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## 7-1 Pumping Plant Metering Project

A Water Efficiency Project

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**PREPARED FOR:**

FY 2022 WaterSMART Small-Scale Water Efficiency Projects Grant  
U.S. Department of the Interior – Bureau of Reclamation  
Funding Opportunity No. R22AS00195

**PREPARED BY:**

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## 1.1 Executive Summary

Date: April 28, 2022

Applicant's Name: Westlands Water District

Applicant's City: Fresno

Applicant's County: Fresno

Applicant's State: California

Category A: Water District

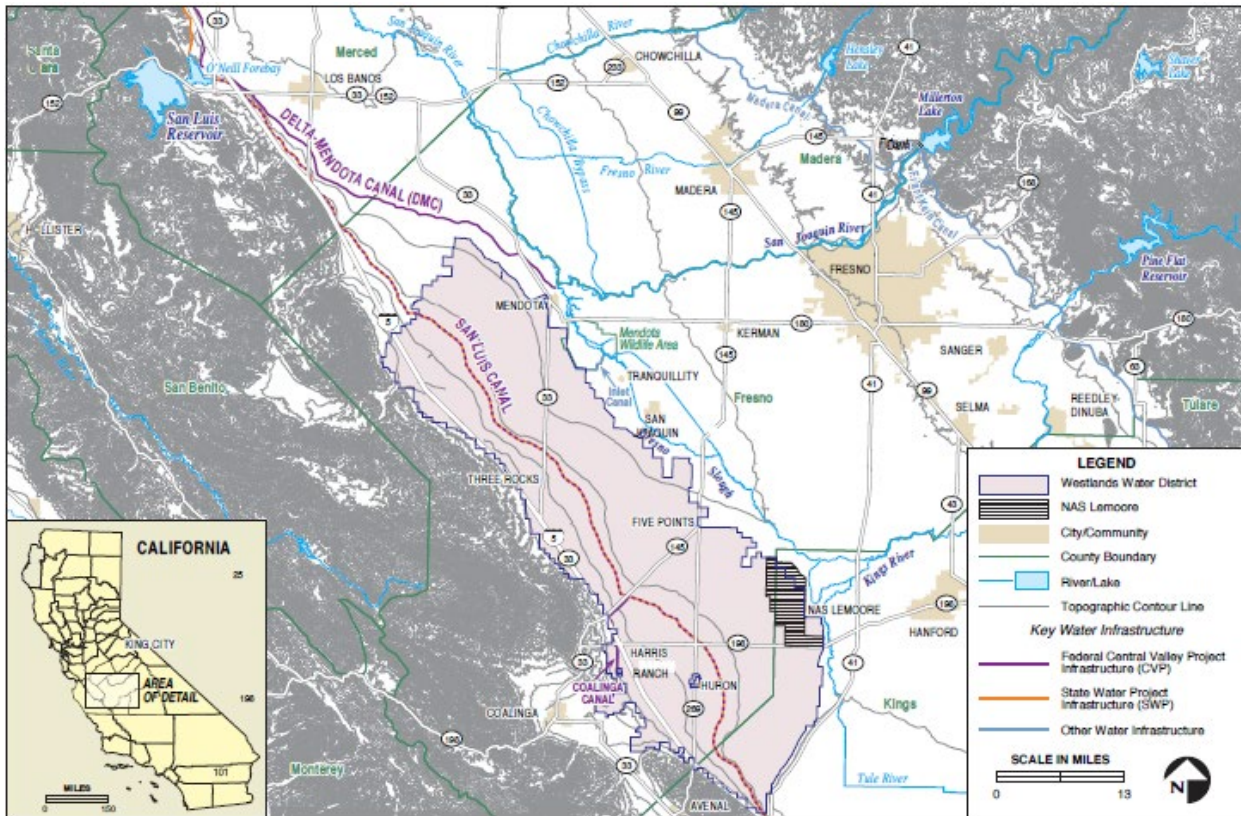
Westlands Water District (District) is pleased to submit this grant proposal for the 7-1 Pumping Plant Metering Project (Project) to the United States Bureau of Reclamation (Reclamation) for the WaterSMART Small-Scale Water Efficiency Projects Grant for Fiscal Year 2022 (Grant). The Project is located in Fresno County, California, near the town of Tranquillity. For the Project, the District proposes to construct two vaults that will house a 54-inch diameter and 24-inch diameter magnetic flow meter and appurtenances at the District's 7-1 Pumping Plant (7-1PP) with the goal of preventing water loss due to flow measurement discrepancies from 7-1PP, Lateral 7L head works and on-farm deliveries. The 7-1PP currently operates without a flow measurement device, so evaporative and channel losses are conservatively estimated when calculating water delivered from the Mendota Pool, for quantifying allocations and supply for the supplemental water program. The District believes that installing measurement devices at 7-1 PP will enable more accurate calculation of losses, which will result in more water being allocated, and provide useful data to support lining the inlet canal to prevent seepage loss. The Lateral 7L and 7-1PP is a Reclamation facility, however, the District operates and maintains the facility.

The Project's estimated construction start date is August 1, 2023 and will be completed by February 2024.

