Ortigalita Creek Recharge and Recovery Project

FUNDING GROUP III APPLICATION

RECHARGE BASIN SIMULATED

Grant Program:

U.S. Bureau of Reclamation
WaterSMART Drought Response Program
Drought Resiliency Projects for Fiscal Year 2024
Notice of Funding Opportunity No. R24AS00007

Grant Applicant:

San Luis Water District
1015 Sixth Street
P.O. Box 2135
Los Banos, California 93635-2135

STEVEN STADLER, P.E.
District Engineer

P.O. Box 2135
1015 Sixth St.
Los Banos, CA 93635
sstadler@slwd.net

Office: (209) 826-4043
Fax: (209) 826-0524
Cell: (559) 554-4293

October 2023

ACRONYMS AND ABBREVIATIONS

AF	acre-feet
APN	assessor's parcel number
cfs	cubic feet per second
CDMGSA	Central Delta-Mendota Groundwater Sustainability Agency
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CVP	Central Valley Project
CWA	Clean Water Act
DCP	Drought Contingency Plan
DMP	Drought Management Plan
DWR	Department of Water Resources
EA	Environmental Assessment
EIN	Employer Identification Number
FAIR	Financial Assistance Interior Regulation
FONSI	Finding of No Significant Impact
FY	Fiscal Year
GSA	groundwater sustainability agency
GIS	Geographical Information System
GSP	groundwater sustainability plan
Project	Ortigalita Creek Recharge and Recovery Project
M&I	municipal and industrial
MMP	Mitigation and Monitoring Plan
MP	milepost
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOFO	Notice of Funding Opportunity
PVC	poly vinyl chloride
Reclamation	Bureau of Reclamation
SAM	System for Award Management
SGMA	Sustainable Groundwater Management Act
SLDMWA	San Luis and Delta-Mendota Water Authority
SLWD	San Luis Water District
SOD	South-of-Delta
UEI	Unique Entity Identifier
USBR	U.S. Bureau of Reclamation
U.S.C.	United States Code
WY	Water Year

TABLE OF CONTENTS

APPENDICES

LIST OF TABLES

LIST OF FIGURES

MANDATORY FEDERAL FORMS

The following mandatory federal forms are included in the pages following this text:

- SF-424: Application for Federal Assistance
- SF-424C Budget Information – Construction Programs
- SF-424D Assurances – Construction Programs

The forms have been fully completed and signed by an authorized representative of the applicant.

TECHNICAL PROPOSAL

Applicant Information

Applicant:	San Luis Water District, a water district organized under California Water Code section 34000 et seq.
Mailing address:	P.O. Box 2135, Los Banos, CA 93635-2135.
Physical address:	1015 Sixth Street, Los Banos, CA 93635.
Location:	Merced County and Fresno County within the State of California. The applicant's principal county is Merced County.
Eligibility:	The applicant meets the eligibility requirements because it is a water district and Category A applicant located in California.

Task Area and Funding Group

This application is for a project under Task A, Increasing the Reliability of Water Supplies through Infrastructure Improvements. The application is not seeking funding for the construction of recovery wells. The application is seeking funding under Funding Group III, funding in an amount no more than $5,000,000.

Applicant Category

The applicant is a Category A applicant as the San Luis Water District is a water district organized under California Water Code section 34000 et seq.

Project Summary

The Ortigalita Creek Recharge and Recovery Project (Project) will construct groundwater recharge basins and associated facilities on a 120-acre site in the Ortigalita Creek watershed area within the San Luis Water District (SLWD). The Project will allow SLWD to store surface water supplies in the aquifer and recover a portion of the stored water for use during drought periods. Stored water will be recovered through a conjunctive use program implemented by SLWD. A portion of the stored water will be used to benefit local groundwater users within the Delta-Mendota subbasin. The project is expected to recharge up to 16,425 acre-feet (AF) in wet years and 5,631 AF on an average annual basis.

Project Length of Time and Estimated Completion Date

The Project will commence upon the execution of a funding agreement, expected October 2024 should the applicant be selected for funding. Construction is planned to commence January 2026 with overall project completion planned for June 2027.

Federal Facility or Federal Lands

The Project is not located on a Federal facility but will involve Federal lands. Two existing turnouts along the San Luis Canal will be modified and one new turnout will be constructed. The two existing turnouts and one new turnout are located in the San Luis Canal right-of-way which is on federal lands.

The existing turnout at milepost 82.59, left bank, is used to deliver water to the existing agricultural operation at the project site. The pipeline delivering water from the turnout will be relocated to a new outfall structure. The relocation work is expected to take place outside of the federal lands.

A new turnout will be constructed at a location at or near milepost 82.89, left bank. The turnout will be a 36" siphon pipeline constructed in accordance with Bureau of Reclamation standards. A license agreement will need to be obtained for the new turnout.

The existing turnout at milepost 83.24, left bank, has an unused 24" gravity pipeline. The pipeline will be extended to a new outfall structure located on the project site and outside of federal lands. The pipeline extension will likely occur on federal lands and an appropriate permit will be obtained for the work and permanent facilities.

Only work involving the turnouts will involve federal lands. The construction of the recharge basins or other project elements will not take place on or involve federal lands.

Background Information

SLWD was formed in 1951 for the purpose of providing water service through a Central Valley Project water service contract. Lands within SLWD generally do not have other supplies of water and landowners rely on SLWD exclusively for their agricultural and municipal and industrial water needs. SLWD is located in southwestern Merced County and northwestern Fresno County in the State of California.

At present, SLWD covers approximately 60,000 acres and serves an estimated population of 2,008 persons. Most of the water provided through SLWD, greater than 99%, serves agricultural uses. In 2020, there were approximately 33,200 irrigated acres. Crops grown in the district include almonds, pistachios, olives, cotton, onions, tomatoes, melons, and wheat.

Water Supply

SLWD has a permanent water service contract with USBR for agricultural and municipal and industrial (M&I) water from the Central Valley Project. The original contract quantity was 125,080 acre-feet. Recently, SLWD has assigned 4,449 acre-feet of its water supply to Santa Nella County Water District (SNCWD) and detached SNCWD from its service area. The current contract quantity is 120,631 acre-feet.

SLWD receives its water from USBR through the Delta-Mendota Canal (DMC) and the San Luis Canal (SLC). SLWD has constructed ten pump stations to pump water from the SLC for delivery through a series of canals and laterals to water users. In some cases, landowners take direct delivery of water from the SLC and the DMC.

Water users within SLWD generally do not have access to other sources of water. Groundwater is only available to a small area within SLWD as most lands within SLWD overly either a saline aquifer or a non-productive aquifer. Surface water from local sources, such as creeks, is not readily available as the runoff from local watersheds is high in salts and not suitable for crop irrigation. The lack of other water supplies was the primary motivation for the formation of SLWD over seventy years ago.

The reliability of Central Valley Project water supplies has been diminishing significantly since the enactment of the Central Valley Project Improvement Act (CVPIA) in 1991. During the past three decades, various regulatory actions and court decisions have reduced CVP south-of-Delta (SOD)

contract allocations. During the past 15 years, SLWD has received an average water allocation of 36% of its full contract amount.

Table 1: CVP South-of-Delta Water Allocations

Contract Year	CVP SOD Allocation	Shasta Year Type
2009	10%	Non-critical
2010	45%	Non-critical
2011	80%	Non-critical
2012	40%	Non-critical
2013	20%	Non-critical
2014	0%	Critical
2015	0%	Critical
2016	5%	Non-critical
2017	100%	Non-critical
2018	50%	Non-critical
2019	75%	Non-critical
2020	20%	Non-critical
2021	0%	Critical
2022	0%	Critical
2023	100%	Non-critical
Average	**36%**	

Additionally, due to additional uncertainty caused by various regulatory actions and court decisions, the quantity of water provided to CVP SOD water contractors is conservatively allocated. Also, the timing of those announcements is often delayed because of uncertainty associated with regulatory reviews and approvals. As a result, certainty about water allocations does not occur until later in the water year, often well after decisions regarding crop planting must be made.

As a result of the diminished reliability and delays in allocating CVP SOD water, SLWD must commit to securing supplemental water supplies every year. Initially, SLWD's contract water was sufficient to meet most of its demands and the quantity of water needed to supplement its water demands was small. As time has progressed and CVP reliability has diminished, the quantity of supplemental water obtained by SLWD has increased significantly and meets on average about two-thirds of its needs. In drought years and especially in years when there is a 0% contract allocation, SLWD is limited in the amount of supplemental water it can obtain and the price of the insufficient quantity obtained is extremely high and not sustainable for agricultural operations.

Project Location

The Project is located within the County of Merced in the State of California at latitude 36.9670° N and longitude 120.8620° W.

With respect to local roadways and features, the Project is located at the southwest corner of Mervel and Center Avenues north of the San Luis Canal in southwestern Merced County. The site is adjacent to the San Luis Canal / California Aqueduct and 0.7 miles from Interstate 5.

A map showing the location of the District within California is provided as **Figure 1**. A map showing the location of the project within the District is provided as **Figure 2**. A map showing the extent of the project site is provided as **Figure 3**.

Figure 1. District Location

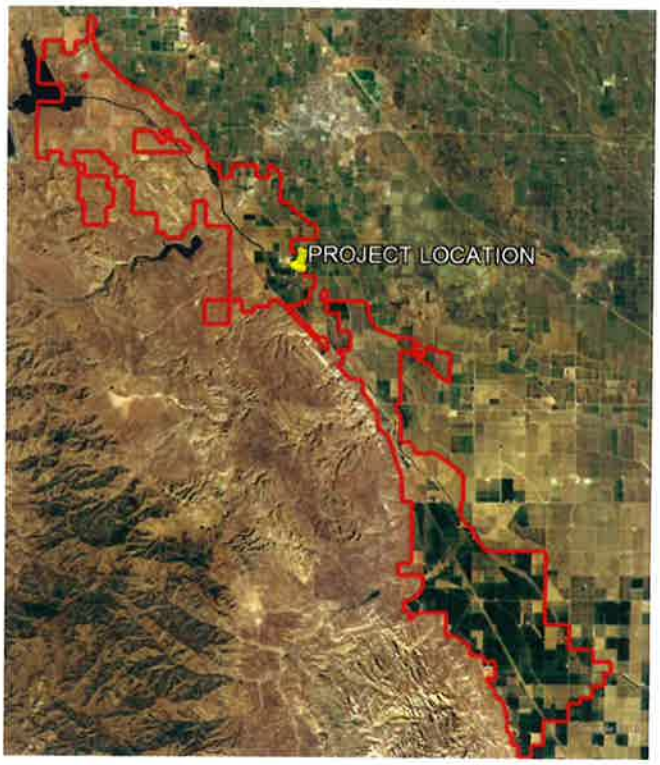

Figure 2. Project Location

Figure 3. Project Extents and Surroundings

Project Description

The Ortigalita Creek Recharge and Recovery Project will construct 93 acres of groundwater recharge basins and associated facilities on a 120-acre site in the Ortigalita Creek watershed area within the San Luis Water District (SLWD). The existing site is comprised of 120 acres used as a pistachio orchard and a 1-acre vacant lot. SLWD will acquire the property from the existing landowner and remove the orchard and the existing field irrigation system. SLWD will then construct the project. Photographs of the existing site are provided in **Appendix A**.

The Project includes the construction of nine recharge basins varying in size between 7 to 12.5 acres. The berms forming the basins will have interior (or water side) slopes of 3:1 and exterior (or non-water side) slopes of 2:1. The basins will have a 10-foot-wide access roadway on top of each of the berms and will have ramps to allow access to the top of the berms from Mervel Avenue and Center Avenue.

Water will be conveyed into the basins from the left bank of the San Luis Canal at three locations. The first location is at milepost 82.59 and is an existing slant pump currently serving an irrigation system on the property. The slant pump has an 8 cubic feet per second (cfs) capacity. The Project will tie into the existing discharge line and install an 18-inch line discharging to a concrete outfall structure constructed in the southwest basin.

