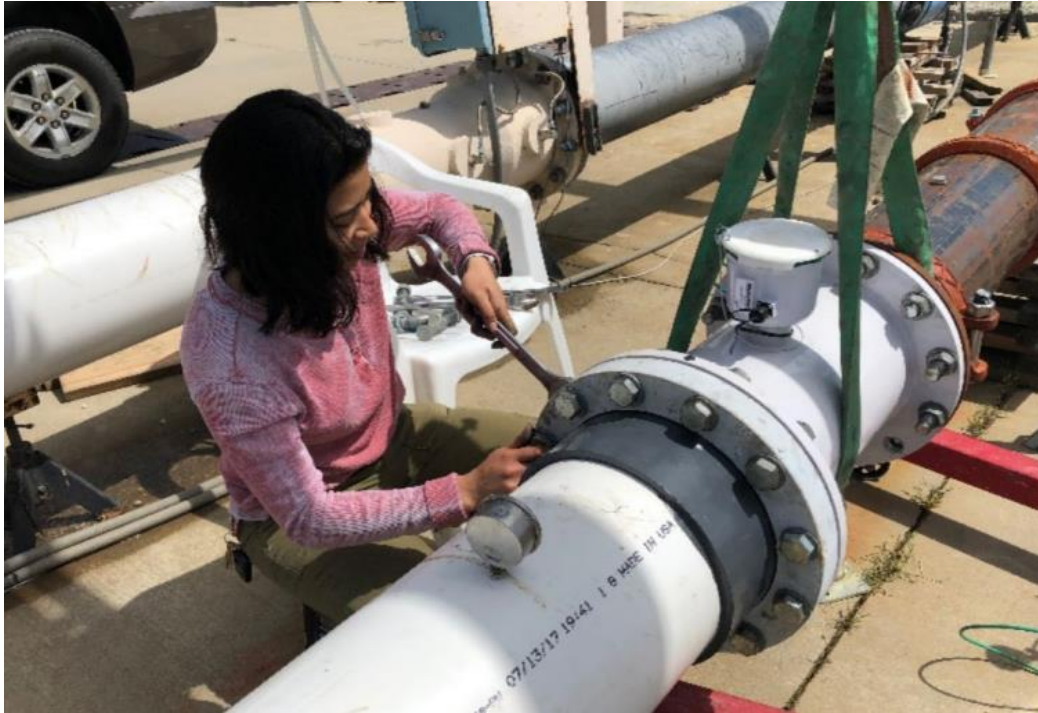


MAGNETIC SMART METER INSTALLATION PROJECT

US Department of Interior, Bureau of Reclamation

WaterSMART: Water and Energy Efficiency Grants for FY 2023

Funding Opportunity No. R23AS00008



Source: CALPOLY San Luis Obispo ITRC

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With

Co-Applicant

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Technical Proposal

I. Executive Summary

Date:	July 28, 2022
Project Name	Magnetic Smart Meter Installation Project
Applicant Information	Lower Tule River Irrigation District in Partnership with Pixley Irrigation District
City, County, State	Tipton & Pixley, Tulare County, California
Application	Category A – Funding Group II
Grant Funding Requested	\$2,000,000
Funding Matching Fund	\$2,746,282.59
Project Duration / Completion Date	32 months / January 2026