## 1.2 Background Data

The District encompasses more than 600,000 acres of farmland located in western Fresno and Kings Counties and serves approximately 700 family-owned farms that average 875 acres in size (**Figure 1**). The District is a Central Valley Project (CVP) contractor with repayment contracts for 1,195,383 AF and receives water through the Delta Division/San Luis Unit of the CVP. Major CVP conveyance facilities used for delivering water to the District include the Delta Mendota Canal (DMC) and the San Luis Canal (SLC). Water is delivered directly to lands in the San Luis Unit or is stored temporarily in San Luis Reservoir (SLR) for later delivery. Once diverted from the CVP facilities, water is delivered to farmers through 1,034 miles of underground pipe and over 2,800 active metered delivery outlets. In addition to the CVP supply, landowners in the District rely on groundwater pumping, water transfers, and water acquisitions to supplement the CVP supply. If the water portfolio is insufficient to farm all land, land is fallowed.

**Figure 1. Westlands Water District Service Area**



The 7-1PP is a federal facility that was constructed in 1963 along with the Lateral 7L and is operated and maintained by the District. The Lateral 7 Inlet Canal between the 7-2PP and the 7-1PP is unlined and experiences seepage and evaporation losses. 7-1PP originally had four 900-hp vertical turbine pumps, each with a pumping capacity of 25 cubic feet per second (cfs). The original purpose of the 7-1PP was to convey water from the Fresno Slough / Mendota Pool to the San Luis Canal alignment area for construction of CVP facilities. Growers who had the good fortune to be located along this pipeline were able to get the first surface supplies in 1964, albeit a small amount. Since then, water typically flows into Lateral 7L from the San Luis Canal, via gravity flow from the Lateral 7L headwork (headworks, which are metered by the State of California). 7-1PP is located at the downstream end of Lateral 7L and pumps water against gravity flow in Lateral 7L. Water pumped out of the Mendota Pool is metered at Pumping Plant 7-2 (7-2PP) before making its way to 7-1PP. All waterways within the Mendota Pool and inlet canal are unlined and experience seepage.

The facility 7-1 PP is not furnished with a measurement device. Improvements to 7-1PP were completed in early 2021. Some of the improvements included the installation of a variable frequency drive (VFD), 350-hp pump, and a new program logic center (PLC). Because there is no meter to measure flow, flows from 7-1PP are calculated based on 1) on-farm meter readings on Lateral 7 minus flow from the San Luis Canal measured by readings at the headworks and 2) pump curve(s). These two methods for determining flow have discrepancies.

### 1.2.1 Project Location

The Project is located on the west side of Fresno County, California in a rural area approximately five miles west of Tranquillity, California (**Figure 2**). The project latitude is 36°37'57.14"N and longitude is 120°20'33.37"W.

**Figure 2. Project Location**



### 1.3 Technical Project Description

The Project would require retaining a consultant for the design and a contractor for construction of the improvements; consistent with the District's procurement policy, both will go through a Request for Proposal process and competitive bid process, respectively. The design would include retrofitting a 54-inch diameter and 24-inch diameter magnetic meters to the existing buried Lateral 7L pipeline. The meters will be housed in a concrete vault which will allow District staff to gain access to the meters for inspection or repair. Conduits are required to provide communication to the existing PLC and power to the meters. Majority of the materials are underground. As a result, ground disturbance, such as backfill, trenching and shoring would be required.

Prior to construction, the District will ensure the Project complies with environmental regulation. The Project will likely be exempt from the California Environmental Quality Act (CEQA) because the work on an existing facility (CEQA Section 15301) and construction would cause minor alterations to the land (CEQA Section 15304; Minor Alterations to Land). If the District is awarded

the Grant, then the Project would be subject to the National Environmental Policy Act (NEPA). A biological and cultural assessment would be performed by Reclamation to determine whether the proposed action may affect critical habitat or species. Since the Project is small, the District anticipates the Project would be recognized as a categorical exclusion by Reclamation.

The District does not expect any other permits or approvals for this Project.

## 1.4 Evaluation Criteria

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

- **Clearly explain the significance of the anticipated water management benefits to the Category A applicant's water supply delivery system and water customers.**

Accurate water management is critical for the District and its water users, especially when the District received 0% of its contractual water in 2021 and 2022. During wet and dry hydrological years, the District conveys available flood flows (through a Warren Act Contract) and groundwater through 7-1PP, respectively. The proposed Project would enable the District to accurately monitor the movement of water pumped by 7-1PP, and account for seepage and evaporation losses in the Lateral 7 Inlet Canal. As a result, the District can accurately allocate water to its water users. Furthermore, when conveyance ceases at 7-1PP, water in the Lateral 7 Inlet Canal is drained back to the Mendota Pool. The difference in meter readings at 7-1PP and 7-2PP, minus losses, would determine how much was drained. Depending on whose water is drained, the District or the water user would be credited for the amount of drained water.

Absent of the proposed Project, an assumed 5% water loss would be applied to water users who use the 7-1PP to convey their groundwater to their land for irrigation. As a result, the water user is allocated less water than was conveyed.