The second location is a proposed siphon turnout at or near milepost 82.89. The siphon turnout will be constructed using a 36" steel pipe from the San Luis Canal to a 60-inch concrete standpipe located outside of the San Luis Canal right-of-way. From the standpipe, a 36-inch PVC pipeline will convey water to a constructed outfall structure located in the southern center basin. The siphon turnout will be rated for at least 50 cfs.

The third location is an existing 24-inch diameter turnout at milepost 83.24 rated for 8 cfs. An 18-inch pipeline will be installed from the existing turnout to a constructed concrete outfall structure located in the southeast basin.

Water will gravity flow between basins from south-to-north through interbasin structures with flow control gates. Similarly, water will flow between the southerly basins, each southerly basin containing an outfall structure introducing water from the San Luis Canal, through interbasin structures. The interbasin structures will also allow for overflow from one basin into another in the event of overfilling.

Four nested monitoring wells will be constructed at the top of the berms to monitor water level elevations in the aquifer above the Corcoran clay and the aquifer below the Corcoran clay. Each monitoring well will be equipped with a transducer and data logger to provide twice daily readings of aquifer water levels. The nested monitoring well will be secured within a lockable round metallic enclosure. Each monitoring well site shall have a 3-foot square concrete slab with a brass or bronze survey marker to provide a reference point for ground surface elevation measurements for water level elevation and subsidence monitoring.

SLWD will recover stored water through a conjunctive use program established with nearby district landowners. The conjunctive use program will encourage nearby landowners to extract the stored water for crop irrigation using their existing wells in lieu of using surface water in drought years. The

surface water conserved by the extraction and use of the stored water will be used by other landowners within SLWD. No recovery wells will be installed as a part of this Project.

The Project also includes the construction of monitoring wells at four locations on the project site. Each monitoring location will have a monitoring well completed in the unconfined (upper) aquifer and the confined (lower) aquifer. The monitoring wells will be used as a part of a groundwater level and groundwater quality monitoring program to ensure that Project operations are not impacting adjacent landowners.

The project site has been extensively studied and it a conservatively assumed to be capable of recharging 0.5 feet per day or 45 acre-feet per day (for 93-acres of recharge area). Site studies involving large-diameter excavated test pits indicated sustained recharge rates up to 5.8 feet per day. The high recharge rates were attributed to the presence of subsurface materials highly favorable for percolation beneath the test pits.

As a historical sidenote, the construction of the San Luis Canal caused the termination of the creek at the San Luis Canal and creek flows no longer pass east of the San Luis Canal and flow directly into the San Luis Canal. As a result of the construction of the San Luis Canal, the Ortigalita Creek watershed north and east of the San Luis Canal no longer receives natural recharge from natural creek flows.

An analysis was performed to determine the water available for recharge which in turn will provide an indication of the recharge that may be expected from the Project. The analysis is provided in **Appendix B**. The analysis indicated the maximum annual recharge expected by the Project would be 16,425 acre-feet. The long term annual average recharge would be 5,631 acre-feet. Based on an assumed loss of 6 percent, which represents water migrating away from the project site or percolating into the lower aquifer, the average annual water supply yield of the project is 5,293 acre-feet.

The project will address the requirements of the Sustainable Groundwater Management Act (SGMA). SLWD and the Project are located within the Central Delta-Mendota Groundwater Sustainability Agency (CDMGSA). The CDMGSA was formed to address groundwater sustainability under SGMA. The CDMGSA is charged with preparing a groundwater sustainability plan (GSP) for groundwater extractions within its boundaries and implementing any projects or management actions required under the GSP. The Ortigalita Creek Recharge and Recovery Project is a listed project under the currently adopted GSP. The CDMGSA, along with all the other GSAs covering the Delta-Mendota subbasin, are preparing a single GSP to address deficiencies identified by the California Department of Water Resources. This project will be included in the revised single GSP. All aspects of the project conform to the requirements and goals of the adopted GSP and will conform to any new requirements and goals of the Revised Single GSP.

Prior to the construction of recovery facilities and as a part of the environmental assessment of the project, SLWD will develop a Monitoring and Mitigation Plan (MMP) for the project. The MMP will address and mitigate all undesirable results listed under SGMA which include the following: chronic lowering of groundwater elevations, subsidence, water quality degradation, reduction of groundwater storage, depletions of interconnected surface waters, and seawater intrusion. Furthermore, the MMP will address concerns related to subsidence of critical infrastructure such as the adjacent San Luis Canal and groundwater levels in nearby wells influenced by project operations.

PERFORMANCE MEASURES

The performance of the Ortigalita Creek Recharge and Recovery Project shall be measured using two metrics, quantity of water recharged and quantity of water recovered. These metrics will be calculated on a monthly basis and reported annually.

The first performance goal of the project is to recharge at least 5,631 AF on an average annual basis. This amount is based on the expected recharge capacity of the Project as provided in the analysis included in **Appendix B**. The quantity of water recharged shall be determined by measuring the quantity of water diverted to the project and then deducting the quantity of water assumed evaporated from the basins. The evaporation will be determined using CIMIS data from the Panoche station, Station No. 124.

The second performance goal of the project is to recover at least 5,293 AF on an average annual basis. This amount represents 94% of the first performance goal and represents water recovered under the conjunctive use program implemented by SLWD. The quantity of water recovered shall be determined by measuring the quantity of water pumped using wells with a propeller-type flowmeter having an accuracy of ±2% or better. The recovery wells are landowner wells in the vicinity of the project site that are equipped with flowmeters having an accuracy of ±2% or better.

The performance metrics and goals are provided in **Table 2.**

Table 2. Performance Metrics and Goals

Metric	Goal
Water Recharged	At least 5,631 AF on an average annual basis
Water Recovered	At least 5,293 AF on an average annual basis

Performance measurement and analysis is critical for project operations from an operations and maintenance perspective as well as an administrative perspective. With regards to operations and maintenance, recharge quantities will be used to determine recharge rates. Recharge rate trends will be used to determine if silt deposits are impeding groundwater recharge and if correction actions such as silt removal, tilling, or deep ripping is required to restore percolation rates. Silt deposition in the recharge basin is not expected to be an operational issue as the level of suspended solids in the San Luis Canal water is low except for those periods during large storm events where local runoff is introduced into the canal.

From an administrative perspective, it is important to understand the amount of water recharged into and recovered from the Project. The use and water supply yield of the Project will allow SLWD to determine if the Project is performing as planned and inform the evaluation of similar project opportunities. Also, the water used for groundwater recharged is sourced from supplies available to SLWD and must be procured. Through measurement of project operations and comparison to expected performance, SLWD can determine if it is producing adequate supplies from the Project.

EVALUATION CRITERIA

Evaluation Criterion A – Project Benefits (30 points)

Subcriterion A1-a: Adds to Available Water Supplies

How will the project build long-term resilience to drought?

SLWD has a permanent water service contract with USBR for irrigation and municipal and industrial (M&I) water from the Central Valley Project. The contract quantity is 120,631 acre-feet and SLWD covers approximately 60,000 acres. SLWD was formed and obtained a CVP water service contract to serve land that does not have access to other sources of water. Most lands within SLWD overly either a saline aquifer or a non-productive aquifer.

The reliability of Central Valley Project water supplies has been diminishing over time. During the past 14 years, SLWD has received an average water allocation of 36% of its full contract amount. As a result of this diminished reliability, SLWD must secure supplemental water supplies every year. In drought years and especially in years when there is a 0% contract allocation, SLWD is limited in the amount of supplemental water it can obtain and the price of the water obtained is high and not sustainable for agricultural operations.

The Project will allow SLWD to store surface water during non-drought periods in the aquifer and recover the water during drought periods. The recovered water will provide an additional water supply that will partially offset the supply deficit occurring in drought periods.

How many years will the project continue to provide benefits?

The project is expected to provide a perpetual benefit so long as the Project facilities are maintained. The recharge basins are the primary Project facilities and the availability and performance of the recharge basins can be maintained with minimal maintenance activity. The project site will be included in the district's weed control program and weeds will be sprayed on a regular basis. The berms of the recharge basins will be reshaped periodically and sedimentation of the basins (which is easily remedies through discing or tilling of the basins) is expected to be minimal given the exceptional water quality in the San Luis Canal. Other associated Project facilities such as concrete structures, pipelines, and monitoring wells have a long service life, are easily repaired or replaced, and replacement costs are minimal compared to the initial investment.

What is the estimated quantity of additional supply the project will provide and how was this estimate calculated? Provide this quantity in acre-feet per year as the average annual benefit over ten years (e.g., if the project captures flood flows in wet years, state this and provide the average benefit over ten years or longer including dry years).

The project will provide an estimated additional 5,293 AF feet of drought year supplies on an average annual basis. The estimate is based on: (1) an estimated annual average recharge rate of 5,631 AF shown in the Water Supply Analysis provided in **Appendix B**; and (2) an estimated recovery of 94% of the water. The 94% recovery percentage is derived by assuming 5% of the recharged water will be dedicated to the overall benefit of the groundwater basin and 1% will be lost by water migrating from the area where the water is recovered.

The estimated recharge rate on an average annual basis was calculated assuming that SLWD will recharge water in years where the CVP allocation is 45% or greater. This assumption is conservative

because SLWD will likely procure water in below normal and dry years for recharge and storage as a hedge against critical drought years.

The estimated recharge rate also assumed that recharge was limited to 45 acre-feet per day (or 0.5 feet per ponded acre). This assumption is also conservative since experience with the site obtained through pilot projects reveals that areas within the site can recharge water at a higher rate. The pilot projects show that additional recharge can be obtained through additional excavation of material and increased exposure of subsurface material conducive to recharge.

The estimate was made using hydrology and Central Valley Project south-of-Delta water allocations over a 15-year period, from USBR Water Year 2009 through 2023. Years prior to WY 2009 were not considered in the analysis as CVP contract allocations were higher prior to WY 2009. The 2009 National Marine Fisheries Service (NMFS) Biological Opinion, and subsequent regulations and court opinions, reduced water exports from the California Bay-Delta significantly.

It is important to recognize that the estimated annual water supply benefit quantity understates the benefit to SLWD in those years where actual recovery occurs. Assuming recovery will only occur in years where the CVP contract allocation received by SLWD is 20% or less, which occurred in 8 of the last 15 years or 53%, the expected recovery in each drought year would be 5,293 AF divided by 0.53 or 9,925 AF.

Provide a qualitative description of the degree/significance of the benefits associated with the additional water supplies.

The additional water supply of 9,925 AF in each drought year represents 17% of the average shortfall in water supply of 58,509 AF experienced in the prior five years of exceptional drought. A breakdown of the water supply shortfall for the last five years of exceptional drought is provided in **Table 3**.

Table 3. Drought Year Water Supply Shortfall

Water Year	District Demands (AF)	CVP South-of-Delta Ag Allocation	District Allocation (AF)	Shortfall (AF)
2014	63,750	0 %	536	63,214
2015	60,749	0 %	434	60,315
2016	64,483	5 %	6,840	57,643
2021	60,197	0 %	451	59,746
2022	52,039	0 %	410	51,629
			Average	**58,509**

During periods when there is a shortfall, SLWD must obtain water to meet district demands from other sources. Most of the area underlying SLWD does not have usable groundwater, either due to a lack of water-bearing strata, as is the case along the foothills, or due to high salinity content in the groundwater.

The cost of this supplemental water, if it is available, is at an exceptionally high cost and is not an economically viable option for agricultural producers. An example of a supplemental water source is the North-of-Delta (NOD) Transfer Program where south-of-Delta water contractors purchase water conserved through fallowing from NOD entities. Often, this water is purchased at high cost,

must be conveyed through the Delta at additional cost and high loss, and delivered into San Luis Reservoir often after peak irrigation demands occur. Furthermore, the delivery of the water is not guaranteed after purchase, creating significant economic risk.