The Lower Tule River Irrigation District (Lower Tule) is pleased to submit this grant proposal for the Magnetic Smart Meter Installation Project (Project) to the United States Bureau of Reclamation (Reclamation) for the WaterSMART: Water and Energy Efficiency Grants for Fiscal Year 2023. The Project will retrofit 742 manually read measuring systems on open canal gravity turnouts with advanced, automated metering devices. The estimated amount of water savings over the metering devices' 20-year life span is **212,425 acre-feet**. The estimated amount of reduced carbon emissions per year is **10.2 metric-tons of CO₂**. The current system requires twice-daily manual measurement checks by an operator, resulting in significant time and energy costs. More importantly, the lack of continual flow metering results in an average accuracy reduction of 15.56% when compared to flow meters with recording instruments. The advanced magnetic smart meters will record and hold data, thereby eliminating the need for twice-daily manual checks by operators, replaced instead by monthly meter readings. This step will provide water savings to the Districts and enhanced customer service experience, and it will reduce the environmental impacts of the system operations. Lower Tule is submitting this application on behalf of itself and the Pixley Irrigation District. The two Districts are jointly managed and operated and share overlapping conveyance systems. Lower Tule is the lead agency, with Pixley serving as a cooperating partner. Lower Tule's Project will be implemented across both Lower Tule and Pixley Irrigation Districts, both of which are located in southern Tulare County in the Central Valley of California.

The proposed project is not located on a Federal facility.

II. Project Location

Lower Tule River Irrigation District / Pixley Irrigation District

The Districts encompass more than 165,000 acres of farmland located in southern Tulare County in the Central Valley of California, serving approximately 952 different landowners, many of whom are part of multi-generational farming families. The nearest population centers are Tulare (68,999) which is 15 miles to the north and Porterville (62,234) which lies 5 miles east of the Lower Tule eastern border. The nearest large

population centers are Sacramento, which is 220 miles north, and Los Angeles, 170 miles south. Within the boundaries of Lower Tule and Pixley there are five communities with populations that range from 2,500 (Tipton) to less than 1,300 (Teviston).

The Districts are home to a variety of different crops. The major crops grown in the Districts are almonds, pistachios, forage crops (wheat, grains) and grapes.

Figure 1 below shows the location of Lower Tule and Pixley, surrounding cities and towns, and other landmarks.

