

Proposal to:
U.S. Department of Interior, Bureau of Reclamation

WaterSMART Planning and Project Design Grants for Fiscal Year 2023 and Fiscal Year 2024

Notice of Funding Opportunity No. R23AS00109

Well 240 Arsenic Treatment and Pipeline Relocation Design Project

Temecula, CA

May 23, 2024



Applicant: Rancho California Water District

Project Manager:

Justin Haessly
42135 Winchester Rd.
P.O. Box 9017
Temecula, CA 92589-9017
haesslyj@ranchowater.com
(951) 296-6900 Office
(951) 296-6860 Fax



WELL 240 ARSENIC TREATMENT AND PIPELINE RELOCATION DESIGN PROJECT

TABLE OF CONTENTS

APPLICATION CONTENT

PAGE

Mandatory Federal Forms

- A. SF-424 Application for Federal Assistancesubmitted via grants.gov
- B. SF-424A Budget Information.....submitted via grants.gov
- C. SF-424B Assurances.....submitted via grants.gov
- D. Project Abstract Summary (OMB Form 4040-0019).....submitted via grants.gov
- E. SF-LLL Disclosure of Lobbying Activities.....submitted via grants.gov

Title Page.....	1
Table of Contents.....	2
Technical Proposal and Evaluation Criteria.....	3
A. Executive Summary.....	3
B. Project Location.....	4
C. Project Description	4
D. Evaluation Criteria.....	5
1. Project Benefits	5
2. Prior Planning and Stakeholder Involvement and Support	13
3. Ability to Meet Program Requirements	14
4. Presidential and Department of the Interior Priorities	19
5. Nexus to Reclamation.....	20
Project Budget.....	21
A. Budget Proposal.....	21
B. Budget Narrative.....	21
Environmental and Cultural Resources Compliance	23
Required Permits or Approvals.....	23
Overlap or Duplication of Effort Statement	23
Conflict of Interest Disclosure.....	23
Uniform Audit Reporting Statement.....	23
Letters of Project Support.....	24
Official Board Resolution	29
Appendices	30
Appendix A – Project Map.....	30
Appendix B – Verification of SAM Account.....	31

TECHNICAL PROPOSAL

A. Executive Summary

Date: May 23, 2024

Applicant Information

Rancho California Water District
Temecula, Riverside County, California

Applicant Category: Rancho California Water District qualifies as a 'Category A' applicant

Task Area: Task Area B: Project Design Grant

Project Summary

The Well 240 Arsenic Treatment and Discharge Line Relocation Project (Proposed Project), led by the Rancho California Water District (Rancho Water), will address high arsenic levels affecting the availability of reliable local drinking water supplies for over 150,000 urban water users. By designing an arsenic treatment system and a new discharge pipeline, the Proposed Project will bring well 240, offline since 2021 due to arsenic contamination, back to its original output capacity of 2,900 acre-feet per year. Ultimately, this will create significant additional local water supplies, reducing reliance on Colorado River imports, and improving operational flexibility to manage drought and climate change impacts. The Proposed Project also provides environmental benefits through the design of well 240's discharge pipeline, which will be relocated to mitigate erosion and scour risks, and eliminate environmentally disruptive maintenance activities in a sensitive creek bed. With strong support from local partners, the project underscores broad regional cooperation and its potential to bolster infrastructure resilience across the community. In total, the Proposed Project cost is estimated at \$850,000, with a \$450,000 match commitment from Rancho Water, and is anticipated to take approximately 20 months, with an estimated completion date of July 2027.

Federal Nexus

The Proposed Project targets Rancho Water's local groundwater facilities and does not involve Federal facilities or lands. However, by creating additional local water supplies, the project reduces imported demands on the Colorado River system through the Metropolitan Water District of Southern California.

Project Schedule (length of time and estimated completion date)

The Proposed Project can start immediately upon receiving funding and executing the grant or cooperative agreement. It will be completed within three years, before March 31, 2028 (assuming an April 01, 2025 award date). The Project Implementation section of this proposal includes the project schedule with key milestones and deliverables for each phase.

Proximity of Project to Federal Facility

The Proposed Project will not be conducted on Reclamation project lands and does not involve Reclamation facilities. However, the Proposed Project will be completed to benefit an area residing within the Colorado River Basin, which satisfies a large portion of its water demand through imports from the Colorado River Aqueduct (Reclamation project water).

B. Project Location

Rancho California Water District (Rancho Water/District) provides water for urban and agricultural uses to the City of Temecula, portions of the City of Murrieta, and unincorporated southwestern Riverside County lands. Rancho Water comprises nearly 100,000 acres in the southwestern portion of Riverside County, California. The District serves approximately 150,000 water users and is located about 85 miles southeast of the City of Los Angeles, 40 miles south of the City of Riverside and 65 miles north of the City of San Diego (as shown in Figure 1). Well 240, the main focus of the Proposed Project, is located at Latitude 33.522100322499; Longitude -117.153076564761. The precise location is illustrated in Appendix A.

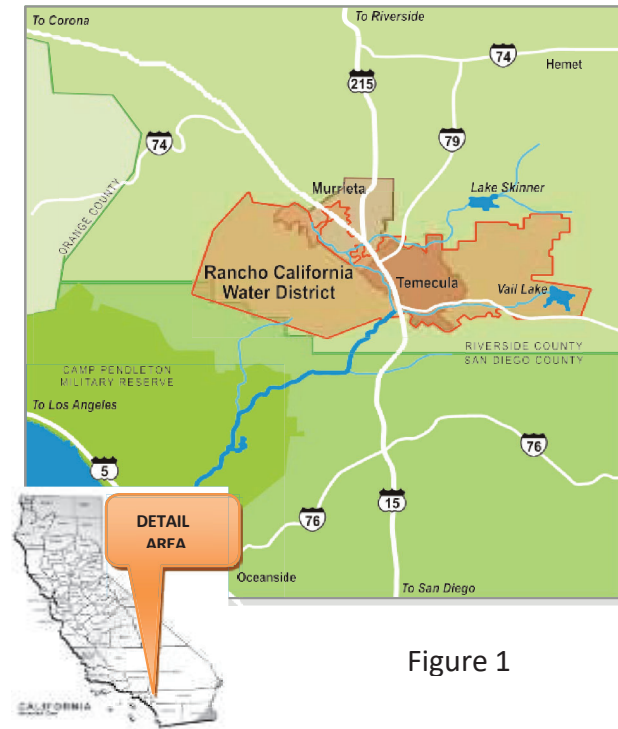


Figure 1

C. Project Description

The Proposed Project, categorized under Task B: Project Design, adds to Rancho Water's local water supplies and protects the environment by implementing two critical design enhancements. First, it involves designing an arsenic treatment system to restore well 240's pumping capacity, which was lost in 2021 due to contamination. Second, it includes the redesign of the well's discharge pipeline which will be relocated away from an environmentally sensitive creek crossing. By facilitating the restoration of 2,900 acre-feet per year of lost local groundwater supply and the relocation of the discharge piping, this initiative reduces dependence on imported water from the Colorado River and provides benefits to the local environment.

The Proposed Project entails several key activities, beginning with the execution of a grant agreement with Reclamation and competitive selection of engineering and environmental consultants for development of the project design. It then progresses through phases including the preparation of a Basis of Design Report (BODR), detailed design stages at 30%, 60%, and 90%, and culminating in a final bid-ready design package. Each phase undergoes rigorous reviews, including value engineering sessions and constructability reviews.

Concurrently, the project will prepare an Initial Study and Draft Mitigated Negative Declaration (MND) under the California Environmental Quality Act (CEQA) to address potential environmental impacts. Public and agency comments will be incorporated, with the final MND subject to approval by the Rancho Water Board of Directors.