The unsustainable economics of these supplemental water purchases is readily shown in water year 2022 when SLWD demands fell over 8,000 AF. The reduction was due to the loss of permanent tree crops within SLWD in 2021 when growers were unable to obtain sufficient irrigation water to maintain all of their permanent planted acreage.

The allocation of water received in all years except 2016 shown in **Table 3** was allocated solely for municipal and industrial water users. This allocation represents the minimum quantity, as determined by USBR, for public health and safety needs. In 2022, this minimum health and safety allocation was further reduced, from 451 AF to 410 AF, due to additional CVP delivery constraints.

Wells

What is the estimated capacity of the new well(s), and how was the estimate calculated?

The Project does not include the installation of any groundwater production wells. There is an existing production well on the Project site; however, the existing production well is not being used by the Project and is not being improved as a part of the project. Groundwater recovery from the Project will occur through a conjunctive use program implemented by SLWD.

The project does include the installation of eight monitoring wells.

How much water do you plan to extract through the well(s), and how does this fit within state or local laws, ordinances, or other groundwater governance structures applicable to the area?

The project does not include the installation of any groundwater production wells. Groundwater recovery from the Project will occur through a conjunctive use program implemented by SLWD. Under no circumstances will the quantity of water extracted under the conjunctive use program exceed 94% of the water that is recharged by the Project. The conjunctive use program will preserve the groundwater recharged by the Project and require landowners to utilize surface water supplies when available, which is the current landowner practice.

Will the well be used as a primary supply or supplemental supply when there is a lack of surface supplies?

The project does not include the installation of any groundwater production wells. Water recovered by SLWD through the conjunctive use program will be used as a supplemental supply since it will represent up to 18% of water demands as discussed previously.

Does the applicant participate in an active recharge program contributing to groundwater sustainability?

SLWD participates in an active recharge program. Locations where recharge is appropriate are limited within SLWD because aquifers underlying the area with usable groundwater are scarce. SLWD has been recharging water at a depleted gravel pit adjacent to Los Banos Creek, referred to as the "Triangle Pond", when hydrologic conditions allow for the past decade. In 2017, SLWD diverted approximately 1,000 AF of surface water from the Delta-Mendota Canal into the Triangle Pond gravel pit in order to recharge the groundwater and to test percolation within the Triangle

Pond. More recently in early 2023, SLWD was able to divert flood water from Los Banos Creek into the Triangle Pond under an emergency executive order issued by the governor for the State of California. Unfortunately, due to a lack of infrastructure to divert high volumes of water safely, the diversion amount was limited to 75 acre-feet.

SLWD is also a member of the Central Delta-Mendota Groundwater Sustainability Agency (CDMGSA). The CDMGSA is one of six planning groups and 23 groundwater sustainability agencies that have developed groundwater sustainability plans covering the Delta-Mendota groundwater subbasin. SLWD is sponsoring a number of projects that will provide active recharge and contribute to the basin's effort to achieve groundwater sustainability.

The Project described in this application implements an active recharge program in the Ortigalita Creek area within SLWD. A portion of the water recharged by the project will not be recovered and will contribute towards groundwater sustainability.

Provide information documenting that proposed well(s) will not adversely impact the aquifer it/they are pumping from (overdraft or land subsidence). At a minimum, this should include aquifer description, information on existing or planned aquifer recharge facilities, a map of the well location and other nearby surface water supplies, and physical descriptions of the proposed well(s) (depth, diameter, casing description, etc.). If available, information should be provided on nearby wells (sizes, capacities, yields, etc.), aquifer test results, and if the area is currently experiencing aquifer overdraft or land subsidence.

No groundwater extraction wells are proposed as a part of the Project. Groundwater recovery from the project will occur through a conjunctive use program developed and implemented by SLWD. The conjunctive use program will be designed to reduce groundwater extractions from existing pre-project levels.

Please describe the groundwater monitoring plan that will be undertaken and the associated monitoring triggers for mitigation actions. Describe how the mitigation actions will respond to or help avoid any significant adverse impacts to third parties that occur due to groundwater pumping.

The groundwater monitoring plan that is proposed for the Project includes monitoring of groundwater levels to avoid impacts from: (1) high groundwater elevations (i.e., groundwater mounding) caused by recharge operations; (2) low groundwater elevations caused by recovery under the conjunctive use program; (3) subsidence caused by recovery under the conjunctive use program; (4) groundwater quality degradation caused either by recharge operations or recovery under the conjunctive use program. Actions undertaken to avoid or mitigate any impacts will depend on the nature and severity of the impact and hydrologic and operational circumstances. A memorandum discussing the proposed monitoring plan is provided in **Appendix C**.

Subcriterion A2-a: Climate Change

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

The proposed project will facilitate the capture of Ortigalita Creek flood flows and facilitate the recharge of the captured flood flows. At present, flood flows within Ortigalita Creek enter the San Luis Canal northwest of the project site. All lands south of the San Luis Canal were severed from Ortigalita Creek by the construction of the San Luis Canal.

The flood flows may be captured by the landowner in a large 800 AF storage basin southwest of the project site. These captured flood flows may then be conveyed across the San Luis Canal through a pipeline and delivered to the Project for recharge.

The diversion of the Ortigalita Creek flood flows and the use of the storage basin are voluntary actions that may be undertaken by the cooperating landowner but are not a project commitment.

Will the proposed project establish and use a renewable energy source?

The proposed project will install solar panels at each of the four monitoring well sites. Accordingly, the project will establish and use a renewable energy source.

Will the proposed project reduce greenhouse gas emissions by sequestering carbon in soils, grasses, trees, and other vegetation?

The proposed project will provide drought resilience to SLWD which in turn will minimize the amount of land that is fallowed when water supplies are not available or become too expensive to sustain agricultural operations. When land is fallowed, the opportunity to sequester carbon in the grasses, trees, and other vegetation grown by the agricultural operation is lost. Accordingly, future greenhouse gas emissions will be reduced by maintaining current carbon sequestration levels.

Does the proposed project include green or sustainable infrastructure to improve community climate resilience?

The proposed project will install solar panels at each of the four monitoring well sites. Also, the project facilities are designed to operate by gravity flow. Accordingly, the proposed project includes green and sustainable infrastructure to improve climate resilience.

Does the proposed project seek to reduce or mitigate climate pollutions such as air or water pollution?

The proposed project will improve groundwater quality. In the area surrounding the project, the total dissolved solids present in the groundwater in the project vicinity ranges from 1,050 to 2,400 ppm. The water being used for groundwater recharge from the San Luis Canal ranges from 300-500 ppm TDS. Similar improvements in other water quality parameters are expected.

Does the proposed project have a conservation or management component that will promote healthy lands and soils or serve to protect water supplies and its associated uses?

The proposed project will implement a recharge project in an area overlying an aquifer of marginal water quality. The recharge of high-quality water sources from the Central Valley Project will improve water quality within the aquifer. In addition to surrounding agricultural operations that utilize production wells, there are several rural residences that rely on domestic wells for their water supply. The proposed project will protect and enhance those uses.

Does the proposed project contribute to climate change resiliency in other ways not described above?

The proposed project is also expected to contribute to climate change resiliency by avoiding the impacts of drought and the implementation of other projects or actions that are more capital and energy intensive.

Subcriterion A2-b: Environmental Benefits

Does the project seek to improve ecological climate change resiliency of a wetland, river, or stream to benefit wildlife, fisheries, or habitats? Do these benefits support an endangered or threatened species?

During years when water is being recharged, the project will provide a surface water source for various avian and mammalian species. The project has not analyzed these benefits with respect to any species including endangered or threatened species.

What are the types and quantities of environmental benefits provided, such as the types of species and the numbers benefited, acreage of habitat improved, restored, or protected, or the amount of additional stream flow added? How were these benefits calculated?

The project has not analyzed the environmental benefits of the Project with respect to any types of species.

Will the proposed project reduce the likelihood of a species listing or otherwise improve the species status?

The project has not analyzed the environmental benefits of the Project with respect to any types of species. Given the nature of the project, it will not have a material impact on a species listing or otherwise improve the species status.

Subcriterion A2-c: Other Benefits

Will the project assist States and water users in complying with interstate compacts?

The Project will not assist States and water users in complying with interstate compacts in any meaningful way.

Will the project benefit multiple sectors and/or users (e.g., agriculture, municipal and industrial, environmental, recreation, or others)? Describe the associated sector benefits.

The Project will provide a water supply during drought periods to water users within SLWD. Water users within SLWD include agricultural water users, municipal water users such as small ranches and the community of San Luis Hills with a population of approximately 200, and industrial users such as almond processing facilities, solar generation facilities, electrical transmission facilities, solid waste landfill disposal facilities, and transportation rest stop facilities.

Will the project benefit a larger initiative to address sustainability?

The Project will benefit the larger initiative undertaken by the State of California to achieve groundwater sustainability by 2040 as mandated by the Sustainable Groundwater Management Act ("SGMA") enacted by the State of California in 2014. Under SGMA, local agencies are managed to form groundwater sustainability agencies covering designated groundwater subbasins. The GSAs are then required to develop and adopt groundwater sustainability plans, monitor and report as provided in the adopted GSPs, implement projects and management actions identified in the GSPs, all with the legislatively mandated goal to achieve groundwater sustainability by 2040.

The Project is a project included within the Groundwater Sustainability Plan for the Central Delta-Mendota Groundwater Sustainability Agency. Completion of the project will address the CDMGSA GSP plan commitment as well as providing a water supply in drought years.

The Project is also included within the 2019 Westside-San Joaquin Integrated Regional Water Management Plan (IRWMP). Completion of the project will address water management planning goals set forth in the IRWMP.

Will the project help to prevent a water-related crisis or conflict? Is there frequently tension or litigation over water in the basin?

The Project will help prevent a water-related crisis or conflict. As stated previously, SLWD lacks reliable alternative water supplies during drought periods and SLWD is experiencing a water-related crisis as agricultural operations fallow land and remove permanent crops. Completion of the project will assist SLWD in addressing drought period water supply shortfalls and work towards preventing the crisis that SLWD is currently experiencing.

There is frequent tension and litigation over water in the basin. The litigation occurs primarily from non-governmental organizations against Central Valley Project operators and water users but also involving Central Valley Project water users and the federal government over CVP operations. Implementation of these types of project allow for some degree of flexibility in operations and the ability to cooperate or endure during periods of exceptional drought.

Evaluation Criterion B – Drought Planning and Preparedness (20 points)

Explain how the applicable plan addresses drought. Proposals that reference plans clearly intended to address drought will receive the most points under this criterion.

The SLWD Drought Management and Drought Contingency Plan (Drought Plan) are functionally two separate documents, the Drought Management Plan (DMP) and the Drought Contingency Plan (DCP) that have been combined for ease of reference and planning. The initial part of the document, the Drought Management Plan, describes the actions the district will undertake in the event of drought and discusses the ongoing management actions that have been implemented to address water supply shortages on an on-going basis. The latter part of the document, the Drought Contingency Plan, was developed to be consistent with the WaterSMART Drought Response Program Framework (Framework). As advised by the Framework, the Drought Contingency Plan addresses six elements: (1) drought monitoring; (2) vulnerability assessment; (3) mitigation actions; (4) response actions; (5) operational and administrative framework; and (6) plan development and update process.

The SLWD Drought Plan identified 11 activities and 12 projects intended to build long-term water supply resilience and mitigate risks posed by drought. (Drought Plan, pp. 12-13). One of the 12 projects is the Ortigalita Creek Recharge and Recovery Project. (Drought Plan, p. 15). The Project was identified as a High Priority project during DCP development.

Does the drought plan contain drought focused elements (e.g., a system for monitoring drought, drought projections that consider climate change, identification of drought mitigation projects, drought response actions, and an operational and administrative framework)?

The Drought Management Plan and Drought Contingency Plan, or simply Drought Plan, contains sections within the document that thoroughly address the focused elements including a system for drought monitoring, sector vulnerability assessments related to drought, prioritized mitigation actions, and response actions that correlate to different stages of drought. Each of the sections addressing the listed drought focused elements is discussed briefly below.