Figure 1 – Regional Map

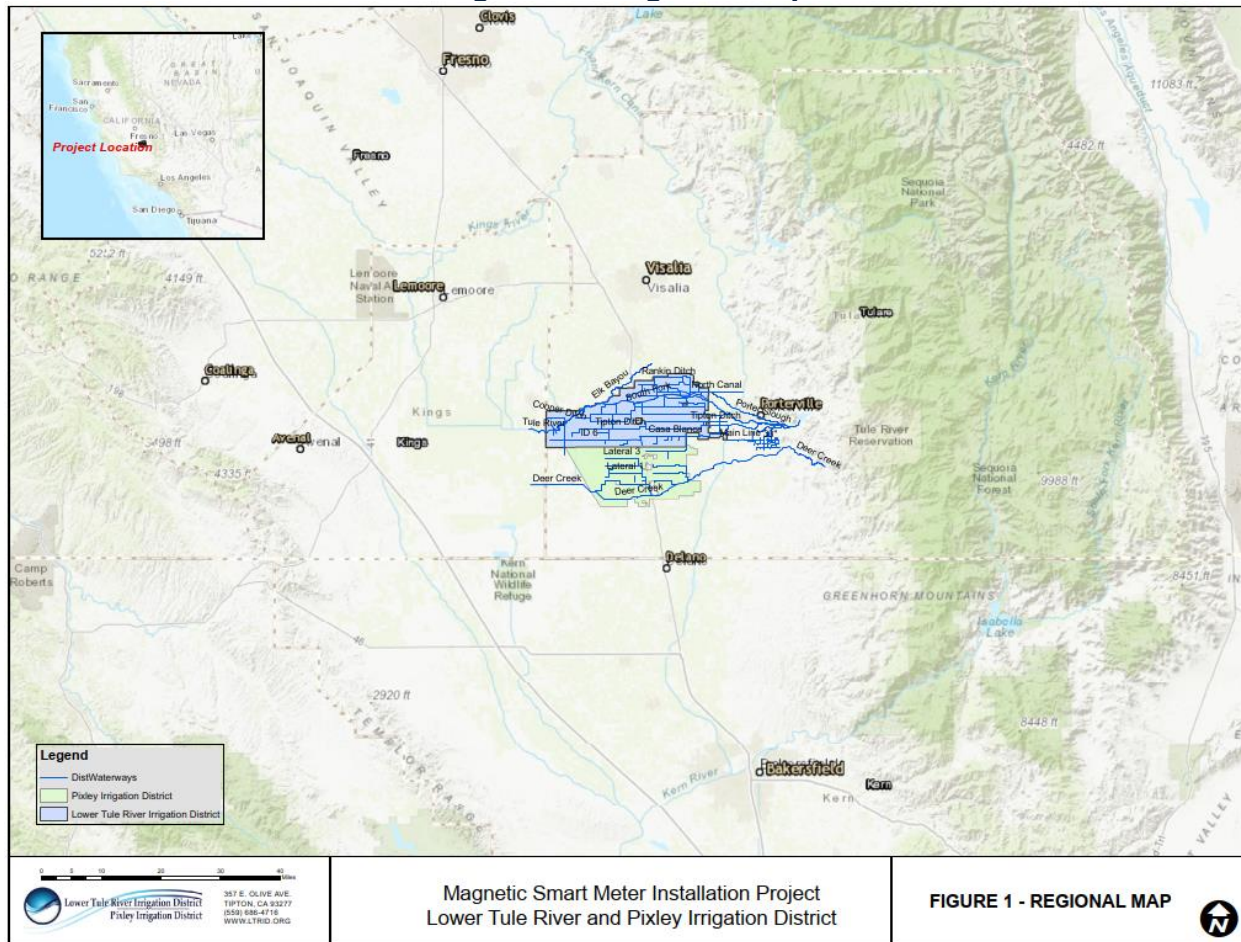