- **Describe the broader benefits that are expected to occur as a result of the project. Will the project improve broader water supply reliability at basin scale?**  
The proposed Project will improve water supply reliability to the Westside Subbasin. Water conveyed and metered at the new meters will help support the District's efforts to monitor water supply from the Mendota Pool. The meters would also help detect leakage within the L7 distribution system. Further, the proposed Project helps support the quantity of water transferred into SLC as supplemental water supply when comparing to Reclamation or the State of California Department of Water Resources (DWR) numbers.
- **Will the proposed project increase collaboration and information sharing among water managers in the region? Please explain.**  
Yes, this Project will benefit projects with other water managers such as the District's

exchange programs with Wildren Water District and the Mendota Pool Group. Measurement information obtained from the proposed Project would be shared with the water managers to provide supporting documentation of such water exchanges and related water losses. Conveyance of water through L7 currently involves the monitoring and operating coordination with DWR and the San Luis Delta-Mendota Water Authority (SLDMWA). The District coordinates with DWR for the amount of surface needed from the SLC to meet on-farm demands. Coordination with SLDMWA is required to determine the volume of surface water diverted from the Mendota Pool into the Lateral 7 Inlet Canal.

- **Will the proposed project positively impacts/benefit various sectors and economies within the applicable geographic area (e.g., impacts to agriculture, environment, recreation, and tourism)? Please explain.**

Yes. The proposed project will positively benefit the agriculture sector and the surrounding disadvantaged communities within the Westside Subbasin. The major job sector is agriculture and as a result of the Project, an accurate account of the water supply will be allocated. More water results in job stability. According to the USDA's Economic Research Service Ag and Food Statistics: Charting the Essentials, in 2020, 19.7 million full- and part-time jobs were related to the agricultural and food sectors—10.3 percent of total U.S. employment. Direct on-farm employment accounted for about 2.6 millions of these jobs, or 1.4 percent of U.S. employment. Employment in agriculture- and food-related industries supported another 17.1 million jobs.<sup>1</sup> District farms provide 3.5 percent of nuts and fresh fruit and 5.4 percent of melons and vegetables nationally. This makes the District an important contributor of quality fresh produce and agricultural products directly and indirectly employing and supporting tens of thousands of households while creating billions of dollars of economic value (Shires).

- **Will the project complement work being done in coordination with NRCS in the area (e.g., the area with a direct connection to the districts water supply)?**

No.

- **Will the project help address drought conditions at the sub-basin or basin scale? Please explain.**

Yes. The District is implementing recharge facilities such as aquifer storage and recovery (ASR) wells, percolation basins, and recharge dry wells as a means to be resilient to drought. One of the sources for these recharge facilities is flood flow through L7 which the proposed Project meters the volume pumped from the 7-1PP. Accurate metering would provide the District with the true quantity of flood flows for storage and groundwater recharge.

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<sup>1</sup> <https://www.ers.usda.gov/data-products/ag-and-food-statistics-charting-the-essentials/ag-and-food-sectors-and-the-economy/>

### E.1.2. Evaluation Criterion B- Planning Efforts Supporting the Project

- **Describe how your project is supported by an existing planning effort. Identify the planning effort and who developed it. If the planning effort was not developed by the Category A applicant, describe the Category A applicant's involvement in developing the planning effort.**

The Project itself is not included in any of the District's plans, however, the Project is associated with the Westside Subbasin's Groundwater Sustainability Plan (GSP) management action to allocate and manage groundwater extractions among water users to avoid undesirable results. Currently, the District is replacing water users' groundwater meters with District-owned meters with telemetry capability, so the District is able to manage groundwater. This includes groundwater that is extracted and pumped into the Lateral 7 Inlet Canal to be delivered onto other lands within the District.

- **Describe to what extent the proposed project is supported by the identified plan. Address the following:**
  - **Is the project identified specifically in the planning effort?**
  - **Explain whether the proposed project implement a goal or address a need or problem identified in the existing planning effort?**

The proposed Project will better support the District to achieve the goals listed below by providing accurate measurements, accounting for system loss, and resolving discrepancies. The District has a Water Management Plan and a Groundwater Management Plan (Plans). The Plans describe its agricultural water management activities in accordance with Reclamation's and the State of California's requirements. The Plans also include an evaluation of the District's water management operations and the implementation of Best Management Practices (metering, improved irrigation systems, and real time ET data) and contains a description of the District, inventory of water resources, water delivered, cropping patterns, and District water inventory tables. The objective of the Plans is to preserve and enhance the long-term viability of the groundwater resources within the District with respect to both quantity and quality.

Furthermore, with the enactment of the Sustainability Groundwater Management Act (SGMA) in 2014, the District acting as a groundwater sustainability agency (GSA) for the Westside Subbasin, is required to implement project management actions to avoid undesirable results and achieve sustainability by 2040. The District developed Westside Subbasin GSP as required by the (SGMA) where the District outlines the plan to sustainably manage the Westside Subbasin, a critically over-drafted groundwater basin, by the year 2040. Given the expected variability in imported surface water supplies, effective management of groundwater pumping within the Westside Subbasin is a substantial and necessary strategy to avoid significant and unreasonable levels of the sustainability indicators within the Westside Subbasin. This management action to allocate groundwater extractions will require the GSA to allocate and manage groundwater pumping among water users to avoid undesirable results. Specifically, the GSA's objective in developing an allocation of groundwater is to enable the continued



beneficial use of groundwater for the current and planned uses within the Subbasin in a cumulative quantity that under the identified management actions will avoid the identified undesirable results. Specifically, the allocation plan provides each person with land overlying the Subbasin continued access to groundwater in accordance with the allocation plan. The proposed Project would ensure accurately estimating losses so growers who hope to convey groundwater through 7-1PP do not over pump their allocation.