The arsenic treatment system will handle a flow rate capable of delivering 2,900 acre feet per year, ensuring compliance with the arsenic Maximum Contaminant Level (MCL) requirements. The design will encompass detailed process flow diagrams, treatment vessel specifications, chemical storage systems, and comprehensive mechanical, structural, electrical, and civil plans. Likewise, pipeline relocation design will feature horizontal and vertical alignment sheets, pipe material specifications, thrust restraint details, and erosion control plans to ensure durability.

Additional technical studies and surveys, such as geotechnical borings and hydraulic modeling, will support design accuracy. Overall, the well 240 Arsenic Treatment and Pipeline Relocation Design Project will deliver a critical solution to enhance water infrastructure, secure reliable local groundwater supplies, and improve water quality for the region, demonstrating Rancho Water's commitment to providing a resilient and reliable water supply for its customers.

D. Evaluation Criteria

1. Evaluation Criterion A: Project Benefits (NOFO Section E.1.1)

Threats to Water Supply, Water Quality, and River-Based Ecosystem/Watershed Health

Rancho Water (RCWD) faces severe and growing threats to its water supply reliability due to the dire impacts of recurring droughts, climate change, and emerging contaminants in its service area. The District's supply portfolio heavily relies on imported water (60-70%) from the Colorado River and the Sacramento-San Joaquin Delta, both of which are experiencing increasing cuts due to prolonged dry conditions. RCWD's groundwater basin, which provides 25-40% of supplies, is also at risk of further depletion due to climate change-driven warming, more frequent, severe droughts, and emerging contaminants such as arsenic and PFAS.

As part of the arid Southern California region, the District has experienced two major droughts in just the last 15 years (2007-09 and 2012-16), with the latter breaking records as the driest four-year stretch in over a century. These events triggered mandatory conservation measures, including declaration of a stage 4a water shortage and cutting water budgets for some customers by 30% and imposing drought surcharges in 2015. Drought conditions returned in early 2022, forcing RCWD to declare a Stage 3b water shortage emergency. This required slashing Tier 3 water budgets by 50% due to a projected 10% supply shortfall. While conditions improved enough by May 2023 to relax restrictions to voluntary conservation, the district remains highly vulnerable to the next inevitable drought.

In addition to climate change and drought conditions, Rancho Water's local supplies are threatened by contaminants. The most concerning contaminants threatening water quality are arsenic and PFAS (per- and polyfluoroalkyl substances). Arsenic, a naturally occurring element, has been detected in samples obtained from the Proposed Project's well 240, which has now been shut down. Long-term exposure to arsenic can cause serious health problems, including cancer, skin lesions, and cardiovascular diseases.

To address these issues, RCWD is investing in the development of local, drought-proof water sources. The Proposed Project incorporates design of water treatment strategies for well 240 that

restore up to 2,900 acre-feet per year of reliable local water supplies to its portfolio, complementing existing investments in conservation, groundwater storage capacity, and recycled water use. The project represents a critical investment in public health and safety, and the agricultural community in Rancho Water's service area, which includes thousands of acres of high-value crops and contributes significantly to the \$2.7 billion regional agricultural economy.

- **Documentation**

Rancho Water heavily relies on imported water, making up 60-70% of its supply, sourced from the Colorado River and the Sacramento-San Joaquin Delta. However, prolonged dry conditions and climate change-induced warming are leading to cuts in these supplies, posing reliability risks. Climate change's severe impacts on the Colorado River are evident, with flows declining due to a 15-year drought, worsened by higher temperatures in the Upper Basin, diminishing major reservoirs like Lake Mead and Lake Powell (Udall et al., 2017). Similarly, the Sacramento-San Joaquin Delta faces challenges from climate change, such as earlier snowmelt and reduced snow accumulation, exacerbating saltwater intrusion and reducing groundwater storage effectiveness (California Department of Water Resources, 2020). These challenges underscore the need for adaptive management and local water supply projects like the Proposed Project (Barnett et al., 2005; California Ocean Science Trust, 2018).

Moreover, altered precipitation patterns in Southern California have decreased rainfall, impacting water levels in Rancho Water's reservoir and groundwater recharge. Vail Lake is at about half capacity, and groundwater levels are historically low. Detection of emerging contaminants like arsenic and PFAS has led to the shutdown of significant groundwater wells, compromising access to sustainable yield (Swain et al., 2018). Completion of the Proposed Project is crucial to reduce pressure on imported supply sources and provide a safe and reliable source. Additionally, climate change assessments foresee more frequent and severe droughts in the Upper Santa Margarita Watershed, compounded by significant declines in imported water from the Colorado River and Northern California, emphasizing the urgent need to enhance and diversify water supplies (Gleick, 2014).

Impact of Identified Threats on Water Uses and Sectors in the Project Area

- **Specific Impacts to Water Uses or Sectors**

Water supply reliability issues in Rancho Water's service area, driven by recurring droughts, climate change, and emerging contaminants, have severe impacts on various sectors. The district serves around 35,000 acres of agricultural land, including key crops like avocados, citrus, and winegrapes which account for about 50% of the district's total water demand. Water shortages can reduce crop yields and productivity, forcing farmers to fallow fields or switch to less water-intensive crops, thereby affecting their income and the local agricultural economy, which is vital to the \$2.7 billion regional agricultural economy. Municipal water supplies are also at risk, with Rancho Water's population projected to grow from 155,000 in 2020 to over 206,000 by 2045, increasing demand. During the 2012-2016 drought, RCWD implemented mandatory water use restrictions, affecting residents' and businesses' quality of life. Contaminants like arsenic and PFAS in groundwater pose significant health risks, as long-term exposure can lead to serious health issues such as cancer and cardiovascular diseases.

The environment and watershed health are also impacted. The Santa Margarita River, home to endangered species like the arroyo toad and least Bell's vireo, suffers from reduced stream flows due to droughts and climate change, affecting aquatic ecosystems and recreational activities. This reduction in water flow can degrade the aesthetic and ecological value of the river, impacting species and recreational opportunities.

Tourism and recreation in the area are similarly affected. Popular spots like the Santa Rosa Plateau Ecological Reserve and Vail Lake Resort rely on stable water levels for activities such as hiking, fishing, and boating. Lower water levels due to droughts can limit these activities, reducing tourism revenue and local economic activity. Outdoor recreation generates significant economic benefits, with water-based activities alone supporting thousands of jobs in California.

Water supply reliability issues also threaten infrastructure, as contaminants like arsenic and PFAS can damage water distribution systems, increasing maintenance costs and service disruptions. Rancho Water has undertaken several infrastructure improvement projects to address these issues, but the need for substantial investment remains critical. Projects like the Proposed Project, that will design treatment facilities for Well 240 and secure 2,900 acre-feet per year of water, are essential to mitigate these impacts, promoting sustainable growth and resilience against ongoing water supply challenges.

Addressing Threats to Water Supplies and Water Uses

▪ Expected Benefits:

The Proposed Project by Rancho California Water District (RCWD) will help address several critical threats to water supplies and water uses in RCWD's service area:

1. **Restoring local groundwater supplies:** The project will treat arsenic contamination in Well 240, allowing it to be restored to its full production capacity of 2,900 acre-feet per year. This will provide a significant boost to RCWD's local water supplies, reducing reliance on increasingly unreliable imported water from the drought-stricken Colorado River and Sacramento-San Joaquin Delta.
2. **Improving water quality and public health:** By treating arsenic in the groundwater, the project directly addresses a serious water quality issue that poses health risks like cancer to the population served by RCWD. Restoring this well to service with arsenic treatment expands access to safe drinking water.
3. **Increasing resilience to climate change impacts:** With climate change causing more frequent and severe droughts, RCWD needs to strengthen its local supplies. Maximizing production from the groundwater basin through this project bolsters RCWD's ability to withstand future droughts when imported supplies are cut back.
4. **Supporting the agricultural economy:** Agriculture accounts for about 50% of RCWD's water demand and is a major driver of the \$2.7 billion regional agricultural economy. Increasing the reliability of local water supplies through this project helps ensure continued water availability for irrigation, supporting crop yields, quality and the viability of agriculture.