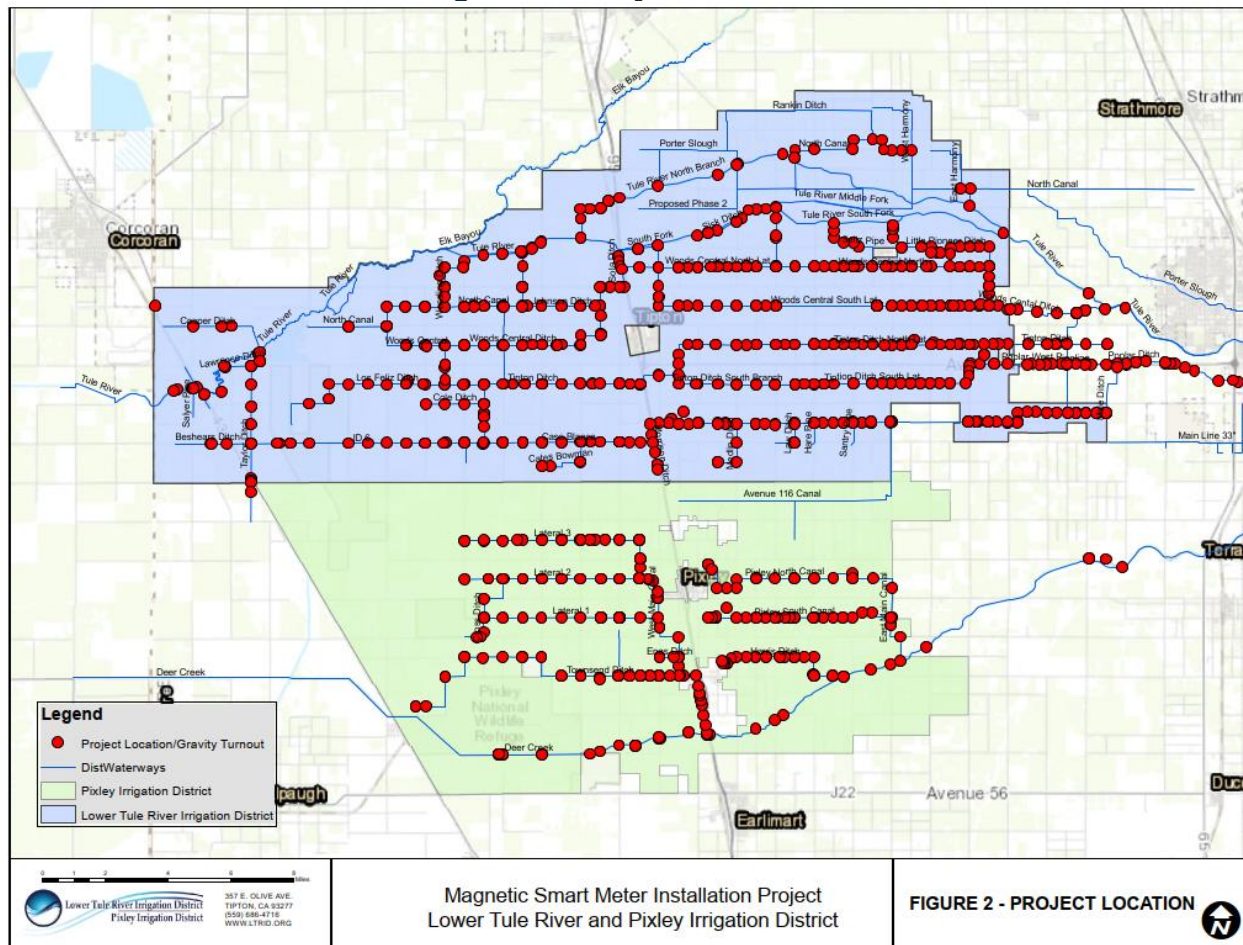