- **Explain how the proposed project has been determined as a priority in the existing planning effort as opposed to other potential projects/measures.**

As mentioned above, SGMA requires the Westside Subbasin to achieve groundwater sustainability by 2040. The Project will provide additional monitoring to help the District better manage water conveyed through 7-1PP which said water will be used to irrigate valuable crops or used to recharge the aquifer to prevent or minimize undesirable results.

#### E.1.1.3. Evaluation Criterion C—Implementation and Results

- **Describe the implementation plan for 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.**

The following is the description of the implementation plan for the project upon determination of the grant. See **Exhibit C** for the anticipated project schedule. A narrative of the project schedule is provided below. The project schedule assumes the grant would be awarded on March 31, 2023.

##### Grant Administration

This task includes reporting and invoicing per the grant requirement.

##### Environmental compliance

Once the District receives the notice of award from Reclamation, the District will work with Reclamation to complete NEPA. Concurrently, the District will file a Notice of Exemption for CEQA. It is expected that NEPA and CEQA will be completed in 45 and 5 working days, respectively.

##### Design

District staff will design the meter vaults and retrofitting of the new meters. Design plan and specification, and bid documents will be developed. It is expected that Design will be completed in 74 working days.

##### Bid

The District will contract with a contractor for the construction of the Project. This includes advertisement of Project and vetting proposed contractors. Procurement method for the construction contract shall be by competitive bid solicitation per 2 CFR Section 200.317 through 200.326. It is expected that awarding Project contract will be completed in 28 working days.

### Construction

Construction consist of mobilization and demobilization, trenching and shoring, installation of meter vaults, meters, and conduits. Items procured for the Project includes, but not limited to, meters, concrete meter vault, piping and appurtenances, and electrical conduits. Testing and commission will conclude the Project. It is expected that construction will be completed in 95 working days.

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

No permit is anticipated for the Project.

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

Engineering work required for this Project includes the design of the meter vaults that will house the meters below surface. These vaults would need to be designed to withstand H-20 and horizontal soil loading, properly drain any water that makes its way into the vault and provide access for District staff to perform inspections and repair as required. The existing pipeline will need to be retrofitting for the installation of new meters. Furthermore, the design consists of the new meters connecting with the existing PLC so the District would have remote real-time flow readings from 7-1PP. The proposed flow measurement devices, recommended by the District's Senior Water Measurement Specialist, will be a 54-inch diameter and 24-inch diameter Krohne Enviromag 2000 Magnetic Flowmeter. These meters have an accuracy of less than 5% of the flow rate from the factory. See **Exhibit A** for specification of the meter.

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

No new policies or administrative action is required as a result of the Project.

- **Describe the timeline for completion of environmental and cultural resource compliance. Was the timeline for completion of environmental and cultural resource compliance discussed with the local Reclamation office?**

If awarded the Grant, a Notice of Exemption will be filed with Fresno County and the State of California Office of Planning and Research once the District is notified of the award. The District will work with Reclamation staff to clear NEPA review. It is expected that NEPA compliance will include Section 106 of the National Historic Preservation Act and Endangered Species Act which consist of a cultural and biological assessment, respectively.

#### E.1.4. Evaluation Criterion D—Nexus to Reclamation

- **Does the applicant receive Reclamation project water?**

Reclamation provides surface water supply to the District under its Repayment Contract(s) and periodic Section 215 Contracts.

- **Is the project on Reclamation project lands or involving Reclamation facilities?**  
Yes. Reclamation currently holds title on the District’s water distribution system. Repayment to Reclamation is satisfied and transfer of title to the District is on-going.
- **Is the project in the same basin as a Reclamation project area or activity?**  
Yes. Reclamation holds title to the District’s distribution system, including Lateral 7L and 7-1PP. The Project will provide accurate flow measurements from 7-1PP. Furthermore, the facility has the ability to divert flows from the Mendota Pool to the San Luis Unit.
- **Will the proposed work contribute water to a basin where a Reclamation project is located?**  
The SLC is a Reclamation facility and experienced subsidence that limits the water delivery capacity. The proposed Project would ensure accurately estimating losses so growers who hope to convey groundwater through 7-1PP do not over pump their allocation hence preventing and/or minimizing subsidence that would otherwise impact the SLC.