5. **Reducing stress on regional water sources:** By increasing RCWD's self-reliance through local groundwater, the project reduces pressure on strained imported supply sources like the Colorado River, leaving more water for other users and the environment in those watersheds.
6. **Securing water for disadvantaged communities:** A portion of the customers who will receive water from this project live in a disadvantaged community. Providing a reliable, safe drinking water supply from the restored well benefits public health and quality of life for this under-resourced population.

The Proposed Project provides both immediate and long-term benefits in mitigating the water supply and water quality threats facing RCWD. It represents a crucial investment in the region's water security and resilience in the face of growing challenges from droughts, climate change and contaminants. Restoring this at-risk groundwater supply asset is key to maintaining reliable water services for RCWD's residents, businesses and agricultural community.

- **Sectors or Water Uses Benefitting from the Proposed Project**

The Proposed Project will benefit several sectors and water uses within RCWD's service area, contributing to increased water security, resilience, and sustainability. The project will:

1. **Reduce the likelihood of conflicts over water:** By increasing local water supply reliability through the restoration of Well 240, the project reduces RCWD's dependence on imported water sources, which are subject to increasing competition and potential conflicts among users. A more robust local supply helps RCWD meet its water demands without exacerbating tensions over shared resources like the Colorado River.
2. **Increase resiliency to drought and climate change:** Climate change is expected to intensify droughts in the region, putting stress on both local and imported water sources. By maximizing groundwater production capacity, the project strengthens RCWD's ability to withstand future droughts when imported supplies are curtailed. Local groundwater is a more drought-resilient supply compared to surface water sources that are directly impacted by reduced precipitation and snowpack.
3. **Sustain agricultural communities:** Agriculture is a vital part of RCWD's service area, accounting for about 50% of water demand and contributing significantly to the regional economy. The increased reliability of local water supplies through this project helps ensure continued water availability for irrigation, supporting crop yields, quality, and the viability of the agricultural sector. Sustaining agriculture also preserves the rural character and heritage of the communities served by RCWD.
4. **Improve reliability of drinking water:** The project directly addresses the threat of arsenic contamination in groundwater, a serious water quality issue that poses health risks to the population served by RCWD. By treating the water from Well 240, the project expands access to safe, reliable drinking water for residents, including those in disadvantaged communities. This supports public health and quality of life.
5. **Result in an action plan to improve water management:** The Well 240 project is part of RCWD's larger strategic plan to enhance water supply reliability, water quality, and sustainable groundwater management in its service area. By investing in this project, RCWD demonstrates its commitment to proactive, long-term water management solutions that address the challenges posed by droughts, climate change, and water quality concerns. The successful

implementation of this project can serve as a model for other water agencies facing similar issues.

6. **Lead to modernized water delivery infrastructure:** The project involves upgrading infrastructure at Well 240, including the installation of an arsenic treatment system and the relocation of the discharge pipeline to mitigate the risk of damage from erosion and scour. These improvements modernize RCWD's water delivery infrastructure, enhancing its resilience, efficiency, and reliability. The project also highlights the importance of strategic infrastructure investments to maintain a robust and sustainable water system in the face of evolving challenges.

The Proposed Project offers multiple benefits across sectors and water uses in RCWD's service area. By increasing local water supply reliability, improving drinking water quality, supporting agriculture, and modernizing infrastructure, the project contributes to a more resilient, sustainable, and equitable water future for the region.

- **Supporting Documentation – Sectors:**

Several studies, reports, and planning documents support the expected benefits of the Proposed Project across sectors and water uses in RCWD's service area.

1. **Reducing conflicts over water:** The 2020 Urban Water Management Plan (UWMP) for RCWD highlights the district's reliance on imported water, which accounts for approximately 60-70% of its total supply (RCWD, 2021, p. 6-2). The Colorado River Basin, a major source of imported water, is facing increasing stress due to climate change and competing demands. A study by the U.S. Bureau of Reclamation projects that the Colorado River Basin's water supply will decrease by 20-30% by 2050 due to climate change (U.S. Bureau of Reclamation, 2012). By increasing local water supply reliability through the Well 240 project, RCWD can reduce its dependence on imported water and minimize its contribution to potential conflicts over these shared resources.
2. **Increasing resilience to drought and climate change:** The Upper Santa Margarita Watershed's climate change vulnerability assessment, conducted as part of the Integrated Regional Water Management Plan, concludes that climate change will likely drive higher frequency droughts of longer duration and greater intensity in the future (RCWD, 2021, p. 6-11). The restoration of Well 240 aligns with RCWD's Groundwater Management Plan, which emphasizes the importance of maximizing groundwater production capacity to enhance drought resilience (RCWD, 2016, p. 4-1).
3. **Sustaining agricultural communities:** The UWMP notes that agricultural water use accounts for approximately 50% of RCWD's total water demand (RCWD, 2021, p. 4-3). The Temecula Valley is a premier wine grape-growing area in California, which, coupled with other high-value crops, requires a consistent irrigation supply. Economic studies indicate that the Temecula Valley Viticultural Area and associated businesses result in \$2.7 billion in annual economic activity (John Dunham and Associates, 2023).
4. **Improving reliability of drinking water:** The presence of arsenic in groundwater sources poses significant health risks to the population served by RCWD. Long-term exposure to arsenic can cause cancer, skin lesions, and cardiovascular diseases (World Health Organization, 2018). The Well 240 project directly addresses this water quality issue, expanding access to safe, reliable drinking water for residents.

5. **Resulting in an action plan to improve water management:** The Well 240 project is part of RCWD's larger strategic plan to enhance water supply reliability, water quality, and sustainable groundwater management, as outlined in the district's 2020 UWMP and Groundwater Management Plan (RCWD, 2021; RCWD, 2016). These plans demonstrate RCWD's commitment to proactive, long-term water management solutions.
6. **Leading to modernized water delivery infrastructure:** The Well 240 project involves upgrading infrastructure, including the installation of an arsenic treatment system and the relocation of the discharge pipeline. These improvements align with RCWD's Capital Improvement Program, which prioritizes infrastructure investments to maintain a robust and sustainable water system (RCWD, 2021, p. 6-3).

These supporting documents highlight the multiple benefits that the Proposed Project is expected to provide for RCWD's service area. By aligning with regional plans and addressing critical water supply and quality issues, the project contributes to a more resilient, sustainable, and equitable water future for the region.

Efforts to Provide Domestic Water Supplies to Underserved Communities

The Proposed Project will provide domestic water supplies to a disadvantaged community within RCWD's service area, which is directly impacted by the presence of arsenic contamination in the groundwater. A portion of the pressure zone served by the Proposed Project's Well 240 is identified as a disadvantaged community based on the White House Council on Environmental Quality's Climate and Economic Justice Screening Tool. This tool identifies disadvantaged communities based on a combination of socioeconomic and environmental burden indicators, such as low income, proximity to hazardous waste facilities, and exposure to water pollution (White House Council on Environmental Quality, 2022). By designing the treatment facilities required for eliminating arsenic contamination in Well 240 and restoring the well to service, the project will directly improve access to safe, reliable drinking water for this disadvantaged community.

■ Need for the New Domestic Water Supply Project

The Proposed Project addresses the critical need to resolve arsenic contamination in groundwater supplies affecting a portion of RCWD's service area, which includes a disadvantaged community. Arsenic, a naturally occurring contaminant, has been detected in Well 240 at levels exceeding the maximum contaminant level (MCL), posing significant public health concerns. Long-term exposure to elevated arsenic levels can lead to serious health effects, including various cancers and non-cancerous conditions like cardiovascular disease and impaired cognitive development in children. Due to rising arsenic levels, well 240 was shut down in 2021 and, despite temporary measures, has remained out of service. This has compromised RCWD's ability to meet water demands, especially during droughts, disproportionately impacting the disadvantaged community that lacks resources to secure alternative water sources. The Proposed Project will design and implement an arsenic treatment system to remove the contaminant, restoring Well 240 to its full production capacity of 2,900 acre-feet per year and ensuring the water meets all drinking water standards. Additionally, the project will design the relocation of the well's discharge pipeline to prevent damage from erosion and scour, enhancing the reliability and resilience of the water supply. By addressing both arsenic contamination and infrastructure vulnerabilities, the Well 240 Project will ensure a reliable, safe water supply for the disadvantaged community and other customers, promoting environmental justice and equitable access to clean water.