The Drought Monitoring Section of the DCP discusses the process for monitoring water availability and provides a framework for predicting the probability of future droughts or confirming an existing drought. The section also discusses the process for the collection, analysis, and dissemination of water availability and other drought-related data to define stages of drought and related mitigation and response actions. (Drought Plan, pp. 6-7).

The Vulnerability Assessment section of the plan evaluates and assesses the risks and impacts of drought and the contributing factors that could impact critical resources within the SLWD. The information provided in this section supports the development of potential mitigation and response actions included in the Drought Plan. (Drought Plan, pp. 8-12).

The Prioritized Mitigation Actions section identifies, evaluates, and prioritizes actions and activities that are intended to build long-term water supply resilience and mitigate risks posed by drought. Five district programs, three multi-agency programs, ten projects, and two activities (investigations) are discussed in moderate detail. (Drought Plan, pp. 12-18).

The Response Actions section of the Drought Plan identifies, evaluates, and prioritizes actions and activities that are implemented in a drought and are triggered during different stages of drought to provide quick benefits. The response actions reference those actions listed in the Drought Management Plan. (Drought Plan, p. 18).

The response and Administrative Framework section of the Drought Plan identified those local responsible for undertaking the actions necessary to implement the Drought Plan. SLWD staff with responsibilities include the General Manager, Assistant General Manager of Water Resources, and the District Engineer. (Drought Plan, p. 18).

Does the drought plan include consideration of climate change impacts to water resources or drought?

The Drought Plan includes a review and discussion of climate change impacts to water resources. (Drought Plan, pp. 7-8). The Drought Plan relied on the Sacramento and San Joaquin Basins Climate Impact Assessment prepared by the U.S. Department of the Interior, Bureau of Reclamation in September 2014. For planning purposes, the Drought Plan assumed that demands within SLWD will increase by 3% and CVP exports will decrease by 3% resulting in the need to address an additional shortage of 6,000 acre-feet throughout the 21st century.

When was the plan developed and how often is it updated?

The Drought Plan was initially developed in 2015 and has been subsequently updated to reflect current programs, policies, and projects intended to reflect water shortage and drought conditions frequently experienced by SLWD. The most recent update was July 2023. (Drought Plan, p. 1). The DCP is reviewed and updated every five years or earlier if circumstances warrant. (Drought Plan, p. 20).

Was the drought plan developed through a collaborative process?

The Drought Plan was developed through a collaborative process. The process is described in the responses below.

Describe who was involved in preparing the plan and whether the plan was prepared with input from stakeholders with diverse interests (e.g., water, land, or forest management interests; and agricultural, municipal, Tribal, environmental, and recreation uses)? Describe the process used for interested stakeholders to provide input during the development of the plan.

The Drought Contingency Plan was developed with input from stakeholders within SLWD as well as stakeholders external to SLWD. Prior to adoption of the Drought Management and Contingency Plan, SLWD held a workshop to discuss the proposed plan update with district water users and to solicit their input. SLWD also held a workshop for neighboring agencies and interested parties. During this external workshop, the proposed plan update was also discussed, input was solicited, and efforts made to coordinate the proposed Drought Plan with other regional planning documents.

Interested stakeholders were provided the opportunity to comment on the DCP, either informally through verbal comments or through written comments.

If the plan was prepared by an entity other than the applicant, describe whether and how the applicant was involved in the development of the plan. If the applicant was not involved in the development, explain why.

The plan was prepared by the applicant, San Luis Water District.

Describe how your proposed drought resiliency project is supported by an existing drought plan.

The Drought Management and Drought Contingency Plan identified vulnerabilities and corresponding project and management actions address those vulnerabilities. The Drought Plan listed 12 projects and 11 management actions or activities. (Drought Plan, pp. 12-13). The Ortigalita Creek Recharge and Recovery Project was one of the 12 projects listed within the Drought Plan.

Does the drought plan identify the proposed project as a potential mitigation or response action?

The Drought Management and Drought Contingency Plan specifically lists the Ortigalita Creek Recharge and Recovery Project as a mitigation action within the Drought Plan. The Project is also described in detail within the Drought Plan. (Drought Plan, p. 15).

How is the proposed project prioritized in the drought plan?

Mitigation actions within the Drought Management and Drought Contingency Plan were ranked in order of priority and then categorized as high, moderate, low based on those rankings. The Ortigalita Creek Recharge and Recovery Project was categorized as a high priority project. (Drought Plan, p. 15).

Does the proposed project implement a goal or need identified in the drought plan? Is the supported goal or need prioritized within the plan?

The proposed project provides a supplemental water supply during periods of drought and, to varying degrees, addresses all eight risks and impacts of drought identified in the Drought Plan. The supported goals or needs are not prioritized in the plan but the project is prioritized.

Attach relevant sections of the plan that are referenced in the application, as an appendix to your application. These pages will be included in the total 125-page count for the application.

The SLWD Drought Management and Drought Contingency Plan can be accessed at slwdwater.com. A copy of the plan is attached as **Appendix D**.

Evaluation Criterion C – Severity of the Actual or Potential Drought or Water Scarcity Impacts to be addressed by the Project (15 points)

Describe recent, existing, or potential drought or water scarcity conditions in the project area.

Responses to the following two questions describe the recent, existing, and potential drought and water scarcity conditions in the project area.

Is the project in an area that is currently suffering from drought, or which has recently suffered from drought or water scarcity? Please describe existing conditions, including when and the period of time that the area has experienced drought or water scarcity conditions. Include information to describe the frequency, duration, and severity of current or recent conditions. You may also provide information relating to historical conditions. Please provide supporting documentation (e.g., Drought Monitor, droughtmonitor.unl.edu).

The Project is located within the San Luis Water District and within Hydrologic Unit Code (HUC) 18040014, Panoche-San Luis Reservoir, California (1,120 square miles). A time-series graph from the U.S. Drought Monitor Website (accessed at droughtmonitor.unl.edu), provided as **Figure 4** below, clearly shows the duration and intensity of drought for the past decade.

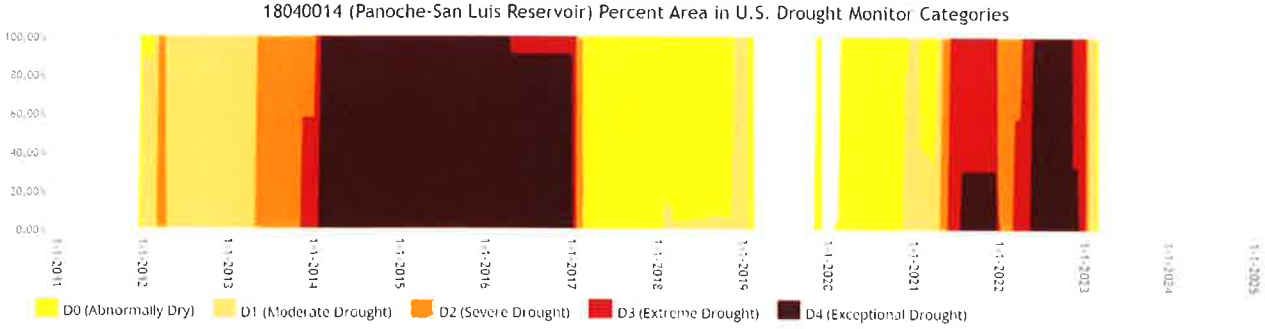

Figure 4. Drought Conditions for Panoche-San Luis Reservoir Hydrologic Area

This hydrologic area has experienced drought conditions for an eleven-year period, from January 2012 through January 2019 and March 2020 through March 2023, or ten of the past 11 years. During this period, there was a lengthy period of exceptional drought from January 2014 to January 2017, a 36-month period. There were also exceptional and extreme drought conditions during 2021 and 2022.

In addition to the drought conditions, SLWD and other south-of-Delta Central Valley Project contractors have experienced reduced contract allocations. The reduction in contract allocations are due in large part to operational constraints placed on CVP operations including exports from the California Bay Delta and releases from Shasta Dam for temperature and fisheries management of

the Sacramento River. The reduction in contract allocation combined with the drought conditions has led to an unprecedented scarcity of water within SLWD.

Describe any projected increases to the severity or duration of drought or water scarcity in the project area resulting from changes to water supply availability and climate change. Provide support for your response (e.g., reference a recent climate informed analysis, if available).

It is anticipated that amendments to the Water Quality Control Plan for the San Joaquin River, Sacramento River, and Bay-Delta Water Quality Control Plans will add additional water supply and operational constraints on CVP operations which in turn will further reduce allocations to south-of-Delta water contractors. Unfortunately, the impacts on water allocations from the Plan amendments, or Voluntary Agreements entered into to achieve compliance with plan requirements through an alternative pathway, are not quantified nor generally known to CVP water contractors at this time.

What are the ongoing or potential drought impacts to specific sectors in the project area if no action is taken (e.g., impacts to agriculture, environment, hydropower, recreation, tourism, forestry, etc.), and how severe are those impacts? Impacts should be quantified and documented to the extent possible.

As a part of the SLWD Drought Plan, the district evaluated and assessed the risks and impacts of drought and the contributing factors that could impact critical resources in the plan area. This assessment of vulnerabilities was then used to develop potential mitigation and response actions. The Drought Plan is included in **Appendix D**. The identified risks and impacts included the following: (1) short-term surface water shortages; (2) long-term surface water shortages; (3) loss of permanent crops; (4) degraded water quality; (5) drinking water well failure; (6) loss of district revenues; and (7) economic hardship.

These impacts are discussed qualitatively in detail in the Drought Contingency Plan (DCP, pp. 8-10.) and presented quantitatively in **Table 4** below.

Table 4. Quantitative Drought Impacts

Short-term surface water shortages	Discussed in detail in Evaluation Criterion A and quantified in **Table 3**
Long-term surface water shortages	Difficult to quantify, interrelated with historic regulatory actions.
Loss of permanent crops	Estimated 4,000 acres lost during most recent drought period.
Degraded water quality	Impacts are specific to locations within SLWD. At one location within the SLWD, nitrate (reported as nitrogen) present in groundwater rose from 7.0 mg/L (02/25/2020) to 14.9 mg/L (1/21/2021)
Drinking water well failure	Ongoing risk, no failures reported to SLWD to date.
Loss of district revenues	District revenue impacts are estimated at $330,700 annually based on 10,000 AF reduction in water deliveries and $19.64 per AF fees for administrative activities and $13.43 per AF for operations and maintenance..
Economic hardship	Discussed later in this Evaluation Criterion C. Estimated at $17 million annually during periods of drought. Long-term loss of $180 million due to impaired land values.

Whether there are public health concerns or social concerns associated with current or potential drought conditions (e.g., water quality concerns including past or potential violations of drinking water standards, increased risk of wildfire, or past or potential shortages of drinking water supplies? Does the community have another water source available to them if their water service is interrupted?).

The primary health and social concern associated with drought conditions are impacts to rural domestic wells. The majority of the area within SLWD does not have groundwater in sufficient volume or quality to support drinking water uses. This has limited rural residences to those areas where groundwater is found with quality that is acceptable to rural residential users. Unfortunately, rural residential wells are particularly susceptible to changes in water elevation and quality since they are: (1) not engineered or constructed to meet the same standards required of municipal water system wells; and (2) usually designed to access shallower groundwater aquifers.

During periods of drought, groundwater levels decline and, in some circumstances, reach levels where rural residential pumps have trouble with extracting groundwater either by the additional pumping head required to produce water or the loss of sufficient head above the pump to maintain suction on the pump. If any of these conditions occur, the rural residential pump is often damaged, requiring replacement, and the rural residence loses their source of domestic water.

There are no municipal water system wells located within SLWD; however, there are several municipal water system wells located in areas adjacent to SLWD including wells serving the City of Los Banos and the communities of Santa Nella and Volta.

Whether there are ongoing or potential environmental impacts (e.g., impacts to endangered, threatened or candidate species or habitat).

The primary environmental impact associated with drought are water supply impacts including groundwater impacts. The impacts on rural domestic users are discussed above. Similar impacts are experienced with agricultural and industrial groundwater users.