#### E.1.5. Evaluation Criterion E—Presidential and Department of the Interior Priorities

##### E.1.5.1 Subcriterion E.1 – Climate Change

- **Please provide specific details and examples on how the project will address the impacts of climate change and help combat the climate crisis.**  
Data from the proposed Project can be used in different ways as part of the efforts to minimize the effects of climate change on the imbalance between supply and demand. For example, unlike static models and estimations, real-time meter data provides detailed information about the “when” and “how much” water is conveyed, allowing the District to adapt and optimize the District’s operations.
- **Does this proposed project strengthen water supply sustainability to increase resilience to climate change? Does the proposed project contribute to climate change resiliency in other ways not described above?**  
The Project helps strengthen water supply sustainability by ensuring water supply is not reduced due to flow measurement discrepancies. The water saved from this Project would be used towards the irrigation of crops for human consumption and goods, and will keep prime farmland in production. California faced ongoing drought in 2020, 2021, and 2022 that is linked to climate change. To be resilient, every drop of water is vital to ecologic system to continue producing goods for human consumption and economic stability to the disadvantaged communities within the District. Additionally, the water saved results in stored water which could be delivered in later years when the region is experiencing drought.

### E.1.5.2 Subcriterion E.2 – Disadvantaged or Underserved Communities

- **Will the proposed project serve or benefit a disadvantaged or historically underserved community? Benefits can include, but are not limited to, public health and safety by addressing water quality, new water supplies, or economic growth opportunities.**

The Project is located near Tranquillity, a community identified as severely disadvantaged (median household income is less than \$42,737 according to the State of California Department of Water Resources DAC Mapping Tool<sup>2</sup>). The median household income of Tranquillity is \$36,597. The Project does not directly serve the disadvantaged community, however, indirect benefits to the disadvantaged community will be equally important and will stem from overall stability of the local agricultural economy. The Project will support continued success of the agricultural sector which provides many jobs in the area.

As stated above, the Project will allow for continued success of the agricultural sector which provides many jobs in the area. The District developed an Economic Impact Report dated October 12, 2016, (Report) to quantify direct and indirect economic impacts resulting from the recent drought experienced in California. According to the Report, economic impacts since the 2012 water year to present are quantified as 5,215 jobs lost (18.1%) and nearly \$650 million in overall economic impacts annually<sup>3</sup>. The loss of agricultural productivity ultimately leads to loss of employment caused by increased land fallowing throughout the central valley. With uncertain water supply, neighboring disadvantaged communities are also greatly impacted in terms of jobs and economic stability. This includes the community of Tranquillity.

- **Please describe in detail how the community is disadvantaged based on.**

The proposed project seeks to invest in an area of persistent poverty compounded by numerous surface water supply shortfalls. By investing this area, agricultural jobs are sustained providing economic stability. According to California Office of Environmental Health Hazard Assessment, the Project is within Census Tract 6019008200 which has 6,978 people. The poverty indicator measures the percentage of people in the census tract living below twice the federal poverty level. Twice the poverty level is used due to the high cost of living in California. The data is from 2011 to 2015. Seventy-six percent of people in this census tract are living below twice the federal poverty level. The percentile for this census tract is ninety-seven, meaning the percent of people living below twice the poverty level is higher than 97% of the census tracts in California<sup>4</sup>.

The linguistic isolation indicator measures the percentage of households in the census tract where no one over fourteen speaks English well. The data is from 2011 to 2015. Thirty-four percent of households in this census tract do not speak English well. The percentile for this census tract is ninety-seven, meaning the percent of linguistically

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<sup>2</sup> <https://gis.water.ca.gov/app/dacs/>

<sup>3</sup> <http://wwd.ca.gov/wp-content/uploads/2016/10/economic-impact-report.pdf>. See Page 28.

<sup>4</sup> <https://oehha.ca.gov/calenviroscreen/indicator/poverty>

isolated households is higher than 97% of the census tracts in California. Approximately 2,530 people in this census tract do not speak English well. The top languages spoken besides English are Spanish and Arabic<sup>5</sup>.

Finally, the low education indicator measures the percentage of adults over twenty-five in the census tract with less than a high school education. The data is from 2011 to 2015. Sixty-three percent of adults in this census tract have less than a high school education. The percentile for this census tract is ninety-nine, meaning the percent of adults without a high school education is higher than 99% of the census tracts in California<sup>6</sup>.

- **If the proposed project is providing benefits to an underserved community, provide sufficient information to demonstrate that the community meets the underserved definition in E.O. 13985, which includes populations sharing a particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life.**  
See above.

#### E.1.5.3 Subcriterion E.3 – Tribal Benefits

- **Does the proposed project directly serve and/or benefit a Tribe? Will the project improve water management for a Tribe?**  
Does not apply.
- **Does the proposed project support Tribal resilience to climate change and drought impacts or provide other Tribal benefits such as improved public health and safety by addressing water quality, new water supplies, or economic growth opportunities?**  
Does not apply.

### 2.1 Overlap or Duplication of Effort Statement

The District submitted a similar proposal back in October 2021 for the WaterSMART Water and Energy Efficiency Grant (WEEG). At the time, the District was not aware of this Grant Funding Opportunity and applied for the WEEG. In the event the District is selected for the WEEG Grant, the District will withdraw from this Grant Funding Opportunity.