- **Increasing Reliable Access to Domestic Water Supplies**

The Proposed Project will significantly increase reliable access to domestic water supplies for the disadvantaged community and other customers throughout RCWD's service area. Through the remediation of arsenic contamination and restoring Well 240 to full production, it ensures a dependable water supply meeting all relevant drinking water standards.

Qualitatively, the project will deliver substantial benefits to the community by:

1. **Improving public health and safety:** The arsenic treatment system design will lead to the removal of the contaminant from the groundwater, ensuring that the water supplied to customers is safe for consumption. This will reduce the risk of adverse health effects associated with chronic arsenic exposure, such as various cancers, skin lesions, and cardiovascular disease (WHO, 2018).
2. **Enhancing water supply reliability:** By facilitating the restoration of Well 240 to its full production capacity and relocating the at-risk discharge pipeline, the project will minimize supply interruptions and ensure a more consistent and dependable water supply for the community. This is particularly crucial during periods of drought when alternative supplies may be limited.
3. **Promoting environmental justice:** The project will address the disproportionate impact of the arsenic contamination issue on the disadvantaged community within the affected pressure zone. By facilitating equitable access to clean, safe drinking water, the project aligns with the principles of environmental justice and helps to reduce water quality disparities.

Quantitatively, the project is expected to provide an average annual benefit of approximately 2,900 acre-feet per year (AFY) of reliable domestic water supply. This estimate is based on restoring Well 240 to its full design pumping capacity. The actual volume of water supplied from the well may vary depending on factors such as water demand and the availability of other sources, but the project will ensure that the well can consistently provide up to its maximum capacity when needed.

While the project benefits Rancho Water's entire service population of over 150,000 people in terms of ensuring safe, reliable local supplies, well 240's contribution of 2,900 AFY equates to 944,967,900 gallons per year, which is sufficient to meet the annual health and safety needs of 47,072 people. This calculation is based on the state of California's determination that each person needs 55 gallons per person per day to meet their health and safety needs (Making Conservation a California Way of Life, 2018). It is also worth noting that this well directly serves a disadvantage community within the District's service area.

In summary, the Proposed Project will deliver significant benefits by increasing reliable access to safe domestic water supplies. It will improve public health and safety, enhance water supply reliability, and promote environmental justice for the disadvantaged community and other customers within the affected pressure zone. By restoring Well 240 to its full production capacity, the project is estimated to provide an average annual benefit of 2,900 acre-feet per year (AFY), which is sufficient to meet the annual health and safety needs of 47,072 people.

- **Improvement of Nature-Based Features**

Yes, the Well 240 Arsenic Treatment and Discharge Line Relocation Project involves the improvement of two nature-based features: the Temecula Valley Groundwater Basin, which is the source of water for Well 240, and the Long Valley Wash, a natural waterway that the well's current discharge pipeline crosses.

As described by the U.S. Geological Survey (2019), groundwater basins are considered nature-based features because they are naturally occurring underground reservoirs that store water in the spaces between rocks, sand, and soil particles. These basins are replenished through a process called groundwater recharge, which occurs when water from precipitation, surface water, or other sources seeps into the ground and percolates down to the water table.

The Temecula Valley Groundwater Basin is a critical natural resource for RCWD and the communities it serves, providing approximately 25-40% of the district's total water supply. However, the basin's ability to provide a reliable and safe water supply is currently impaired by the presence of arsenic contamination, which has led to the shutdown of Well 240.

The Proposed Project will improve the functionality and resilience of this nature-based feature by addressing the arsenic contamination issue and restoring the well to its full production capacity. The installation of an arsenic treatment system will remove the contaminant from the groundwater, ensuring that the water extracted from the basin meets all applicable drinking water standards. This improvement will not only enhance the quality of the water supplied to customers but also contribute to the overall health and sustainability of the groundwater basin.

Moreover, the project's efforts to relocate the well's discharge pipeline will help protect both the groundwater basin and the Long Valley Wash from potential contamination risks associated with pipeline failures due to erosion and scour. The current discharge pipeline crosses the wash and is at risk of damage from erosion, which could lead to water quality issues in both the wash and the groundwater basin. By relocating the pipeline away from the wash, the project will safeguard the integrity of these nature-based features and help maintain their natural functioning.

In addition to these direct improvements, the Well 240 project aligns with RCWD's broader efforts to sustainably manage the Temecula Valley Groundwater Basin through its Groundwater Management Plan (RCWD, 2016). This plan outlines strategies for monitoring, protecting, and enhancing the basin's water quality and quantity, ensuring its long-term viability as a nature-based water supply source.

By investing in the improvement of these nature-based features, the Well 240 project not only benefits the community by providing a reliable and safe water supply but also contributes to the overall resilience and sustainability of the region's water resources and ecosystems in the face of challenges such as climate change and population growth.

- **Environmental Mitigation and Compliance Obligations**

The Proposed Project addresses water quality issues related to arsenic contamination, which is regulated under the Safe Drinking Water Act (SDWA).

The SDWA, originally passed by Congress in 1974 and amended in 1986 and 1996, is the main federal law that ensures the quality of Americans' drinking water (U.S. EPA, 2021). Under the SDWA, the U.S. Environmental Protection Agency (EPA) sets standards for drinking water quality and oversees the states, localities, and water suppliers who implement those standards. The EPA has set the maximum contaminant level (MCL) for arsenic in drinking water at 10 parts per billion (ppb) (U.S. EPA, 2021).

Recent tests taken at well 240 show arsenic concentrations exceed these standards, and the well has been taken out of operation. The proposed arsenic treatment system will be designed to remove the contaminant from the groundwater, ensuring that the water supplied to customers meets the SDWA standards.

2. Evaluation Criterion B: Inclusion of Stakeholders, Stakeholder Support, and Previous Planning Efforts (NOFO Section E.1.2)

❖ *Sub-Criterion B2: Task B: Project Design*

▪ Prior Planning and Design

The objectives of the Proposed Project align with the priorities identified by regional water management planning efforts that were completed with extensive stakeholder collaboration. This stakeholder engagement ensures projects align with regional priorities and benefits from past collaborative planning efforts. Specifically, the Upper Santa Margarita Watershed's Integrated Regional Water Management Plan, developed and approved by water agencies, Community Based Organizations, and Tribes calls out infrastructure projects like Well 240 as critical for the long-term sustainability and drought resilience of the river system.

Aligning with this regional plan, Rancho Water's 2015 Water Facilities Master Plan (WFMP), which outlines needed infrastructure investments, specifically identifies the Well 240 Project as one of the top 10 priority projects to be implemented within the first five years. It is called out as a critical action to stabilize groundwater production, increase emergency preparedness, and replace aging infrastructure. In addition, Rancho Water's 2020 Urban Water Management Plan (UWMP), functions as a foundational supply and demand management guide, and identifies Well 240 as a key component of the groundwater program that is crucial for local drought resilience. Lastly, Rancho Water's 2024 Capital Improvement Plan allocates funding for design of wellhead treatment facilities at Well 240 to remove arsenic and restore it to full pumping capacity.

Building on the foundation of stakeholder-driven regional planning, Rancho Water is committed to executing projects that achieve the outcomes, goals, and strategies outlined in the Upper Santa Margarita Watershed's Integrated Regional Water Management Plan.