Figure 2 below shows the precise location of the 742 meters that would be installed through the Magnetic Smart Meter Installation Project.

Figure 2 – Project Location



III. Technical Project Description

Lower Tule River and Pixley Irrigation District (collectively as “Districts”) propose to implement a Magnetic Smart Meter Installation Project to convert 742 manually-read surface water delivery locations that currently use a head differential method to an updated, automated magnetic smart meter method.

Current Method – Head Differential Measurement

Head differential measurement is a system that was used to calculate volume and water use prior to the development of the modern meter system. It was used particularly in large open channel systems where even the early meters were either very costly or not accurate. Head differential involves a two-step process of taking a measurement against a fixed point of reference to the depth to water on both the upstream and downstream side of the turnout, and then determining the total flow area of the submerged orifice (gate) by measuring the stem of the gate to determine the opening. Prior to the development of accurate metering on gravity flow turnouts, head differential metering was commonplace and included on most Reclamation-constructed facilities. An example of a head differential turnout is shown in **Figure 3** taken from a 1956 Reclamation publication.

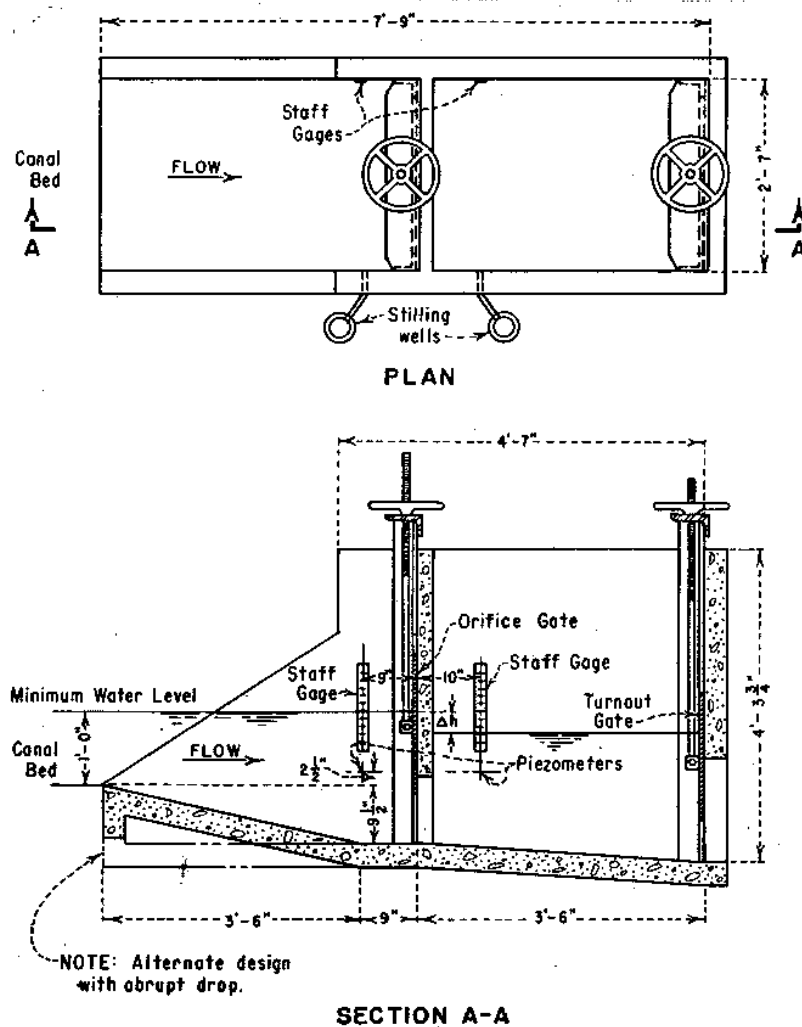
Figure 3 – Head Differential Measurement

Source: USBR Water Measurement Manual 1956

The difference in measurement is then calibrated against a chart that has measurement in inches on one axis and gate size and diameter on the other axis. The nexus of those two measurements provides a flow in cubic feet per second (cfs) on the chart. Volume used by the turnout is then calculated by extrapolating the instantaneous flow read over the period between manual readings. While the measurement is very accurate, it only provides the flow rate (Q) for that one moment in time. Any changes to the flow in the canal can change the differential in measurement, which increases or decreases the actual flow rate (Q). When that happens, the volume being used by the farmer changes also, but only with periodic manual measurements; that volume change is not captured in real time the way it would be with a flow meter. **Figure 4** shows a drawing from the same Reclamation publication demonstrating how and where to measure the differences to determine flow rates.

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Figure 4 – Submerged Orifice Gravity Flow Measurement



Source: USBR Water Management Manual 1956

A detailed study completed by the Districts shows an average accuracy variance of approximately +15% between head differential measurement and metering, meaning the average end user is getting about 15% more water than is actually being accounted for through the measurement. This amount is an average from turnouts that were tested, which showed a significant range, with some users getting 58.6% more water than they were charged for and others being charged for 76.6% more water than they were receiving. The variable in the range was due to the changes in flow in the canals serving the turnouts; the more that changed, the wider the variable.

Attachment D provides a complete range of the metered event test data.

Proposed Project – Smart Metering

The Magnetic Smart Meter Installation Project implemented in both Districts will install 742 new magnetic smart meters at turnouts along 320 miles of open canals throughout the Districts, replacing the need for manual measurement and manual calculation of water flow and volume. Meters equipped with magnetic pulse technology will be acquired and installed, providing users with accurate and easily replicated flow measurement with less than 0.5% error through the Magnetic Smart Meter Installation Project.

The magnetic smart meter proposed in this Magnetic Smart Meter Installation Project is equipped with updated technology that sends pulses of magnetic frequency through the body of liquid. The signal frequency then travels back to the receiver and is converted to usable readings that farmers and operators understand. The magnetic smart meters are also equipped with a small LCD screen powered by a small battery that lasts up to 5 years. The LCD screen displays information such as instantaneous flow and quantity of water that passed through the meter. The display can be customized to the needs of the District. The proposed magnetic smart meter does not contain any moving part, allowing the water to flow free from obstruction, and keeping maintenance of the meters to a minimum. The meters are also bi-directional which will allow the District to install them in tight or limited spaces. See **Figure 5**.