## 3.1 Project Budget

### 3.1.1 Funding Plan and Letters of Funding Commitment

The total project cost is \$208,000. The District's share from the non-federal amount is \$108,000, coming from the District's Drought Reserve Funds, and Cap and Trade Funds. Aside from the Grant, and the aforementioned sources there will be no other additional funding source. The

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<sup>5</sup> <https://oehha.ca.gov/calenviroscreen/indicator/linguistic-isolation>

<sup>6</sup> <https://oehha.ca.gov/calenviroscreen/indicator/educational-attainment>

District is requesting \$100,000.00 of federal funds through the Grant to contribute to the total Project cost (**Table 2**). The District will adopt a resolution to authorize the submittal of the Grant application and commit to financial and legal obligation associated with the receipt of the Grant funding.

The total estimated costs include District’s staff time for managing the Project, review of Project documents, and construction management services during construction. Other costs are engineering services and construction through a third-party and are presented in **Table 3**. Equipment and supplies will be procured by the contractor; these costs are embedded in the “Construction” bid item. Non-federal cost share is 52%. Costs provided in the tables below are approximations and are subject to change, however, the District will be obligated to fund at least 50% of the cost share if awarded the Grant.

### 3.1.2 Budget Proposal

**Table 2: Total Project Cost**

<b>FUNDING SOURCES</b>	<b>AMOUNT</b>
Costs to be reimbursed with the requested Federal funding	\$100,000.00
Costs to be paid by the applicant	\$108,000.00
Value of third-party contributions	\$0
<b>Total Estimated Project Cost</b>	<b>\$208,000.00</b>

**Table 3: Budget Proposal**

BUDGET ITEM DESCRIPTION	COMPUTATION		Quantity Type	TOTAL COST
	\$/Unit	Quantity		
<b>WWD Salaries and Wages</b>				
Deputy GM of Resources	\$79.83	12	hr.	\$957.96
Supervisor of Resources	\$61.21	64	hr.	\$3,917.44
Resources Engineer	\$37.83	141	hr.	\$5,334.03
Supervisor of Field Engineering	\$71.60	38	hr.	\$2,720.80
Field Engineer	\$37.83	82	hr.	\$3,102.06
Senior Water Measurement Specialist	\$33.90	36	hr.	\$1,278.00
Electrician	\$43.67	48	hr.	\$2,096.16
<b>Subtotal WWD Salaries and Wages</b>				<b>\$19,406.45</b>
<b>WWD Fringe Benefits</b>				
Deputy GM of Resources	\$65.67	12	hr.	\$788.04
Supervisor of Resources	\$50.29	64	hr.	\$3,218.56
Resources Engineer	\$31.07	141	hr.	\$4,380.87
Supervisor of Field Engineering	\$58.90	38	hr.	\$2,238.20
Field Engineer	\$31.07	82	hr.	\$2,547.74
Senior Water Measurement Specialist	\$27.90	36	hr.	\$1,051.20
Electrician	\$35.93	48	hr.	\$1,724.64
<b>Subtotal WWD Fringe Benefits</b>				<b>\$15,949.25</b>
<b>WWD Travel</b>				
78 miles round trip	\$0.59	1,560	mi.	\$912.60
<b>Subtotal WWD Travel</b>				<b>\$912.60</b>
<b>Environmental and Regulatory Compliance Costs</b>				
CEQA Filing Fees	\$51.50	1	EA	\$51.50
<b>Subtotal Environmental and Regulatory Compliance Costs</b>				<b>\$51.50</b>
<b>Contractual / Construction</b>				
Engineering Services	\$40,000.00	1	LS	\$40,000.00
Construction	\$112,000.00	1	LS	\$112,000.00
<b>Subtotal Contractual / Construction</b>				<b>\$152,000.00</b>
<b>PROJECT COST SUBTOTAL</b>				<b>\$188,319.80</b>
De minimis Rate per 2 CFR 200.414(f)	percentage		10%	\$18,831.98
<b>TOTAL ESTIMATED PROJECT COSTS (round up to the nearest thousands)</b>				<b>\$208,000.00</b>

### 3.1.3 Budget Narrative

#### *Salaries and Wages*

This section describes District’s staff estimated effort, in hours. Efforts includes managing the Project, reviewing Project documents, and providing construction management services during construction. The Project Manager is David Vang, a Resources Engineer with the District, and he

will devote up to 141 hours to oversee the Project, at a rate of \$37.83 per hour. All the District's staff hours are listed in **Table 3**. The estimated hours for each staff with the respective task are shown in **Exhibit D**.

#### *Fringe Benefits*

The Fringe Benefits include overhead costs including medical, retirement, training, and general office operational expenses. Rates for Fringe Benefits are shown in **Table 3**.

#### *Travel*

According to MapQuest, the trip mileage total, starting at the District's Fresno office to the proposed project site and back is approximately 78 miles round trip. With an estimated total of 20 trips for site recon and construction oversight, the total mileage is 1,560 miles. All travel is local, and no lodging will be required. The Internal Revenue Service standard mileage rates (\$0.585 per mile) were used as the basis of travel rate. Therefore, the travel budget is \$912.60.

#### *Equipment*

The contractor will procure all equipment relating to the Project. Material and Equipment costs are estimated into the "Construction" cost.