Public Outreach and Stakeholder Engagement Strategy

Rancho Water has planned a multi-faceted approach to public outreach and stakeholder engagement during the design process for the Well No. 240 Project. Upon being awarded grant funding, Rancho Water will initiate outreach efforts by distributing press releases through local media outlets. These press releases will thank the Bureau of Reclamation for their support, provide details on the project benefits, and highlight Rancho Water's commitment to enhancing the community's safe and reliable drinking water supply.

As the design process progresses, Rancho Water will continue public engagement through its existing committee and board meeting infrastructure. All project updates and design information will be presented during these regular public meetings, which are livestreamed to ensure virtual attendance and accessibility for community members. The district will also leverage its social media channels to circulate project updates and respond to questions from followers.

Additionally, Rancho Water staff will be available to discuss the Well No. 240 Project at local community gatherings and events. This personal outreach approach allows staff to directly interact with stakeholders, explain project details, and receive feedback in an informal setting. Rancho Water values these face-to-face opportunities to build awareness and solidify community support. The district will also analyze potential additional stakeholders and future community partners to enhance engagement further.

[Tribal Strategies or Plans](#)

N/A – Not a Tribal strategy or plan.

[Stakeholder Support](#)

The Well 240 Project has strong stakeholder support as evidenced by the attached Letters of Support. In addition to the letters, the City of Temecula and the Pechanga Tribe have expressed backing for the Project as a critical water resilience upgrade. The Riverside County Board of Supervisors, the Temecula Valley Chamber of Commerce, and the Santa Margarita Ecological Reserve have also endorsed the effort as important for regional water security, economic vitality, and watershed health, respectively. This diverse support from government, business, and environmental stakeholders underscores the Proposed Project's broad appeal. These entities recognize the urgent need to shore up local supplies in the face of climate change and see the Well 240 Project as an important step in that direction. Their support is a testament to the soundness of the Project and the value of the engaged planning process that shaped it.

[Opposition](#)

There is no opposition to the Proposed Project

3. Evaluation Criterion C— Ability to Meet Program Requirements (NOFO Section E.1.3)

[Addressing Program-Specific Requirements](#)

The Proposed Project fully aligns with the program requirements for Project Design Grants outlined in Attachment 2 of the NOFO. Specifically, the Project will develop a comprehensive design package for a major water supply reliability project, bringing the design to a minimum of 60% completion suitable for subsequent construction bid solicitation.

The design will encompass all essential components outlined in the NOFO, comprising a basis of design report delineating project objectives, design criteria, site conditions, and assumptions. Additionally, it will feature comprehensive engineering drawings, incorporating plan and profile views, mechanical details, and equipment specifications. Detailed construction cost estimates will be provided, derived from unit prices and quantities, along with an implementation schedule delineating phasing and key milestones.

The proposed budget includes sufficient resources for engineering consulting services to produce this full design package consistent with program requirements. Rancho Water has a demonstrated track record of successfully executing design projects of similar scale and complexity in compliance with all relevant standards and grant obligations.

[Approach that will be undertaken to meet the applicable program components and requirements.](#)

The Proposed Project will be executed with a strategic approach to meet all applicable program components and requirements. Rancho Water will ensure compliance with technical, regulatory, and environmental standards through a structured and phased methodology. This approach includes meticulous planning, design, environmental review, stakeholder engagement, and project management. The Project is divided into key milestones:

- **Milestone 1 - Grant Agreement Execution:** Rancho Water and Reclamation will finalize and execute the financial assistance agreement, establishing the terms and conditions of the grant.
- **Milestone 2 - Consultant Selection and Design Kickoff:** Rancho Water will procure engineering and environmental consultants through a competitive qualifications-based selection process. A kickoff meeting will be held to confirm scope, schedule, and deliverables.
- **Milestone 3 - Basis of Design Report:** The consultant will prepare a Basis of Design Report (BODR) documenting the key design parameters, criteria, and assumptions for both the arsenic treatment system and pipeline relocation. The BODR will build on Rancho Water's previous Arsenic Treatment Study and pipeline alignment alternatives analysis. It will include process flow diagrams, preliminary site layouts, hydraulic calculations, geotechnical and survey data needs, and an outline of specifications. Rancho Water staff will review and provide input on the BODR.
- **Milestone 4 - 30% Design Drawings and Cost Estimate:** Based on the approved BODR, the consultant will advance the design to the 30% level. Deliverables will include draft drawings for the treatment system (process mechanical, structural, electrical, and instrumentation and control) and pipeline plan and profile sheets. A Class 4 opinion of probable construction cost will also be prepared. Rancho Water will conduct a 30% design review workshop and value engineering session to identify opportunities for optimization.
- **Milestone 5 - CEQA Initial Study and Draft MND:** Concurrent with the design, Rancho Water's environmental consultant will prepare the draft CEQA documents. This will include an Initial Study evaluating the Project's potential environmental impacts and a draft Mitigated Negative Declaration specifying measures to avoid or minimize impacts. Technical studies for biological resources, cultural resources, noise, and traffic will support the CEQA analysis. Rancho Water will review the draft documents and authorize public circulation.
- **Milestone 6 - 60% Design and Draft Specifications:** The consultant will incorporate 30% design review comments and progress the design to the 60% level. Deliverables will include refined drawings for all disciplines, draft technical specifications for major equipment and materials, and a Class 3 cost estimate. Rancho Water will conduct another review workshop and value engineering session at this stage.

- **Milestone 7 - 90% Design and Cost Estimate:** The design will be advanced to the 90% level, representing a near-final product. Deliverables will include detailed drawings and specifications for all components of the work, a Class 2 cost estimate, and draft bidding documents. Rancho Water will conduct a constructability review to ensure the Project is ready for bidding.
- **Milestone 8 - CEQA Final MND:** After completing an initial study and Draft, MND, the consultant will prepare a final Mitigated Negative Declaration incorporating public and agency comments received during the circulation period. Rancho Water's Board of Directors will consider the final MND for adoption at a public hearing.
- **Milestone 9 - 100% Bid-Ready Design Package:** Based on 90% review comments, the consultant will prepare the final bid package. This will include sealed drawings and specifications, a Class 1 cost estimate, and final front-end contract documents. The package will be suitable for competitive bidding.
- **Milestone 10 - Project Closeout and Final Report:** Rancho Water will complete all final reporting and invoicing requirements for grant closeout. A final report will document the completed design and environmental work products and discuss lessons learned.

Throughout the design process, Rancho Water will oversee the consultants' work and coordinate input from in-house engineering, operations, and maintenance staff. The District will also conduct public outreach to provide Project updates and solicit feedback. Streamlining the arsenic treatment segment, the Project will leverage insights from Rancho Water's recent Arsenic Treatment Study. Detailed schematics, media specifications, and structural plans will enhance the system's reliability and operational ease, while ensuring compliance with the arsenic Maximum Contaminant Level. Additional geotechnical and hydraulic assessments will bolster design accuracy.

The pipeline relocation opts for an environmentally sensitive route, integrating seamlessly with existing infrastructure via detailed alignment and connection plans to minimize disruption. Adhering to standardized specifications like corrosion protection and traffic management, the design prioritizes a smooth transition from design to construction bidding, supported by allocated funds for consultant fees and regulatory compliance. This comprehensive strategy underscores the commitment to bolstering water infrastructure resilience and community welfare. Key stages and milestones include:

Task	Estimated Start Date	Estimated End date	Responsible Party
Grant Agreement Execution (Milestone 1)	April 2025	April 2025	Rancho Water and Reclamation
Consultant Selection and Design Kickoff (Milestone 2)	May 2025	August 2025	Rancho Water
Basis of Design Report (Milestone 3)	September 2025	December 2025	Engineering Consultant with Rancho Water oversight
30% Design Drawings and Cost Estimate (Milestone 4)	January 2026	March 2026	Engineering Consultant
CEQA Initial Study and Draft MND (Milestone 5)	January 2026	April 2026	Environmental Consultant, with Rancho Water oversight

60% Design and Draft Specifications (Milestone 6)	April 2026	August 2026	Engineering Consultant
90% Design and Cost Estimate (Milestone 7)	September 2026	December 2026	Engineering Consultant
CEQA Final MND (Milestone 8)	May 2026	September 2026	Environmental Consultant, with Rancho Water oversight
100% Bid-Ready Design Package (Milestone 9)	January 2027	April 2027	Engineering Consultant
Project Closeout and Final Report (Milestone 10)	May 2027	July 2027	Rancho Water

This conservative schedule includes appropriate time for sequential review and revision cycles, interdependencies between design and environmental analysis tasks, and development of supporting cost estimates and contract documents. Rancho Water is confident in the ability to complete all requirements within the grant performance period.