Materials and equipment needed to complete the Magnetic Smart Meter Installation Project include:

- 742 magnetic smart meters, varying in size
- Flanges ranging in size from 8-inches to over 12-inches, which will connect the meter to the existing delivery pipe
- Sets of bolts, nuts and fasteners to secure the meter to the flange and PVC solvent glue to ensure a proper seal
- District-owned backhoe for any minor excavation

All other equipment needed to install the meters is already owned by the Districts.

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Figure 5 – Installed Magnetic Smart Meter



The magnetic smart meters are also capable of transmitting data over a regional network, which will allow the districts to reach the next step of installing an advanced metering infrastructure system to enable receiving of data from the meters across the District. The remote monitoring system includes a database that would need to be implemented to store the daily use information from the advanced meters. Remote monitoring is not part of the current project.

IV. Evaluation Criteria

Evaluation Criterion A – Quantifiable Water Savings (28 points)

1. **Describe the amount of estimated water savings.** For projects that conserve water, please state the estimated amount of water expected to be conserved (in acre-feet per year) as a direct result of this project.

Water Savings

The proposed project will save an estimated **10,621 acre-feet (AF) of water** per year.

2. **Describe current losses:** Please explain where the water that will be conserved is currently going and how it is being used. Consider the following:
 - a) Explain where current losses are going (e.g., back to the stream, spilled at the end of the ditch, seeping into the ground)?
 - b) If known, please explain how current losses are being used. For example, are current losses returning to the system for use by others? Are current losses entering an impaired groundwater table becoming unsuitable for future use?
 - c) Are there any known benefits associated with where the current losses are going? For example, is seepage water providing additional habitat for fish or animal species?

Current Losses

Head differential water delivery readings account for 65% of the turnouts in the Districts. On average, these turnouts deliver 15.6% more water to the user than is accounted for and billed. Those losses accrue as an overapplication of surface water for irrigation, which in turn results in seepage to the ground past the rootzone of the crops. That water is “lost” to the system and not accounted for by the Districts.

The losses partially end up in the shallow aquifer within the districts, but some of those flows end up as aquifer outflow and become unusable to the districts and overlying landowners. In either case, that water overapplied as irrigation is not directly accounted for. In addition, the cost and energy use for pumping the water back out creates a negative carbon impact by requiring the use of energy to extract the water (See Evaluation Criterion B, Subcriterion b.2 - Summary Calculations). Accurately accounted for, that water would be reallocated as surface water to other users in the Districts and applied as irrigation water.

The water conserved through the project will enable the Districts to increase water allocated to the balance of the lands within the Districts and offset groundwater pumping done by those lands.

- 3. Describe the support/documentation of estimated water savings:** Please provide sufficient detail supporting how the estimate was determined, including all supporting calculations. Note: projects that do not provide sufficient supporting detail/calculations may not receive credit under this section. Please be sure to consider the questions associated with your project type (listed below) when determining the estimated water savings, along with the necessary support needed for a full review of your proposal.

Documentation of Estimated Water Savings

Documentation of savings was done through a testing process completed by the Districts comparing the current method versus the proposed new magnetic smart meters on select turnouts over a 2-year period.

Step One

Water savings were calculated through a test done by the Districts from March 2017 through September 2019 using turnouts that had both head differential measurement setup and a magnetic smart meter installed. Over the test period, 196 separate events were recorded. Each event used the volume of flow, as manually calculated using the head differential method (see Technical Description, Section III above), against the actual flow as recorded and totaled by the magnetic smart meter.