#### *Contractual / Construction*

Contractual and construction costs are estimated at \$152,000 and includes engineering services and construction. Procurement method for engineering services will be through a Request for Proposal process per the District's procurement policy. Procurement method for the construction contract shall be by competitive bid solicitation per 2 CFR Section 200.317 through 200.326. The following discussion details the contracts required for the project.

#### Construction:

Construct the Project according to the construction documents that includes the meters, concrete meter vault, piping and appurtenances, and electrical conduits. The work would require ground disturbance as the pipeline is underground. See **Exhibit F** for probable cost estimate for construction.

#### *Environmental and Regulatory Compliance Costs*

It is anticipated that the Project would be categorically exempted from CEQA pursuant to CEQA Guideline 15301 (Existing Facilities) and 15304 (Minor Alterations to Land). As a result, the District is required to file a Notice of Exemption with the County of Fresno and the State of California's Office of Planning and Research, and pay the required filing fees.

NEPA would be addressed by Reclamation as part of the grant process. Based on the minimal land disturbance, the District anticipates that Reclamation would file a Categorical Exclusion.



### *Indirect Costs*

Indirect costs are estimated to be 10% of the subtotal Project cost and factors unforeseeable costs such as change orders and inflation. The District will be responsible for the additional cost that exceeds the total estimated Project costs in **Table 3**.

## 3.1 Environmental and Cultural Resources Compliance

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

All land clearing, scraping, excavation, grading, and demolition activities will be effectively controlled of fugitive dust emissions utilizing application of water, as needed. Excavated native material would be used onsite or lawfully dispose at a dumpsite. All area in and surrounding the project area is with District-owned land that has been fallowed. There should be minimal disruption to the surrounding area.

- **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 California least tern, San Joaquin kit fox, Tipton kangaroo rat, blunt-nosed leopard lizard, woolly-threads and giant garter snake are known species in the District's service area identified by Reclamation but not specific to the project area<sup>7</sup>. Species biology, habitat needs, status under the Endangered Species Act (ESA), and measures being incorporated for the protection of these species and their habitats would be addressed during Reclamation's biological assessment.

- **Are there wetlands or other surface waters inside the project boundaries that potentially fall under Clean Water Act (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 boundary.

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

The District's Lateral 7L system was constructed in 1963.

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<sup>7</sup> Draft Finding of No Significant Impact Central Valley Project Interim Renewal Contracts for Westlands Water District, Santa Clara Valley Water District, and Pajaro Valley Water Management Agency 2014-2016.  
[https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc\\_ID=42465](https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=42465)

- **Will the proposed project result in any modification of or effects to, individual features of an irrigation system (e.g., head gates, 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.**

Yes. The Project will make modifications to the existing Lateral 7L pipeline, which was constructed in 1963, to provide the existing Lateral 7L with flow measurement devices that will accurately record the quantity of water pumped from 7-1PP. It is estimated that the modification would take no more than 5 days to complete and field tested.

- **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.**

The project area does not include historic properties listed on the National Register of Historic Places.

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

No known archaeological sites are in the project area.

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

No. The Project prevents water loss due to measurement discrepancies and would benefit growers in the District. Therefore, there would be no disproportionate effects to these populations.

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

The Project is not on sacred land. Ground disturbance will be on lands that have been disturbed in the past, specifically alignment of an existing underground pipeline.

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

No.

## 4.1 Required Permits or Approvals

Prior to construction, the District will obtain the appropriate approvals. Since the Project is improving existing infrastructure and environmental footprint is relatively small, the anticipated required approvals to construct the Project are state and federal environmental compliances.

1. CEQA (Notice of Exemption)
2. NEPA (Categorical Exclusion)

## 5.1 Letters of Project Support

The District received two letters of support for the Project from growers utilizing the 7-1PP and Westlands Water District Groundwater Sustainability Agency. See **Exhibit C** for the letters of project support.

## 6.1 Official Resolution

A copy of the official resolution adopted by the District's Board of Directors to commit the financial and legal obligations associated with receipt of a financial assistance award under this funding opportunity announcement will be provided to Reclamation after the District's Board Meeting on May 17, 2022. The official resolution will be submitted to Reclamation before the 30-days extension set forth in Section D.2.2.14 of the funding opportunity announcement. See **Exhibit G** for the draft resolution to be adopted.

## REFERENCES

“AG and Food Sectors and the Economy.” USDA ERS - Ag and Food Sectors and the Economy, <http://www.ers.usda.gov/data-products/ag-and-food-statistics-charting-the-essentials/ag-and-food-sectors-and-the-economy/>. Accessed 20 April 2022

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“Water Management Plan 2017.” Westlands Water District, 4 Aug. 2021, <https://wwd.ca.gov/water-management/additional-water-management/water-management-plan-2017-2/>. Accessed 20 April 2022

“Westside Subbasin Groundwater Sustainability Plan.” Westlands Water District, 4 Aug. 2021, <https://wwd.ca.gov/water-management/groundwater-management-program/sustainable-groundwater-management-act/adoptedGSP>. Accessed 20 April 2022