Agricultural land that is involuntarily fallowed through drought may revert to an unmaintained state, especially if the owner is insolvent. Unmaintained lands will often grow non-native plant species and will draw undesired uses such as illegal dumping, illegal recreation such as off-road vehicle use, and unauthorized occupancy. Once this type of land conversion occurs, the land becomes economically undesirable for agricultural uses. Further, these types of undesired uses do not provide habitat or food for animal species including endangered, threatened, or candidate species.

Whether there are local or economic losses associated with current drought conditions that are ongoing, occurred in the past, or could occur in the future (e.g., business, agriculture, reduced real estate values).

There are considerable economic losses associated with the recent and future anticipated drought conditions. These losses have been quantified on a regional basis in a number of studies and reports including the following report prepared by the California Department of Food and Agriculture (CDFA):

> Economic Impacts of the 2020–22 Drought on California Agriculture, California Department of Food and Agriculture, November 22, 2022 (accessed at https://wsm.ucmerced.edu/wp-content/uploads/2022/11/Economic_Impact_CA_Drought_V01.pdf)

Per the CDFA report, researchers estimate that in 2021, drought conditions in California resulted in $1.7 billion in direct and indirect costs, more than 14,000 lost jobs, and nearly 400,000 acres of fallowed farmland. Unfortunately, no information exists on impacts for the local area or specifically within SLWD.

Within SLWD, it was observed that approximately 4,000 acres of permanent plantings were removed from 2021 to 2023. In order to estimate the economic impacts without undertaking a comprehensive economic study, it is assumed that the job and economic impacts are borne proportionally throughout the area in the above-referenced study. The land fallowed within SLWD comprises 1% of the land estimated to be fallowed in the report. Accordingly, it is estimated that there were $17 million in direct and indirect costs and more than 140 jobs lost as a result of the 2021 drought. The drought period between 2014 and 2016 was considered exceptional and it can be inferred that the losses associated with those drought periods would be equal to or greater than those experienced in 2021.

The CDFA report does not address the impacts to land values and data from other sources could not be readily obtained. It is generally understood that the district has experienced a considerable drop in land values between the period preceding the drought and following the drought. This impact is conservatively estimated at $5,000 per acre. Assuming 36,000 irrigated acres within SLWD, this equates to a $180 million loss in value. In addition to the loss of direct value, the loss in value can indirectly impact agricultural operations due to reduced collateral available for operational loans.

Whether there are other drought-related impacts not identified above (e.g., tensions over water that could result in a water-related crisis or conflict).

The drought period has coincided with the enactment of the Sustainable Groundwater Management Act of 2014 by the State of California. SGMA requires that local agencies form groundwater sustainability agencies covering designated groundwater subbasins, develop and adopt groundwater sustainability plans, and achieve groundwater sustainability by the year 2040. During the drought period, the use on groundwater as an alternative source of water within the region increased significantly when the use of groundwater should have been declining towards sustainable levels. As a result, there is an increased need for projects and management actions to address groundwater sustainability. This project, the Ortigalita Creek Recharge and Recovery Project, is specifically identified in the locally adopted groundwater sustainability plan as a project to address groundwater sustainability and SGMA compliance.

Evaluation Criterion D – Presidential and DOI Priorities (15 points)

Disadvantaged or Underserved Communities

Please use the White House Council on Environmental Quality's interactive Climate and Economic Justice Screening Tool, available online at Explore the map – Climate & Economic Justice Screening Tool (https://screeningtool.geoplatform.gov) to identify the disadvantaged communities that will benefit from your project.

Using the location of the Project, which is within the SLWD boundaries, and the SLWD boundaries, three disadvantaged communities that will benefit from the Project were identified using the Climate and Economic Justice Screening Tool. These census tracts are summarized in **Table 5.**

Table 5. Census Tract Summary

Census Tract Number	06047002100	06019008402	06019008302
County	Merced County	Fresno County	Fresno County
State	California	California	California
Population	4,246	980	7,406
Identified as disadvantaged?	YES	YES	YES

Census Tract 06047002100 is considered disadvantaged because it meets more than one burden threshold and the associated socioeconomic threshold. The tract meets burden thresholds in the following categories: climate change, transportation, and workforce development. The tract is in the 94th percentile for unemployment.

Census tract 06019008402 is considered disadvantaged because it meets more than one burden threshold and the associated socioeconomic threshold. The tract meets burden thresholds in the following categories: energy, legacy pollution, and workforce development. The tract is in the 89th percentile for unemployment.

Census tract 06019008302 is considered disadvantaged because it meets more than one burden threshold and the associated socioeconomic threshold. The tract meets burden thresholds in the following categories: health, transportation, and workforce development. The tract is in the 98th percentile for unemployment.

Please note that SLWD lies entirely within the three census tracts listed above and there are no areas within SLWD that are not considered disadvantaged using the Climate and Economic Justice Screening Tool. Also note that all three census tracts were disadvantaged for more than two burden thresholds, and all three census tracts were considered disadvantaged due to the burden threshold of workforce development which includes unemployment as a metric.

If applicable, describe how the proposed project will serve or benefit a disadvantaged or underserved community, identified using the tool described above. For example, will the project improve public health and safety by addressing water quality, add new water supplies, provide economic growth opportunities, or provide other benefits in a disadvantages or underserved community?

The Project will both serve and benefit the three disadvantaged communities identified above. A portion of the population in the three disadvantaged communities are water users within SLWD, either through their ownership or leasing of land within SLWD, either for agricultural use or as rural residential uses, and will directly benefit from the additional water supplies created by the Project. Another larger portion of the population in the three disadvantaged areas benefit through improved economic conditions as a result of the Project. As stated previously and throughout this application, one of the impacts of drought periods is the short-term and long-term loss of agricultural production within SLWD, either through the inability to secure adequate water supplies or the increased cost of those water supplies due to scarcity.

Tribal Benefits

Does the proposed project directly serve and/or benefit a Tribe? Benefits can include, but are not limited to, public health and safety by addressing water quality, new water supplies, economic growth opportunities, or improving water management.

The Project does not directly serve or benefit a Tribe.

Does the proposed project support Reclamation's Tribal trust responsibilities or a Reclamation activity with a Tribe?

The Project does not support Reclamation's Tribal trust responsibilities or a Reclamation activity within a Tribe.

Evaluation Criterion E – Readiness to Proceed and Project Implementation (10 points)

Describe the implementation plan of the proposed project. Please include an estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates.

A project schedule showing the stages and duration of the proposed work by calendar and fiscal month is provided in **Figure 5**. Milestone events are depicted as dots in the figure. The project is planned for completion in June 2027.

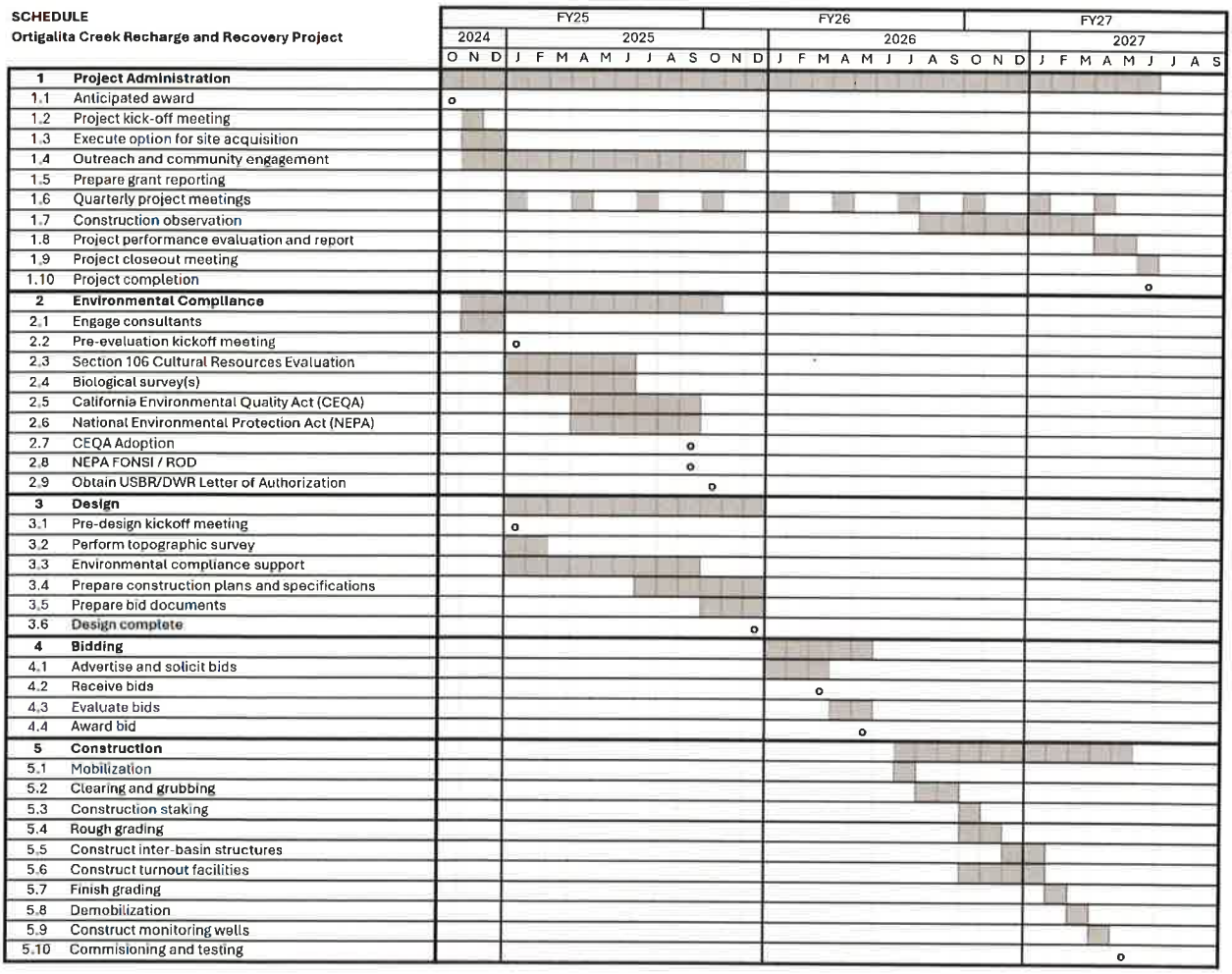

Figure 5. Project Schedule

Describe any permits that will be required (e.g., water rights, water quality, stormwater, or other regulatory clearances). Include information on permits or approvals already obtained. For those permits and approvals that need to be obtained, describe the process, including estimated timelines for obtaining such permits and approvals.

The permits that will be required include: (1) a letter of permission to access the federal right-of-way for pre-project surveys; (2) an encroachment permit with the DWR to modify the turnouts at mileposts 82.59 and 83.24, left bank; (3) a license agreement from USBR for a new turnout at or about milepost 82.89, left bank; and (4) well permits from the County of Merced for eight monitoring wells.

SLWD has discussed the project with area representatives from USBR and DWR. Once awarded the project, SLWD will initiate discussions with USBR and DWR regarding any authorization involving those agencies. SLWD will then submit the appropriate requests at the earliest opportunity.

The monitoring well drilling contractor will obtain well permits from the County of Merced. Issuance of the permits for monitoring wells is considered a ministerial act and are typically obtained within 72 hours of application filing.

Identify and describe any engineering or design work performed specifically in support of the proposed project.

The project site and nearby areas have been studied extensively by a prior landowner. In 2019, a local engineering firm was engaged by the prior owner of the project site to evaluate the recharge potential of the site for a future private water banking project. A test pit was excavated to measure the percolation and water from a nearby well and water delivered from the SLC was used for percolation testing. A report of the evaluation stated that "recharge rates ranging from 8.6 to 10.3 feet per day were calculated" and "well water readings …confirm a strong well water level response to recharge."