Prior Planning Work

The Project design will build upon substantial prior planning work that has confirmed the need for and feasibility of the improvements. Specifically, Rancho Water has completed:

- A comprehensive Arsenic Treatment Study evaluating treatment processes and recommending a preferred approach. The study included bench-scale testing of various adsorptive media and detailed cost estimates. The results will directly inform the treatment system design.
- An alignment alternatives analysis for the replacement pipeline. The analysis included utility research, identification of constraints, and development of alignment options. The recommended alignment will be carried forward to final design.
- Preliminary geotechnical and survey data collection at the Well 240 site. This information will streamline design data needs.

By leveraging this past work, the Project can proceed efficiently to build on defined needs and approaches rather than revisiting fundamental questions. The design will hit the ground running.

Existing Data and Models for Proposed Plan or Design

Rancho Water has accumulated a comprehensive repository of high-quality existing data to facilitate an efficient and well-informed design process. This includes complete well logs, aquifer testing, water quality, and performance data for Well 240, guiding the sizing and configuration of the treatment system. Recent GIS mapping of the distribution system surrounding Well 240 and the proposed pipeline alignment streamlines tie-in design, while detailed geotechnical reports from original drilling inform site layout and foundation design for the treatment system. Moreover, a hydraulic model of the 1305 Pressure Zone served by Well 240 validates pipe sizing and system performance, with utility mapping minimizing conflicts in the pipeline design. All data, including treatment system performance and cost insights from the arsenic study, adhere to industry-standard methods and undergo Rancho Water's rigorous quality control processes, ensuring accuracy and reliability for the design team's utilization.

Staff Qualifications and Expertise

The proposed Project will be led by Rancho Water's experienced in-house engineering team, with support from specialty consultants. Key staff roles and qualifications include:

- **Dan Ruiz, Director of Engineering:** As the Director of Engineering, Dan Ruiz specializes in leading engineering endeavors related to water infrastructure. His expertise spans civil engineering, water resource management, and regulatory compliance. Dan's duties include overseeing engineering projects, ensuring adherence to design standards, and managing teams to execute water system improvements.
- **Robert Avera, Engineering Manager:** As the Engineering Manager, Robert Avera brings expertise in civil engineering and water infrastructure projects. His responsibilities involve leading engineering initiatives, overseeing designs, and ensuring compliance with regulatory standards. Robert conducts feasibility studies and collaborates with stakeholders to facilitate the successful implementation of water system projects.
- **Jordan Farrell, Water Production Manager:** Jordan Farrell specializes in water treatment, quality control, and regulatory compliance. He supervises operations, ensures water quality, and manages safety protocols. Jordan oversees maintenance, regulatory compliance, and maintains high-quality water supply for the community.

In addition, Rancho Water recognizes the value of supplementing the in-house team with specialized expertise for a project of this complexity. The following technical assistance will be sought through qualified consultants:

- Arsenic treatment process modeling and equipment selection
- Surge analysis and valve design
- Electrical, instrumentation and controls design
- Development of detailed technical specifications

The District will also look to Reclamation for guidance on how to effectively manage and administer the grant funding agreement. Rancho Water grants staff will coordinate closely with Reclamation counterparts to ensure full compliance with all federal requirements.

Policy and Administrative Requirements for Plan Implementation

No new Rancho Water policies or administrative actions are required for implementing the Well 240 improvements. The Project is consistent with existing Board policy directives on water supply reliability, quality protection, and infrastructure investment, with funding already allocated in Rancho Water's 5-year Capital Improvement Plan. It will adhere to established design standards, specifications, and operating procedures, requiring no special approvals. Administratively, it aligns with existing procurement, contracting, and construction management protocols, with the engineering department authorized to proceed without additional Board actions. Overall, the Project seamlessly integrates within Rancho Water's current policy and administrative framework as a priority initiative, necessitating no new actions to move forward.

4. Evaluation Criterion D—Presidential and Department of the Interior Priorities (NOFO Section E.1.4)

❖ Climate Change:

The Proposed Project directly addresses climate change impacts and helps combat the climate crisis in several key ways:

1. **Increasing drought resilience and water supply reliability:** The project maximizes production from the Temecula Valley Groundwater Basin, a more climate-resilient source, by restoring 2,900 acre-feet per year from Well 240, reducing reliance on vulnerable imports during Southern California's exacerbated droughts due to climate change.
2. **Improving water quality and public health resilience:** The project addresses worsening water quality, particularly arsenic contamination exacerbated by climate change, by installing treatment to ensure safe drinking water despite fluctuating aquifer conditions.
3. **Modernizing infrastructure for climate adaptation:** The project enhances water infrastructure resilience against climate change-induced extreme weather events by installing new treatment facilities and relocating the well discharge pipeline away from erosion risk areas.
4. **Reducing greenhouse gas emissions:** The project diminishes dependence on high-energy, greenhouse gas-intensive imported water sources through local, drought-resistant water supply, while also optimizing production from Well 240 to decrease groundwater pumping from other wells.
5. **Preserving environmental flows:** Enhancing local supply reliability reduces demand on climate-stressed imported sources, like the Colorado River during droughts, thereby preserving environmental flows and riparian habitats by alleviating pressures on those systems.

The Proposed Project exemplifies proactive climate adaptation through diversified local supplies, modernized resilient infrastructure, improved water quality safeguards, reduced energy/GHG impacts, and environmental protections - directly supporting the priorities of E.O. 14008. The proposed Well 240 Arsenic Treatment and Pipeline Relocation Project directly enhances water supply sustainability and climate resilience by restoring Well 240 and maximizing Temecula Valley Groundwater Basin production. This reduces reliance on vulnerable imported water supplies, boosting overall supply resilience during droughts. Diversifying Rancho Water's supply portfolio improves system flexibility amid uncertain climate change impacts, while the arsenic treatment system safeguards drinking water quality against climate-driven basin dynamics. Modernizing critical infrastructure further fortifies resilience against increasing extreme weather events. By reducing reliance on energy-intensive imports and optimizing Well 240 production, the project minimizes energy and greenhouse gas impacts while preserving habitats and environmental flows. Robust planning, stakeholder engagement, and support for disadvantaged communities foster equity and enhance climate resilience, showcasing Rancho Water's proactive climate adaptation. Overall, the Proposed Project integrates diversification, quality safeguards, modernization, environmental protections, and equity provisions, making it a crucial element of Rancho Water's climate resilience strategy.

❖ Disadvantaged or Underserved Communities:

The Project directly benefits disadvantaged and underserved communities, aligning with the environmental justice objectives of Executive Orders 14008 and 13985. By treating contamination

at its source, particularly rising arsenic levels in Well 240, the Project ensures a reliable supply of safe drinking water to an economically burdened community in Temecula. Moreover, it enhances water security amid intensifying droughts and strains on imported water supplies, particularly crucial for vulnerable communities with limited political influence. Additionally, by revitalizing Well 240, the Project reduces the need for costly emergency repairs and water hauling, providing financial relief for low-income ratepayers and supporting the local economy. Relocating pipeline infrastructure from the riverbed also offers opportunities for expanding green spaces and recreational access, addressing "park poverty" and improving public health and environmental connection. In sum, the Project advances the environmental justice goals of the Biden-Harris administration and demonstrates tangible action toward water equity.