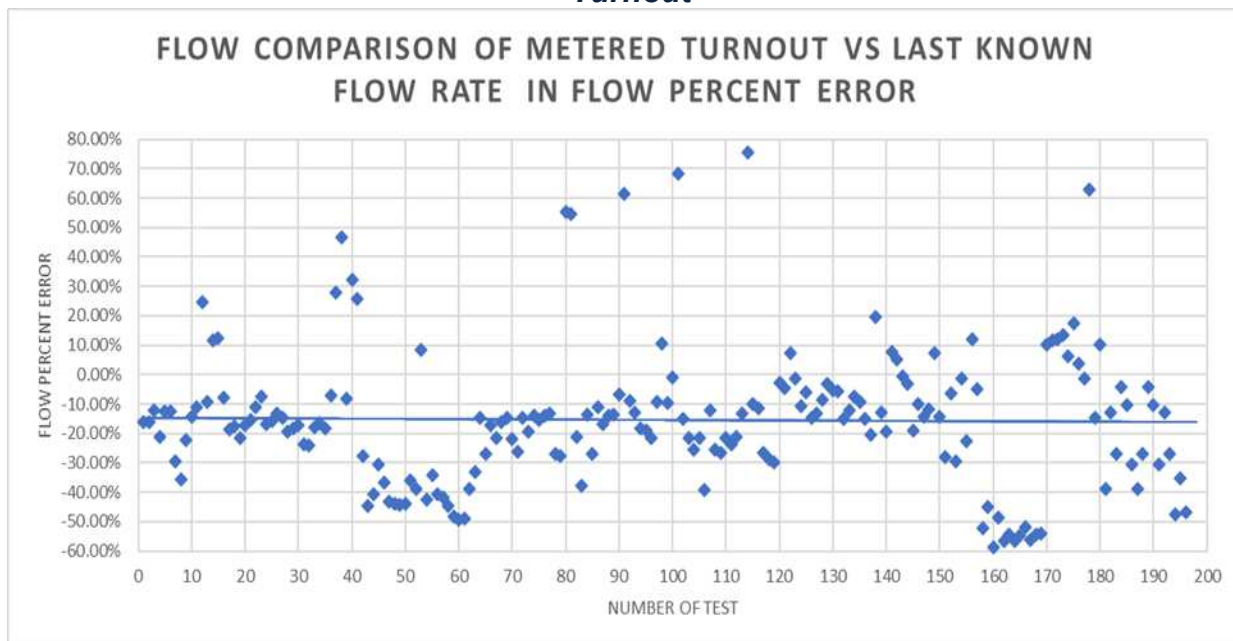
A flow percentage error was calculated by subtracting the metered flow from the head differential reading and dividing the difference into the metered flow.

$$\text{Metered flow} - \text{Head Differential} = \text{Sum} / \text{Metered Flow}$$

Those 196 events provided an average of a -15.56% flow error, meaning the Districts have delivered more water than what was actually recorded by the head differential measurement, by an average of 15% across the test site turnouts.

Figure 6 provides a scatter plot of all the readings, showing the range above and below the average flow error of -15%. The standard deviation from the mean was 23%, so 68% of the 196 events measured between -38% and +8% from the average error. See Attachment D for a complete table of the testing results.

Figure 6 – Flow Comparison of Meter Vs. Last Known Flow Rate of Gravity Turnout



Step Two

The average error in flow rate was the first step in determining the water savings. Once the flow rate error was determined, the Districts determined the percentage (65%) of the turnouts in the Districts that currently use the head differential measurement:

*Head Differential Turnouts: 742
Total District Turnouts: 1,141*

$$\text{Head Differential Turnouts} / \text{Total Turnouts} = 65\%$$

Step Three

The third step looked at the 20-year profile of water delivered through all turnouts in the Districts. A factor of 65% was applied to each year to determine how much of the water delivered to the total of all turnouts was measured using the head differential method. That sum was applied against the -15.56% error factor to

determine the annual average amount of water lost to the Districts that will be saved using the magnetic smart meters.

Table 1 below provides a summary of the data collected. The amount of water saved is estimated to be **10,621 AF/year**.