After the property contains the project site was sold, SLWD with the cooperation of the current landowner, has continued to study the site for use as a SLWD water recharge and recovery facility. Subsequent evaluations have shown that the project site is suitable for such a purpose.

A preliminary design of the project has been completed and will be used as the basis for permitting the required environmental work under the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA). The preliminary design will also be used to support all required permit allocations.

Describe any land purchases that must occur before the project can be implemented.

The project site is located on the following parcels:

- a 102.5 acre parcel, Merced County Assessor's Parcel Number (APN) 088-105-003
- a 1.0 acre parcel, APN 088-105-004
- a 19.2-acre parcel. APN 088-105-002

In anticipation of the project, the district has obtained options to purchase the 102.5-acre parcel, the 1.0-acre parcel, and a portion of the 19.2-acre parcel from two landowners. The project only involves a 16.6-acre portion of the 19.2-acre parcel. The 19.2-acre parcel has an agricultural shop and yard on the western portion of the parcel and a lot line adjustment will be obtained from the County of Merced to separate the portion containing the shop and yard from the portion being

acquired by San Luis Water District. The acquisition cost of the property has been specified as a part of the two option agreements. A parcel map showing the properties is provided in **Appendix E**.

Describe any new policies or administrative actions required to implement the project.

SLWD will also develop and implement a conjunctive use program that will be used to recover water from the project. The conjunctive use program will establish a management area surrounding the district area benefited from the project. Landowners in the benefited area will be encouraged or required to utilize surface water deliveries when available in lieu of pumping groundwater. During periods of drought, landowners will extract a portion of the groundwater stored by the project in exchange for releasing an equivalent amount of surface supplies to district water users outside the management area. To ensure that the conjunctive use program does not impact groundwater users inside or adjacent to the management area, SLWD will monitor extraction quantities, groundwater elevations, groundwater quality, and land elevations. Criteria will be established to ensure that groundwater conditions are maintained at existing conditions or better, extractions under the program do not exceed recharged quantities, and subsidence does not occur at or near the project location as a result of the conjunctive use program.

Evaluation Criterion F – Nexus to Reclamation (5 points)

Describe the nexus between the proposed project and a Reclamation project or Reclamation activity. Does the applicant have a water service, repayment, or O&M contract with Reclamation?

The applicant, San Luis Water District, receives Reclamation project water from the Central Valley Project through the Delta-Mendota Canal and the San Luis Canal under Water Service Contract No. 14-06-200-7773A-IR1-P.

If the applicant is not a Reclamation contractor, does the applicant receive Reclamation water through a Reclamation contractor or by any other contractual means?

San Luis Water District is a Reclamation contractor.

Will the proposed work benefit a Reclamation project area or activity?

The proposed work is located in the San Luis Water District, within the SLWD service area, and the Central Valley Place of Use. The project will directly improve aquifer conditions in the area adjoining the project, all within those aforementioned areas, and increase the reliability of the district's water supply. The proposed work is a groundwater sustainability mitigation project within the Northern and Central Delta-Mendota Groundwater Sustainability Plan which encompasses a planning area managed by the following Reclamation water service contractors: Del Puerto Water District, Eagle Field Water District, Fresno Slough Water District, Mercy Springs Water District, Oro Loma Water District, Pacheco Water District, Panoche Water District, Patterson Irrigation District, San Luis Water District, Santa Nella County Water District, Tranquillity Water District, West Stanislaus Irrigation District, and Widren Water District.

Is the applicant a Tribe?

The applicant is not a Tribe.

Evaluation Criterion G – Stakeholder Support for Proposed Project (5 points)

Describe the level of stakeholder support for the proposed project. Are letters of support from stakeholders provided?

Outreach for the project was conducted in two phases. The first phase occurred during when the project was first proposed as a part of the Northern GSP. A considerable outreach effort was undertaken for the development and adoption of the GSP which included this project. Outreach which occurred within the SLWD included discussion of the proposed project, along with the Los Banos Creek Recharge and Recovery Project and the Kaljian Drain Water Reuse Project. This outreach occurred prior to adoption of the GSP in November 2019.

Outreach efforts specific for this project occurred in early 2022 and have continued to date. Five groups of stakeholders were identified: (1) agricultural landowners that surround the project; (2) rural residential landowners in the vicinity of the project; (3) landowners within SLWD; (4) county and city governments, local water districts; and (5) other potentially interested parties (i.e., non-governmental organizations, Tribes).

Letters of support for the project were received from the following stakeholders and interested parties: Santa Nella County Water District (adjacent agency), Riverdale Ranches, Inc. (SLWD landowner, owner of project site), Aaron Barcellos (SLWD landowner, farmer), Jon Maring (SLWD landowner, farmer), John Woolf (SLWD landowner, farmer), and Tom Coleman (SLWD landowner, farmer). The letters of support are provided in **Appendix G**:

Are any stakeholders providing support for the project through cost-share contributions or through other types of contributions to the project?

The stakeholders supporting the project are not providing any cost-share contributions or other type of contributions to the project at this time.

Explain whether the project is supported by a diverse set of stakeholders, as appropriate, given the types of interested stakeholders within the project area and the scale, type, and complexity of the proposed project. For example, is the project supported by entities representing agricultural, municipal, Tribal, environmental, or recreation uses?

The project is supported by a diverse set of stakeholders. Twenty-three (23) groundwater sustainability agencies (GSAs) covering the Delta-Mendota groundwater subbasin have incorporated the Project into the coordinated planning effort to address groundwater sustainability. These GSAs, listed below, represent various agricultural, environmental, and municipal interests.

GSAs representing agricultural interests include the following fifteen (15) agencies: Aliso WD GSA, Central Delta-Mendota GSA, Delta-Mendota II GSA, Farmers WD GSA, Fresno County Management Area A GSA, Fresno County Management Area B GSA, Madera County GSA, Merced County GSA, Northwestern Delta-Mendota GSA, Oro Loma WD GSA, Patterson ID GSA, San Joaquin River Exchange Contractors GSA, Turner Island WD GSA, West Stanislaus GSA, and Widren WD GSA. GSAs representing municipal interests include the following seven (7) agencies: City of Dos Palos GSA, City of Firebaugh GSA, City of Gustine GSA, City of Los Banos GSA, City of Mendota GSA, City of Newman GSA, and City of Patterson GSA. The GSA representing environmental interests is the Grassland GSA.

PROJECT BUDGET

Funding Sources

The total cost for the Project is $6,466,200. The source of funding for the Project will be Federal funding provided through this grant application and Non-Federal funding provided by the San Luis Water District. The District will fund this capital improvement project from the District's reserve accounts. This account has a cash and investment balance of $37,781,416 as of February 28, 2023. The District has committed to funding the Project as provided in a Board of Directors Resolution included later in this application.

There will be no source of Non-federal funding for the Project other than the applicant and no Letters of Funding Commitment from third parties are included in this application.

Table 6 and **Table 7** below summarizes the funding amounts by source.

Table 6. Summary of Non-Federal and Federal Funding Sources

FUNDING SOURCES	AMOUNT
Non-Federal Entities	
1. San Luis Water District	$ 3,233,100
Non-Federal Subtotal	**$ 3,233,100**
REQUESTED RECLAMATION FUNDING	**$ 3,233,100**

Table 7. Total Project Cost

Source	Percentage	Amount
Costs to be reimbursed with the requested Federal funding	50.0 %	$ 3,233,100
Costs to be paid by the applicant	50.0 %	3,233,100
Value of third-party contribution	0.0 %	0
TOTAL PROJECT COST	**100.0 %**	**$ 6,466,200**

Budget Narrative

A Budget Detail and Narrative spreadsheet (NOFO Attachment B) is provided in **Appendix J**. All costs, including the valuation of third-party in-kind contributions, shall comply with the applicable cost principles contained in 2 CFR Part 200. Per the NOFO, the Budget Detail and Narrative spreadsheet can be used to satisfy the requirement to provide a budget narrative. However, in order to provide additional information on the budget and project expense categories, a budget narrative providing detail about each of the budget item categories and individual budget items, where applicable, is provided in the text below. The total cost for the project, broken down by budget category, are also provided in **Table 8** below.

Table 8. Budget Narrative, Total Costs

Budget Category	Amount
Salaries and Wages	$ 0
Fringe Benefits	0
Travel	0
Equipment	0
Materials and Supplies	0
Contractual	399,620
Construction	3,184,180
Other Direct Costs	2,882,400
Total Direct Costs	**$ $6,466,200.00**
Indirect Costs	0
Total Costs	**$ 0**

Salaries and Wages

The District will not be utilizing its staff for design, construction, or administration and will be contracting for these services. The District is not requesting reimbursement for using its in-kind services, i.e., labor or equipment, as cost share.

Fringe Benefits

The District is not requesting reimbursement for fringe benefits associated with District salaries and wages.

Travel

The District does not anticipate incurring any travel-related expenses given the nature of the project and the relatively short distance between the project site and District facilities. Travel-related expenses are not eligible for reimbursement and are not included within the proposed budget.

Equipment

The District will be contracting for the construction of the project and the contractor will provide their own equipment as a part of their construction contract. The District will not utilize its own equipment. The District is not requesting reimbursement for the use of its own equipment.

Materials and Supplies

The District is not requesting reimbursement for materials and supplies. All materials and supplies will be furnished and installed as a part of the construction works under the construction contract. The District is not requesting reimbursement for any material and supplies.

Contractual

The District will contract for various services for various non-construction related services to complete the project. Each of these contracts is listed in **Table 9** below.

Table 9. Budget Narrative (Contractual)

Budget Item	Amount
Project Management and Administration	$ 53,000
Boundary and Topographical Survey	15,900
Geotechnical Study	53,000
Design	106,000
Environmental Documents	84,800
Lot Line Adjustment	10,600
Hydrogeological Consulting	21,200
Bid Phase Services	21,200
Environmental Compliance	27,560
Engagement/Outreach	6,360
Total	**$ $399,620.00**

Project Management and Administration

The District will solicit proposals from qualified engineering firms, evaluate the proposals, and then contract with the selected engineering firm to provide project management and administrative services for the project. The contract will generally include the work needed to manage the overall project in accordance with the grant agreement and SLWD expectations. These services will specifically include, but not be limited to the following activities: preparing project schedules, preparing financial accounting reports, preparing progress reports, coordinating the work of consultants and contractors, holding periodic project meetings, and coordinating with SLWD on project actions.

Boundary and Topographical Survey

The District will solicit proposals from qualified surveying firms, evaluate the proposals, and then contract with the selected surveying firm to perform a boundary and topographical survey of the project site. The boundary and topographical survey will be used as the project design basis and for the demarcation of the federal lands from the project site.

Geotechnical Study

The District will solicit proposals from qualified geotechnical firms, evaluate the proposals, and then contract with the selected geotechnical firm to perform a geotechnical investigation and evaluation of project site conditions. The geotechnical investigation and evaluation will be used as the project design basis and will inform design elements such as berm design, structure foundation designs, and requirements for earthwork.

Design

The District will solicit proposals from qualified engineering firms, evaluate the proposals, and then contract with the selected engineering firm to provide design engineering services for the project. The engineering contract will include the work needed to support the environmental evaluation and prepare design plans, construction plans, and construction specifications for the project.

Environmental Documents

The District will solicit proposals from qualified engineering and consulting firms, evaluate the proposals, and then contract with the selected engineering and/or consulting firms to prepare environmental documentation for the project as required by NEPA and CEQA. The firm may be selected to provide other contractual services for the project if appropriately qualified.

Lot Line Adjustment

The District will solicit proposals from qualified engineering firms with experience in performing lot line adjustments within the County of Merced, evaluate the proposals, and then contract with the selected engineering firm to perform the lot line adjustment for the project. The contract will include the work needed to prepare applications and drawings for the lot line adjustment, submitting the application package to the County of Merced, and addressing any issues that may arise during the processing of the lot line adjustment. The firm may be selected to provide other contractual services for the project if appropriately qualified.