❖ **Tribal Benefits:**

While not directly serving tribal lands, the Project indirectly benefits the Pechanga Band of Luiseño Indians by ensuring Rancho Water can fulfill its obligation to deliver 4,994 AFY of imported water under a negotiated settlement. By bolstering local groundwater supplies, the Project safeguards against climate change and imported water disruptions, thereby protecting tribal water rights. Additionally, improved water quality and reliability directly benefit many Tribal members residing in the area served by Well 240.

To honor sovereignty and advance Tribal benefits, Rancho Water has engaged Pechanga leadership, receiving their support and appreciation for the collaborative approach. This aligns with the respectful Nation-to-Nation partnership outlined in the President's memorandum on Tribal consultation. Ongoing consultation and collaboration will continue, with opportunities for joint efforts on water conservation and grant funding pursuit. Through these initiatives, the Project exemplifies how local water management partnerships can uphold Federal trust responsibilities, strengthen nation-to-nation collaboration, and deliver meaningful benefits for Tribes.

5. Evaluation Criterion E — Nexus to Reclamation (NOFO Section E.1.5)

The Proposed Project advances Reclamation's goals of water supply reliability, environmental stewardship, and community resilience. Rancho Water, reliant on imported supplies from Reclamation's Boulder Canyon Project, will bolster local groundwater to alleviate pressure on the strained Colorado River system. Its 2,900 AFY local supply serves as a buffer against projected cuts in deliveries, enhancing sustainability. Moreover, the Project supports Tribal water security by fulfilling obligations to the Pechanga Band of Luiseño Indians. Environmentally, it improves the Santa Margarita River watershed's health, fostering habitat restoration and reducing pipeline risks. By integrating these benefits, the Project embodies Reclamation's holistic, multi-benefit approach. Its support enhances resilience for Lower Colorado Basin communities and ecosystems, showcasing Reclamation's commitment to innovative, climate-driven water management.

**** *The end of the technical proposal and evaluation criteria (20-page limit)* ****

Project Budget

Table 1 summarizes the total costs and funding sources for the Proposed Project. The total cost of the Project is estimated to be \$850,000. Funding sources for the project include funding from Rancho Water and requested funding from Reclamation. No other Federal funding has been requested or received for the proposed project. There are no other outstanding funding requests.

Table 1. - Summary of Non-Federal and Federal Funding Sources

FUNDING SOURCES	AMOUNT
Non-Federal Entities	
1. Rancho Water Budget	\$450,000
2. Value of third-party contributions	\$0
Non-Federal Subtotal	\$450,000
REQUESTED RECLAMATION FUNDING	\$400,000
TOTAL PROJECT COST	\$850,000

Budget Narrative

The total cost of the proposed Well 240 Arsenic Treatment and Discharge Line Relocation Design Project is estimated to be \$850,000.

Contractual costs account for the bulk of the budget at \$800,000. This includes the progressive design phases from Basis of Design Report through bid-ready documents as well as the required environmental review under the California Environmental Quality Act (CEQA). Estimated costs for each design milestone are based on the level of detail and effort required, with the 30% and 60% design phases being the most intensive. The CEQA compliance task accounts for technical studies, tribal consultation, and public review periods.

A 6.25% contingency of \$50,000 is also included to account for any unforeseen costs or potential changes in scope.

Rancho Water will fund more than 50% of the total project cost, amounting to \$450,000. Reclamation grant funding is being requested for the remaining \$400,000. No other federal or non-federal entities are providing monetary contributions to the project.

The budget provides sufficient resources for Rancho Water and its consultants to complete all the required design and environmental work for the Well 240 project in accordance with Reclamation's standards and the grant program requirements. It accounts for the progressive development of design detail and accuracy in cost estimating as the project advances towards construction readiness.

Basis of Design Report: \$85,000

Task includes: Project kick-off meeting; data collection and review; development of design criteria, process flow diagrams, site layouts, hydraulic calculations, geotechnical and survey needs assessment, and specification outline.

30% Design Drawings and Cost Estimate: \$175,000

Task includes: Preparation of draft drawings (process, mechanical, structural, electrical, instrumentation and control), pipeline plan and profile sheets, and Class 4 opinion of probable construction cost. Also includes 30% design review workshop and value engineering.

60% Design and Draft Specifications: \$150,000

Task includes: Advancement of design based on 30% review comments; refined drawings for all disciplines; draft technical specifications for major equipment and materials; Class 3 cost estimate. Includes 60% review workshop and value engineering.

90% Design and Cost Estimate: \$150,000

Task includes: Advancement of design to 90% level; detailed drawings and specifications for all components; Class 2 cost estimate; draft bid documents. Includes constructability review.

100% Bid-Ready Design Package: \$100,000

Task includes: Incorporation of 90% review comments; preparation of final sealed drawings and specifications; Class 1 cost estimate; final front-end contract documents suitable for bidding.

Other – Environmental and Regulatory Compliance: CEQA Initial Study/Mitigated Negative Declaration (IS/MND): \$140,000

Task includes: Technical studies (biological, cultural, noise, traffic); Draft IS/MND; tribal consultation; public review draft Final IS/MND

TOTAL DIRECT COSTS: \$800,000

Contingency: \$50,000

Assumes 6.25% of total project cost to cover unforeseen expenses.

TOTAL ESTIMATED PROJECT COSTS: \$ 850,000

Environmental and Cultural Resources Compliance

The project involves pilot testing, which will involve placement of a small (less than 4 square foot) pilot skid near the well(s) that will undergo pilot testing. The skid will be placed in a fenced, already compacted, graded, and denuded area and the likelihood of environmental impacts is minimal. The project will qualify for a Class 6 “Information Collection” California Environmental Quality Act exemption. The project will qualify for a Categorical Exclusion under the National Environmental Policy Act under the exclusion for “Inventories, research activities, and studies, such as resource inventories and routine data collection when such actions are clearly limited in context and intensity.

Required Permits or Approvals

No permits will be required to for the project in this grant application. Permits required for construction of a potential PFAS treatment facility will be identified more specifically during the final design of any such facility.

Overlap or Duplication of Effort Statement

Rancho Water attests that there is no overlap between the proposed project and any other active or anticipated proposals or projects in terms of activities, costs, or commitment of key personnel. The proposal submitted for consideration under this program is not duplicative of a proposal or project that has been or will be submitted for funding consideration to another potential federal grant funding source. If at any time the project is awarded funds for any federal or non-federal source, Rancho Water will notify the NOFO point of contact or the Program Coordinator immediately.

Conflict of Interest Disclosure Statement

There are no actual or potential conflicts of interests at the time of submission.

Uniform Audit Reporting Statement

Rancho Water submitted a Single Audit Report to the Federal Audit Clearinghouse for their most recently closed fiscal year (fiscal year ending 6/30/2022). Rancho Water’s Employer Identification Number (EIN) is 95- 2415751.

Letters of Project Support

Rancho Water recently submitted an application for the WaterSMART Drought Resiliency Projects for Fiscal Year 2024. Although the application was not approved, the District received valuable feedback from the Reclamation grant program team. It was recommended that Rancho Water apply for the WaterSMART Planning and Project Design Grants to develop a comprehensive plan and reapply once the design phase is completed. The attached letters of support, from the initial application which focused on implementation and design, underscore the significant interest and support for the project's success.