Westlands Water District  
Groundwater Sustainability Agency

April 7, 2022

Mr. Jose Gutierrez  
Chief Operating Officer  
Westlands Water District  
3130 North Fresno Street  
Fresno, California 93703-6056

**RE: Support for Application of U.S. Bureau of Reclamation WaterSMART: Water and Energy Efficiency Grant**

Dear Mr. Gutierrez,

The intent of this letter is to express Westlands Water District Groundwater Sustainability Agency's (GSA) support for Westlands Water District's (WWD) application for funding from the WaterSMART program. The WaterSMART program funds projects that achieve sustainable water savings and water reliability benefits. As we understand, the proposed 7-1 Pumping Plant Metering Project (Project) provides flow measurement devices at the existing 7-1 Pumping Plant that will enable accurate metering of supplemental water acquired and pumped from the Mendota Pool. Acquisition and allocation of additional surface water supply should result in reduced reliance on the groundwater basin.

The GSA supports this Project because it conserves water resources, promotes efficiency, and results in water savings, which ultimately benefits the District and the entire Westside Subbasin. Thank you for giving the GSA the opportunity to support the proposed Project and we encourage Reclamation to provide thoughtful consideration and approval.

Sincerely,

Katarina Campbell, P.E.

Groundwater Sustainability Agency – Plan Manager

# S3 GROUP, LLC

1750 N. Siskiyou Avenue  
Kerman, CA 93630  
559-846-8983 Phone  
559-846-8933 Fax

Jose Gutierrez  
Chief Operating Officer  
Westlands Water District  
3130 N. Fresno Street  
Fresno, CA 93703

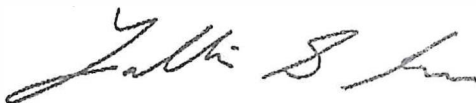
**SUBJECT: 7-1 PP Metering Project – Letter of Support**

Dear Mr. Gutierrez,

I own lands adjacent to Westlands Water District's Lateral 7L and rely on this lateral and the 7-1 Pumping Plant (7-1PP) to supply water onto my farm. The 7-1PP Metering Project (Project) would provide a measurement device that accurately measures flow pumped from 7-1PP which will result in a water savings and mitigate future discrepancies with the State.

It is my pleasure to support the Westlands Water District's application and efforts to implement the metering project. Thank you for giving me the opportunity to support the proposed project. Hopefully the U.S. Bureau of Reclamation will give thoughtful consideration for funding the District's Project.

Sincerely,



Lakhvir S Sran

S3 Group, LLC

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**RESOLUTION NO. 1xx-22**

**WESTLANDS WATER DISTRICT**

**A RESOLUTION OF THE BOARD OF DIRECTORS  
SUPPORTING THE APPLICATION FOR GRANT FUNDING  
FROM THE UNITED STATES BUREAU OF RECLAMATION  
FOR PROJECTS RELATED TO WATER AND ENERGY EFFICIENCY PROGRAM**

WHEREAS, the United State Bureau of Reclamation (“Reclamation”) solicited grant proposals for funding opportunities through the WaterSMART Small-Scale Water Efficiency Projects Grant (“Grant”) to support small-scale on-the-ground projects that seek to conserve, better manage, or otherwise make more efficient use of water supplies; and

WHEREAS, WaterSMART projects conserve and use water more efficiently, increase the production of renewable energy, mitigate conflict risk in areas at a high risk of future water conflict, and accomplish other benefits that contribute to sustainability in the Western United States; and

WHEREAS, Westlands Water District (“District”) is water district and is an eligible applicant pursuant to Public Law 111-11, Section 9502; and

WHEREAS, the District classified as a Category A grant recipient; and

WHEREAS, the District determined that the 7-1 Pumping Plant Metering Project (“7-1PP Project”) will be beneficial for both the District and Reclamation by optimizing water management and improving sustainable water savings; and

WHEREAS, the District is pursuing this grant funding assistance under the WaterSMART Grant in the amount of \$100,000 to help fund the 7-1PP Metering Project to implement flow measurement devices at the 7-1 Pumping Plant for; and

NOW, THEREFORE, BE IT AND IT IS HEREBY RESOLVED AS FOLLOWS:

1. The General Manager or his designee is authorized and directed to execute an agreement and associated documents with Reclamation related to the grant funding for the Grant.

DRAFT

2. The Board of Directors reviewed and supports the application for this grant funding opportunity, and the District is committed to the financial and legal obligations associated with the receipt of Reclamation's grant funding.
3. The District is capable of providing the amount of funding and in-kind services specified in the funding plan for the Grant application.
4. The District will work with Reclamation to meet established deadlines if the District is selected to receive funding from Reclamation.
5. The General Manager or his designee is authorized and directed to do all other things necessary and appropriate to carry out the foregoing and to take such additional actions as may be necessary or convenient to carry out the intent of this resolution.
6. A certified copy of this resolution shall be prepared and transmitted by the District's Secretary to Reclamation.

Adopted at an adjourned regular meeting of the Board of Directors at Fresno, California, this 17<sup>th</sup> day of May 2022.

AYES:

NOES:

ABSENT:

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Bobbie Ormonde,  
Secretary