Hydrogeological Consulting

The District will solicit proposals from qualified engineering and consulting firms with experience in hydrogeology within settings similar to the project location. The contract will include work needed to support the design of the recharge facilities and the development of the conjunctive use program to facilitate recovery of a portion of the stored water.

Bid Phase Services

The District will solicit proposals from qualified engineering and consulting firms with experience in bidding public works projects. The contract will include work needed to prepare appropriate bid documents (including the construction contract), advertise the bidding opportunity, and evaluate all bids received for compliance with solicitation provisions. The firm may be selected to provide other contractual services for the project if appropriately qualified.

Environmental Compliance

The District will solicit proposals from qualified individuals and consulting firms with experience in the plant and animal species found within the project location. The contract will include work needed to perform database research and plant and animal field surveys to support the preparation of project environmental documentation, and the implementation of all plant and species-related avoidance and mitigation measures. The selected individual and/or consulting firm may be subcontracted through the firm selected to prepare the environmental documentation.

Engagement/Outreach

The District will solicit proposals from qualified individuals and consulting firms with experience in public outreach and communications. The contract will include work needed to develop outreach materials, schedule outreach meetings, and advertise outreach meetings, and facilitate outreach meetings when they occur. The selected individual and/or consulting firm may be subcontracted through the firm selected to prepare the environmental documentation.

Construction - Contractual

The District will contract for various services for various construction services to complete the project. Each of these contracts is listed with their budgeted costs in **Table 10** below.

Table 10. Budget Narrative (Construction, Contractual)

Budget Item	Amount
General Construction	$ 2,780,260
Monitoring Wells	200,000
Total	**$2,980,260**

Each of the construction contracts is discussed below.

General Construction

The District will solicit competitive bids for the general construction contract. The contractor will be required to have the appropriate licenses for the project and have recent experience constructing similar facilities. The general construction contract will include the construction of all project facilities except for the monitoring wells.

Monitoring Wells

The District will solicit bids for construction of the monitoring wells. The contractor will be required to have the appropriate licenses for the project and have recent experience constructing monitoring wells similar to those being constructed as part of the project. The monitoring well contractor shall be required to provide an electronic log of the well and samples of cuttings obtained during well borings. The monitoring well contract may be a standalone contractor incorporated into the general construction contract.

Construction – Other Costs

The District will incur expenses for other costs for services related to construction. These other costs are listed in **Table 11** below.

Table 11. Budget Narrative (Construction, Other Costs)

Budget Item	Amount
Permitting	$ 10,000
Construction Staking	27,560
Construction Supervision	139,000
Construction Testing	27,560
Total	**$ $204,120.00**

Permitting

The project will likely incur expenses related to permits that are not the responsibility of the general contractor as specified in the construction contract documents. An appropriate amount has been budgeted for these expenses.

Construction Staking

The District will solicit proposals from qualified surveying firms with experience in construction staking. The contract will include work needed to locate and mark proposed project structures (i.e. berms, basins, outfall structures, etc.) and set rough and finish grades. The surveying firm selected

will work in close coordination with the general contractor. The selected surveying firm may be subcontracted through the engineering design firm.

Construction Supervision

The District will solicit proposals from qualified individuals and firms with experience in construction supervision. The contract will include work needed to provide inspection and observation services to ensure compliance with the approved construction documents, contract documents, applicable regulations, project schedule, and all other applicable requirements. The selected individual or firm may be subcontracted through the firm selected to prepare the engineering design.

Construction Testing

The District will solicit proposals from testing firms qualified and experienced in construction testing including the testing of materials used in construction, final construction assemblies, and soil or substrate conditions. The contract will include work needed to ensure compliance with construction specifications including requirements pertaining to concrete compressive strength and soil compaction. The selected firm may be subcontracted through the firm selected to prepare the engineering design.

Other Direct Costs

The project will require the acquisition of two parcels from a SLWD landowner. The project would also benefit from the acquisition of a small one-acre parcel from a separate landowner; however, the acquisition is not required in order for the project to proceed. The SLWD has tendered a Letter of Intent to Purchase Property to the owner of the 120-acre property required for the project and has received a countersigned copy back from the owner. The letter expresses the conditions and terms under which the property would be acquired and is non-binding. SLWD has also communicated with the owner of the 1-acre parcel and has received verbal assurances of their interest in allowing SLWD to acquire the parcel for the project.

The acquisition of either property will be a voluntary transaction between the District and the landowners. Eminent domain will not be used to acquire the properties. The properties do not have any buildings and relocation as a part of the acquisition is not needed.

The District will obtain an appraisal for the properties in compliance with grant agreement provisions and federal law and regulations. After appraisal, an offer will be made to each landowner by the District. Once the offers are accepted, the District will execute a Purchase and Sale Agreement with the landowners. Appropriate arrangements which depend on the timing of the acquisition will be made for those parcels with growing crops.

Based on an appraisal obtained by the District, the District has budgeted $24,000 per acre for land acquisition. The total acquisition, including the optional 1.0-acre acquisition, totals 120.1 acres. The budget amount for the land acquisition is $2,882,400.

ENVIRONMENTAL AND CULTURAL RESOURCES COMPLIANCE

To allow Reclamation to assess the probable environmental and cultural resources impacts and costs associated with each application, all applicants must respond to the following list of questions focusing on NEPA, ESA, and NHPA requirements. Please answer the following questions to the best of your knowledge. If any question is not applicable to the project, please explain why. The application should include the answers to:

Will the proposed project impact the surrounding environment (e.g., soil [dust], air, water [quality and quantity], animal habitat)? Please briefly describe all earth-disturbing work and any work that will affect the air, water, or animal habitat in the project area. Please also explain the impacts of such work on the surrounding environment and any steps that could be taken to minimize the impacts.

The proposed project will involve earth disturbing work. The earth disturbing work involves the following:

- removal of the existing pistachio orchard
- construction of recharge basins through cut and fill earthwork operations utilizing earthmovers and scrapers
- excavation of trenches and backfilling of the trenches for subsurface water pipelines and electrical conduits
- drilling of boreholes for monitoring wells
- miscellaneous minor excavations for concrete pads surrounding monitoring wells and other project equipment.

The earth disturbing work may also affect the air, water, and animal habitat in the project area. Those effects and any associated impacts will be analyzed as a part of identifying and mitigating the environmental impacts caused by the project under the CEQA and NEPA. Steps that could be taken to minimize the impacts will be included in CEQA/NEPA documents.

Are you aware of any species listed or proposed to be listed as a Federal threatened or endangered species, or designated critical habitat in the project area? If so, would they be affected by any activities associated with the proposed project?

The district is not aware of any species listed or proposed to the listed as a Federal threatened or endangered species or designated critical habitat in the project area. The project site is currently a pistachio orchard and is level, graded, and has minimal vegetation other than the pistachio trees.

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

There are no wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdiction as "Waters of the United States". The San Luis Canal is adjacent to the project boundaries and work under the project will involve federal lands. However, no work within the waterway itself is being planned or contemplated as a part of the proposed project.

Ortigalita Creek no longer exists east of the San Luis Canal as discussed elsewhere in this application. Ortigalita Creek flows from the foothills into an intercept structure on the east bank of the San Luis Canal / California Aqueduct. Flows from the creek then flow into the San Luis Canal. There are no flows from Ortigalita Creek east of the San Luis Canal and the bed and banks of the creek no longer exist as all of those features transitioned into agricultural land in the early 1900's.

When was the water delivery system constructed?

The proposed project is adjacent to the San Luis Canal (or California Aqueduct) and involves facilities, referred to as turnouts, that will convey water from the San Luis Canal into the basins constructed by the proposed project. Construction of the San Luis Canal began in 1963 and was completed in 1968.

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

The proposed project will result in the modification of the discharge piping on two turnouts along the San Luis Canal. The turnouts are located at milepost 82.59 left and 83.24 left. The modifications involve the modification of buried discharge piping from each of the turnouts. This type of modification are typical of modifications made when land or irrigation systems are improved and/or reconfigured.

The proposed project will also install a new siphon-type turnout at or about milepost 82.89 left. The design of the turnout will be similar to existing siphon-type turnouts along the San Luis Canal at milepost 89.67 left (City of Dos Palos) or 101.70 left (SLWD Pumping Plant No. 17).

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

There are no items listed in the National Register of Historic Places within SLWD. Generally within the district, there are a number of buildings, structures, and/or features, including the San Luis Canal and the Delta-Mendota Canal, that are eligible for listing on the National Register of Historic Places given that these features were constructed more than 50 years ago. With respect to the specific project site, the only feature that is eligible for listing on the National Register of Historic Places is the San Luis Canal.

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

There are no known archaeological sites in the proposed project area.

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

The project will not have an impact on low income or minority populations. The project site is currently a pistachio orchard and has no residences, buildings, or structures of any kind. Given that there is no direct interaction between low income or minority populations and the project site, changing the use of the site from a permanent agricultural planting to a recharge facility will not involve the relocation of any low income or minority populations.

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

The proposed project will not access to and ceremonial use of Indian sacred sites or result in other impacts on tribal lands. There are no Indian sacred sites or tribal lands within the proposed project site or adjoining areas.

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

The proposed project will not contribute to the introduction, continued existence, or spread of noxious weeds or non-native invasive species known to occur in the area. SLWD maintains all district lands and facilities on a regular basis. The district employs a full-time licensed Pest Control Advisor (PCA) to provide treatment recommendations and three certified Qualified Applicators to apply herbicides and other treatment materials to control the spread of noxious weeds and non-native invasive species within SLWD facilities.

REQUIRED PERMITS OR APPROVALS

The proposed project will need to prepare an Initial Study (IS) to comply with the requirements of the California Environmental Quality Act (CEQA). The IS determines whether a state action has the potential to cause significant environmental impacts. If the agency determines that the action will not have significant environmental impacts, the agency will issue a Negative Declaration (ND). If mitigation measures are needed to reduce significant environmental impacts to a less than significant level, the agency will issue a Mitigated Negative Declaration (MND). When an Initial Study indicates that a project has the potential to significantly damage the environment, CEQA requires that an EIR be prepared. For project planning purposes only, it is expected that the project will perform an IS and issue a MND.

The proposed project will also need to prepare an Environmental Assessment (EA) to comply with the requirements of the National Environmental Protection Act (NEPA). The EA determines whether a federal action has the potential to cause significant environmental effects. If the agency determines that the action will not have significant environmental impacts, the agency will issue a Finding of No Significant Impact (FONSI). A FONSI is a document that presents the reasons why the agency has concluded that there are no significant environmental impacts projected to occur upon implementation of the action. If the EA determines that the environmental impacts of a proposed Federal action will be significant, an Environmental Impact Statement is prepared. For project planning purposes only, it is expected that there will be no significant impact as a result of the project.

The proposed project will also need to prepare an assessment of potential impacts to cultural heritage resources. Section 106 of the National Historic Preservation Act (NHPA) requires that all federal agencies planning actions defined as undertakings (i.e., activities making use of federal funds or requiring federally-issued permits, licenses, or approval)--or even state agencies, municipalities, or other parties making use of pass-through federal funds or approvals for their projects--"take into account" the potential effects of their proposed projects on historic properties. Historic properties are historic resources (either archaeological, architectural, or engineered in the form of buildings, structures, districts, sites, and objects) that are either listed in, or eligible for listing in, the National Register of Historic Places.

The proposed project will also need to obtain a Letter of Authorization for the work to modify the discharge piping of two existing turnouts and install the new siphon turnout. It is also anticipated that SLWD will need to execute a license agreement with USBR for the new turnout.

Lastly, the contractor installing the monitoring wells will need to apply for a well permit from Merced County. At this time, permit applications for monitoring wells are considered a ministerial act by Merced County and do not require additional authorization. Other types of well permits require concurrence from the local groundwater sustainability agency overlying the well location.

There may be other permits or approvals required for the project, many of which are generally considered ministerial in nature and are usually obtained by the contractor as a part of the construction effort. These permits may include county encroachment permits for work involving county right-of-way or transportation permits for delivering oversized or heavy project components.