Letters of Project Support from the following agencies/entities are included:

- Senator Kelly Seyarto, Thirty-second Senate District
- County of Riverside, Third District, Supervisor Chuck Washington
- Temecula Valley Chamber of Commerce

CAPITOL OFFICE
1021 O STREET, SUITE 7120
SACRAMENTO, CA 95814
(916) 651-4032

DISTRICT OFFICES

24640 JEFFERSON AVENUE, SUITE 202
MURRIETA, CA 92562
(951) 894-2220

4740 GREEN RIVER ROAD, SUITE 212
CORONA, CA 92578
(951) 290-1620

777 E. TAHQUITZ CANYON WAY, SUITE 200-12
PALM SPRINGS, CA 92262
(760) 422-6684

California State Senate

SENATOR
KELLY SEYARTO

THIRTY-SECOND SENATE DISTRICT



COMMITTEES

- GOVERNANCE & FINANCE
VICE CHAIR
- NATURAL RESOURCES
VICE CHAIR
- BUDGET SUBCOMMITTEE #5
- APPROPRIATIONS
- GOVERNMENTAL ORGANIZATION
- ENERGY
- JOINT LEGISLATIVE AUDIT
- HOUSING
- TRANSPORTATION

October 9th, 2023

Robert Grantham, General Manager
Rancho California Water District Water District
42135 Winchester Road
Temecula, CA 92590

Re: Support for Rancho Water's WaterSMART Planning and Design Grant Application – Address Murrieta-Temecula Water Quality for Long-Term Supply Reliability – Phase I

Mr. Grantham:

I would like to express my support for Rancho California Water District's application to the U.S. Bureau of Reclamation's WaterSMART Planning and Project Design Grant program for Fiscal Year 2023 (R23AS00109) to Address Murrieta-Temecula Water Quality for Long-Term Supply Reliability Phase I (Project).

PFAS are synthetic compounds which have been used extensively in consumer products such as carpets, clothing, fabrics for furniture, paper packaging for food, and other materials. The presence of PFAS in source water and drinking water is complex and concerning due to their widespread use and environmental persistence. Continued exposure to high levels of specific PFAS may lead to adverse health effects.

Rancho Water is taking a proactive approach to PFAS by closely monitoring water supplies and by identifying feasible treatment solutions. Addressing PFAS in groundwater is of critical importance as the local groundwater basin acts as the region's storage bank.

The Project is to bench test and perform a pilot study on the condition and PFAS content of four groundwater wells, evaluate treatment options and restore them to service which will increase previously available local water supplies for Riverside County and also the Pechanga Band of Luiseno Mission Indians (Pechanga Tribe).

This Project will significantly improve water supply reliability in the region and enhance regional drought resiliency by preserving the ability to use groundwater and groundwater banking.

Thank you for your consideration of this request.

Sincerely,

A handwritten signature in black ink that reads "Kelly Seyarto".

Kelly Seyarto
State Senator, 32nd District

COUNTY OF RIVERSIDE

District Office: French Valley
37600 Sky Canyon Drive, #505
Murrieta, CA 92563
(951) 955-1030 – Fax (951) 955-2194

Robyn Brock, Chief of Staff
E-Mail: D3Email@rivco.org
www.SupervisorChuckWashington.com



Riverside Office:
4080 Lemon Street, 5th Floor
Riverside, CA. 92501

Hemet Office:
43950 Acacia Ave, Suite A
Hemet, CA. 92544

Supervisor Chuck Washington Third District

October 10, 2023

Att: Robert Grantham, General Manager
Rancho California Water District
42135 Winchester Road
Temecula CA, 92590

Re: Support for Rancho California Water District's WaterSMART Drought Resiliency Projects for Fiscal Year 2024 – Well 240 Arsenic Treatment and Discharge Line Relocation

Dear Mr. Grantham,

We understand that Rancho California Water District (Rancho Water) is applying to the U.S. Bureau of Reclamation's WaterSMART Drought Resiliency Grant Program for Fiscal Year 2024 (R24AS00007) to implement the *Well 240 Arsenic Treatment and Discharge Line Replacement Project (Project)*.

Arsenic is a naturally occurring chemical element that is widely distributed in water, air, and soil. Arsenic in drinking water is a widespread concern. Arsenic levels tend to be higher in groundwater sources, such as wells, than from surface sources, such as lakes or reservoirs. Rancho Water has identified arsenic in three of its drinking water wells and has been able to meet standards for arsenic in the water delivered to customers by blending the water from these wells with other sources. However, Rancho Water has been monitoring the trends in arsenic levels and based on the upward trend in Well 240, this well has been taken offline. This has reduced the groundwater supply available to Rancho Water and its customers. Rancho Water has identified the need to add arsenic treatment to Well 240 before it can be returned to service. In addition, in the near past, due to high stormflows, the connection between Well 240 and Rancho Water's potable water system has been exposed. About 850 feet of the discharge line resides within Long Valley Wash and this pipeline has been exposed due to extreme weather and is at risk of damage and rupture. The relocation of the discharge line out of the drainage way, along with arsenic treatment, would ensure long-term reliability of Well 240 and its water supply.

We appreciate that Rancho Water is taking a proactive approach to arsenic by closely monitoring water supplies and by identifying feasible treatment solutions for arsenic. Addressing arsenic in groundwater is a critical importance as the local groundwater basin acts as the region's storage bank with water stored during periods of plenty and water withdrawn during periods of drought.

This Project will significantly improve water supply reliability in the region and enhance regional drought resiliency by preserving the ability to use groundwater and groundwater banking. As the Riverside County Third District Supervisor its important that my constituents have access to clean water.

The WaterSMART Drought Response Program supports a proactive approach to drought by providing financial assistance to water agencies to implement projects that will build long-term resiliency to drought (Drought Resiliency Projects). The proposed Project accomplishes the goals of the funding opportunity enhancing water supply reliability during times of drought.

Riverside County Third District Supervisor Chuck Washington is proud to support Rancho Water's WaterSMART grant application.

Sincerely,



Chuck Washington
Riverside County
Third District Supervisor

May 22, 2024

RE: Rancho California Water District's Well 240 Arsenic Treatment and Discharge Line Relocation Project - SUPPORT

To Whom It May Concern,

On behalf of the Temecula Valley Chamber of Commerce, we express our strong support for the Rancho California Water District's Well 240 Arsenic Treatment and Discharge Line Relocation Project. We believe this project is crucial for the continued prosperity and well-being of our community.

This initiative involves designing and implementing an advanced arsenic treatment system for Well 240 and constructing a new discharge pipeline to connect the well to the potable water distribution system. Restoring Well 240 to its original output capacity of 2,900 acre-feet per year is essential for delivering safe, reliable drinking water to over 150,000 residents. The well's shutdown in 2021 due to high arsenic levels significantly impacted our local water supply, and this project is a necessary step to rectify that.

From a community perspective, the Well 240 project will provide multiple benefits. Firstly, by ensuring that the water supply meets safety standards, this project will protect the health of our residents. Reliable access to clean water is a fundamental public service that underpins the overall quality of life in our community. Secondly, adequate and safe water supply is vital for businesses, particularly those in the agricultural, manufacturing, and service sectors. Improved water infrastructure will support local businesses, attract new investments, and promote economic growth.

Additionally, the relocation of the discharge pipeline to reduce erosion and scour at an existing stream crossing will enhance the resilience of our water infrastructure. This reduces the risk of service disruptions due to extreme weather events, which are becoming more frequent due to climate change. Reducing the need for ongoing maintenance in sensitive creek areas will minimize environmental disruption, preserving local ecosystems and promoting sustainable water management practices.

Furthermore, this project has garnered broad regional support, including from key partners such as the City of Temecula and the Pechanga Band of Luiseño Indians. This collaboration underscores the project's importance and its potential to strengthen regional infrastructure and community ties.

In conclusion, the Temecula Valley Chamber of Commerce fully supports the Well 240 Arsenic Treatment and Discharge Line Relocation Project. We believe it is a critical investment in our community's future, ensuring that our residents and businesses have access to safe, reliable water. We urge you to consider this project favorably and provide the necessary funding to make it a reality.

Thank you for your attention to this important matter. Please feel free to contact us if you require any further information.

Sincerely,



Brooke Nunn
President/CEO

Appendix A – Project Maps

Majority of the focus for the Proposed Project is located at Latitude 33.522100322499;
Longitude -117.153076564761.

