019

US Bureau of Reclamation Policy and Administration WaterSMART Drought Response Program: Drought Contingency Planning Grants for Fiscal Years 2020 and 2021

Subject: Support for Valley Water's WaterSMART Drought Response Program Grant Application

Dear Sir/Madam:

This letter is to express support for Santa Clara Valley Water District's (Valley Water) submittal of a proposal to the WaterSMART Drought Response Program. This grant funding would support the development of a Drought Response Plan that would guide efficient and effective coordination among stakeholders during droughts and provide a strategy for mitigating potential drought impacts to Valley Water's water supply reliability.

The Santa Clara Valley Open Space Authority is a public, independent special district created by the California State Legislature in 1993 at the urging of community leaders who saw the importance of maintaining the ecological integrity of the region. The Authority conserves the natural environment, supports agriculture, and connects people to nature by protecting open spaces, natural areas, and working farms and ranches for future generations.

Valley Water is the wholesale water provider to Santa Clara County's (County) 1.9 million residents and actively manages the County's groundwater storage, operates ten surface reservoirs, and provides treated water. We are specifically interested in Valley Water developing a Drought Response Plan so that Valley Water will be better prepared to avoid or mitigate potential drought impacts to sensitive groundwater dependent ecosystems and creek baseflows.

The Santa Clara Valley Open Space Authority urges the US Bureau of Reclamation to award funding for this proposal that will improve drought resiliency, local groundwater sustainability, and the County's water supply management.

Sincerely,

andrea machingie

Andrea Mackenzie General Manager

33 Las Colinas Lane San Jose, CA 95119 408.224.7476 T 408.224.7548 F openspaceauthority.org

January 30, 2020

US Bureau of Reclamation Policy and Administration WaterSMART Drought Response Program: Drought Contingency Planning Grants for Fiscal Years 2020 and 2021

Subject: SJW Support for Valley Water's WaterSMART Drought Response Program Grant Application

Dear Sir/Madam:

This letter is to express San Jose Water Company's (SJW) support for Santa Clara Valley Water District's (Valley Water) submittal of a proposal to the WaterSMART Drought Response Program. This grant funding would support the development of a <u>Drought Response Plan</u> that would guide efficient and effective coordination among stakeholders during droughts and provide a strategy for mitigating potential drought impacts to Valley Water's water supply reliability.

Valley Water is the wholesale water provider to Santa Clara County's 1.9 million residents including over half of the water SJW retails to our service area, which contains over 1 million residents. To provide a reliable water supply, Valley Water actively manages the County's groundwater storage, operates ten surface reservoirs, and provides treated water. This grant will allow Valley Water to better prepare for droughts while working with SJW and other retailers.

SJW strongly supports the US Bureau of Reclamation to award funding for this proposal that will improve drought resiliency, local groundwater sustainability, and the County's water supply management.

Sincerely,

Curtis A. Rayer, Jr. Vice President of Operations San Jose Water Company