OVERLAP OR DUPLICATION OF EFFORTS STATEMENT

There is no overlap between the Project and any other active or anticipated proposals or projects in terms of activities, costs, or commitment of key personnel. This proposal submitted for consideration under the U.S. Bureau of Reclamation WaterSMART Drought Response Program does not in any way duplicate any proposal or project that has been or will be submitted for funding consideration to any other potential funding source whether it be Federal or non-Federal. If at any time this proposal is awarded funds that would be duplicative of the funding requested from Reclamation, the District will notify the Notice of Funding Opportunity (NOFO) point of contact or the Program Coordinator immediately.

CONFLICT OF INTEREST DISCLOSURE

Per the Financial Assistance Interior Regulation (FAIR), 2 CFR §1402.112, applicants must state in their application if any actual or potential conflict of interest exists at the time of submission.

At the time of submission of this application, no actual or potential conflicts of interest exist.

UNIFORM AUDIT REPORTING STATEMENT

All U.S. states, local governments, federally recognized Indian Tribal governments, and non-profit organizations expending $750,000 in U.S. dollars or more in Federal award funds in an applicant organization's fiscal year must submit a Single Audit report for that year through the Federal Audit Clearinghouse's Internet Data Entry System in accordance with 2 CFR §200 subpart F.

U.S. state, local government, federally recognized Indian Tribal governments, and non-profit applicants must state if their organization was or was not required to submit a Single Audit report for the most recently closed fiscal year. If their organization was required to submit a Single Audit report for the most recently closed fiscal year, provide the Employer Identification Number (EIN) associated with that report and state if it is available through the Federal Audit Clearinghouse website.

The applicant, San Luis Water District, did not expend $750,000 or more in Federal award funds in the applicant's fiscal year. Accordingly, the applicant, San Luis Water District, was not required to submit a Single Audit report for the most recently closed fiscal year.

CERTIFICATION REGARDING LOBBYING

Applicants requesting more than $100,000 in Federal funding must certify to the statements in 43 CFR §18, Appendix A-Certification Regarding Lobbying. If this application requests more than $100,000 in Federal funds, the Authorized Official's signature on the appropriate SF-424, Application for Federal Assistance form also represents the entity's certification of the statements in 43 CFR §18, Appendix A.

This application requests more than $100,000 in Federal funds. The Authorized Official for the District has signed the appropriate SF-424, Application for Federal Assistance form, certifying the statements in 43 CFR §18, Appendix A.

LETTERS OF SUPPORT

Letters of support for the project were received from the following stakeholders and interested parties: Santa Nella County Water District (adjacent agency), Grasslands Water District, Riverdale Ranches, Inc. (SLWD landowner, owner of project site), Aaron Barcellos (SLWD landowner, farmer), Jon Maring (SLWD landowner, farmer), John Woolf (SLWD landowner, farmer), and Tom Coleman (SLWD landowner, farmer). The letters of support are provided in **Appendix G**:

OFFICIAL RESOLUTION

The San Luis Water District Board of Directors adopted the following resolution at their Regular Board Meeting held on September 26, 2023:

RESOLUTION 23-1304

A RESOLUTION OF THE BOARD OF DIRECTORS OF SAN LUIS WATER DISTRICT AUTHORIZING SUBMITTAL OF A WATERSMART GRANT APPLICATION FOR THE ORTIGALITA CREEK RECHARGE AND RECOVERY PROJECT AND MATTERS RELATED THERETO

A copy of the resolution is provided in **Appendix H**.

LETTERS OF FUNDING COMMITMENT

Cost share funding is <u>not</u> anticipated to be provided by a source other than the applicant. Accordingly, there are no letters of funding commitment included in this application.

CONFLICTS OF INTEREST DISCLOSURE

Per the Financial Assistance Interior Regulation (FAIR), 2 CFR §1402.112, applicants must state in their application if any actual or potential conflict of interest exists at the time of submission.

At the time of submission of this application, no actual or potential conflicts of interest exist.

UNIQUE ENTITY IDENTIFIER AND SYSTEM FOR AWARD MANAGEMENT

Reclamation will not make a Federal award to an applicant until the applicant has complied with all applicable Unique Entity Identifier (UEI) and System for Award Management (SAM) requirements and, if an applicant has not fully complied with the requirements by the time Reclamation is ready to make an award, Reclamation may determine that the applicant is not qualified to receive a Federal award and use that determination as a basis for making a Federal award to another applicant.

The applicant, San Luis Water District, has registered with the System for Award Management (SAM) and has obtained a Unique Entity Identifier (UEI). The applicant has complied with all known UEI and SAM requirements prior to submission of this application. The applicant will also maintain compliance with all known UEI and SAM requirements prior to the award and throughout the award period, if awarded.

The applicant will also renew and revalidate their SAM registration at least once every 12 months from the date previously registered. The applicant will also revalidate its registration as often as needed to ensure their information is up to date and reflects any change that may have occurred to the applicant's IRS information.

Aaron Barcellos
A-Bar Ag Enterprises
27480 S Bennett Rd.
Firebaugh, CA 93622

October 17, 2023

Lon Martin
General Manger
San Luis Water District
P.O. Box 2135
Los Banos, CA 93635

Subject: USBR WaterSmart Drought Resiliency Program
Letter of Support for Ortigalita Creek Recharge and Recovery Project

Dear Lon:

I am writing to express my formal support for the district's application to the U.S. Bureau of Reclamation for the Ortigalita Creek Recharge and Recovery Project. The San Luis Water District has been innovative in its efforts to provide water for its growers during these recent periods of extreme drought. Projects such as this, especially in light of the current regulatory environment, are vital to increasing the long-term reliability of this region's water supply.

I believe that this project is a straightforward and logical effort to store water when it is available and recover the water when it is most needed. I also appreciate that the district is pursuing those projects that it has advanced as a part of the district's Drought Contingency Plan and the Groundwater Sustainability Plan for the Northern and Central Delta-Mendota Regions.

I would encourage the U.S. Bureau of Reclamation to consider funding this project. Please accept my full endorsement for the project and grant application.

Sincerely,

Aaron Barcellos

Thomas Coleman
Coleman Farming Company, LLC
285 W Shaw Ste.202
Fresno, CA 93704

October 17, 2023

Lon Martin
General Manger
San Luis Water District
P.O. Box 2135
Los Banos, CA 93635

Subject: USBR WaterSmart Drought Resiliency Program
Letter of Support for Ortigalita Creek Recharge and Recovery Project

Dear Lon:

I am writing to express my formal support for the district's application to the U.S. Bureau of Reclamation for the Ortigalita Creek Recharge and Recovery Project. The San Luis Water District has been innovative in its efforts to provide water for its growers during these recent periods of extreme drought. Projects such as this, especially in light of the current regulatory environment, are vital to increasing the long-term reliability of this region's water supply.

I believe that this project is a straightforward and logical effort to store water when it is available and recover the water when it is most needed. I also appreciate that the district is pursuing those projects that it has advanced as a part of the district's Drought Contingency Plan and the Groundwater Sustainability Plan for the Northern and Central Delta-Mendota Regions.

I would encourage the U.S. Bureau of Reclamation to consider funding this project. Please accept my full endorsement for the project and grant application.

Sincerely,

Thomas Coleman

Jon Maring
JEM Ranches
PO Box 97
Westley, Ca. 95387

October 17, 2023

Lon Martin
General Manger
San Luis Water District
P.O. Box 2135
Los Banos, CA 93635

Subject: USBR WaterSmart Drought Resiliency Program
Letter of Support for Ortigalita Creek Recharge and Recovery Project

Dear Lon:

I am writing to express my formal support for the district's application to the U.S. Bureau of Reclamation for the Ortigalita Creek Recharge and Recovery Project. The San Luis Water District has been innovative in its efforts to provide water for its growers during these recent periods of extreme drought. Projects such as this, especially in light of the current regulatory environment, are vital to increasing the long-term reliability of this region's water supply.

I believe that this project is a straightforward and logical effort to store water when it is available and recover the water when it is most needed. I also appreciate that the district is pursuing those projects that it has advanced as a part of the district's Drought Contingency Plan and the Groundwater Sustainability Plan for the Northern and Central Delta-Mendota Regions.

I would encourage the U.S. Bureau of Reclamation to consider funding this project. Please accept my full endorsement for the project and grant application.

Sincerely,

John Woolf
Shields Ave Ranch
285 W Shaw Ave
Fresno, CA 93704

October 17, 2023

Lon Martin
General Manger
San Luis Water District
P.O. Box 2135
Los Banos, CA 93635

Subject: USBR WaterSmart Drought Resiliency Program
Letter of Support for Ortigalita Creek Recharge and Recovery Project

Dear Lon:

I am writing to express my formal support for the district's application to the U.S. Bureau of Reclamation for the Ortigalita Creek Recharge and Recovery Project. The San Luis Water District has been innovative in its efforts to provide water for its growers during these recent periods of extreme drought. Projects such as this, especially in light of the current regulatory environment, are vital to increasing the long-term reliability of this region's water supply.

I believe that this project is a straightforward and logical effort to store water when it is available and recover the water when it is most needed. I also appreciate that the district is pursuing those projects that it has advanced as a part of the district's Drought Contingency Plan and the Groundwater Sustainability Plan for the Northern and Central Delta-Mendota Regions.

I would encourage the U.S. Bureau of Reclamation to consider funding this project. Please accept my full endorsement for the project and grant application.

Sincerely,

Riverdale Ranch LLC
FRESNO, CA
(559) 431-1500 • FAX (559) 431-3452 • (800) 953-9357

October 17, 2023

Lon Martin
General Manger
San Luis Water District
P.O. Box 2135
Los Banos, CA 93635

Subject: USBR WaterSmart Drought Resiliency Program
Letter of Support for Ortigalita Creek Recharge and Recovery Project

Dear Lon:

I am writing to express my formal support for the district's application to the U.S. Bureau of Reclamation for the Ortigalita Creek Recharge and Recovery Project. The San Luis Water District has been innovative in its efforts to provide water for its growers during these recent periods of extreme drought. Projects such as this, especially in light of the current regulatory environment, are vital to increasing the long-term reliability of this region's water supply.

As a landowner involved in the project, I have had the opportunity to meet with District staff on numerous occasions to discuss the project. The project is located in the Ortigalita Creek area, an area that is well-suited to groundwater recharge. This project will improve groundwater conditions in the underlying aquifer and I look forward to the completion of the project.

I believe that this project is a straightforward and logical effort to store water when it is available and recover the water when it is most needed. I also appreciate that the district is pursuing those projects that it has advanced as a part of the district's Drought Contingency Plan and the Groundwater Sustainability Plan for the Northern and Central Delta-Mendota Regions.

I would encourage the U.S. Bureau of Reclamation to consider funding this project. Please accept my full endorsement for the project and grant application.

Sincerely,

Nader Malakan

Santa Nella County Water District
12931 State Highway 33 • Santa Nella, CA 95322
PH: (209) 826-0920 • FAX: (209) 826-8359

October 20, 2023

Lon Martin
General Manger
San Luis Water District
P.O. Box 2135
Los Banos, CA 93635

Subject: USBR WaterSmart Drought Resiliency Program
Letter of Support for Ortigalita Creek Recharge and Recovery Project

Dear Lon:

I am writing to express my formal support for the district's application to the U.S. Bureau of Reclamation for the Ortigalita Creek Recharge and Recovery Project. The San Luis Water District has been innovative in its efforts to provide water for its growers during these recent periods of extreme drought. Projects such as this, especially in light of the current regulatory environment, are vital to increasing the long-term reliability of this region's water supply.

I believe that this project is a straightforward and logical effort to store water when it is available and recover the water when it is most needed. I also appreciate that the district is pursuing those projects that it has advanced as a part of the district's Drought Contingency Plan and the Groundwater Sustainability Plan for the Northern and Central Delta-Mendota Regions.

I would encourage the U.S. Bureau of Reclamation to consider funding this project. Please accept my full endorsement for the project and grant application.

Sincerely,

Amy Montgomery
General Manager