Table 1 – Average Water Saved Per Year

Water Year	Turnout Deliveries - Lower Tule	Turnout Deliveries - Pixley	Total	Head Differential Deliveries (65%)	Est. Water Not Measured -(15.56%)
2002	72,275	16,660	88,935	57,808	(8,995)
2003	119,885	19,609	139,494	90,671	(14,108)
2004	77,025	6,646	83,671	54,386	(8,462)
2005	177,265	37,901	215,166	139,858	(21,762)
2006	135,957	36,744	172,701	112,256	(17,467)
2007	32,850	5,343	38,193	24,825	(3,863)
2008	72,265	6,630	78,895	51,282	(7,979)
2009	96,686	15,228	111,914	72,744	(11,319)
2010	158,176	17,544	175,720	114,218	(17,772)
2011	170,962	37,868	208,830	135,740	(21,121)
2012	62,901	-	62,901	40,886	(6,362)
2013	35,028	3,251	38,279	24,882	(3,872)
2014	-	-	-	-	-
2015	1,284	-	1,284	835	(130)
2016	70,753	4,673	75,426	49,027	(7,629)
2017	187,821	54,868	242,689	157,748	(24,546)
2018	72,162	11,700	83,862	54,510	(8,482)
2019	172,537	52,743	225,280	146,432	(22,785)
2020	36,527	-	36,527	23,743	(3,694)
2021	14,736	5,801	20,537	13,349	(2,077)
20-Year Averages			105,015	68,260	(10,621)
Total Water Saving with a min 20 Yr. lifespan of the SMART Metering Project					(212,425)

4. Please address the following questions according to the type of infrastructure improvement you are proposing for funding. See *Appendix A: Benefit Quantification and Performance Measure Guidance* for additional guidance on quantifying water savings.

1. Canal Lining/Piping: NOT APPLICABLE
2. Municipal Metering: NOT APPLICABLE
3. **Irrigation Flow Measurement:** Irrigation flow measurement improvements can provide water savings when improved measurement accuracy results in

reduced spills and over-deliveries to irrigators. Applicants proposing municipal metering projects should address:

- a) How have average annual water savings estimates been determined?** Please provide all relevant calculations, assumptions, and supporting data.

Average annual water savings estimates were determined by comparing water delivery measured with a magnetic smart meter and water delivery using the last known flow rate measured by the ditch rider. The average error in flow rate was the first step in determining the water savings. Once the flow rate errors were determined, the Districts took the average flow error (-15.56%) and applied it against the 20-year historical average water delivered to landowners. See **Table 1** for Water Savings Calculations and Historical Data.

- b) Have current operational losses been determined?** If water savings are based on a reduction of spills, please provide support for the amount of water currently being lost to spills.

Yes, current losses are due to inaccurate surface water measurement readings obtained through the head differential method. Attachment D shows the complete testing results that compare the head differential measurement to actual meter device reading. Per the test result, an average flow error of -15.56% was found in 196 separate testing events.

- c) Are flows currently measured at proposed sites, and if so, what is the accuracy of existing devices? How has the existing measurement accuracy been established?**

Yes, flows are currently measured at the proposed sites using a head differential method (see **Figure 3** and **Figure 4**). The existing devices are typically 85% accurate. This accuracy is established by comparing the existing head differential measuring device to an actual meter. The margin for error can range in the extremes, from -58% to +68%.

- d) Provide detailed descriptions of all proposed flow measurement devices, including accuracy and the basis for the accuracy.**

The Districts are proposing to install 742 magnetic smart meters to surface water delivery turnouts. The magnetic smart meter is capable of logging flow measurement data with a guaranteed battery life of 5 years. The magnetic smart meter has multiple sensor points to deliver accuracies of +/- 2% with a factory calibration.

- e) Will annual farm delivery volumes be reduced by more efficient and timely deliveries? If so, how has this reduction been estimated?**

The Magnetic Smart Meter Installation Project will directly impact the delivery volumes to farms. The surface water delivery to farms will be more accurate using magnetic

smart meters. The proposed project will ensure more accurate and equitable distribution of surface water to farmers which is critically important, especially in dry and drought periods when surface water is allocated and limited. Total volume of surface water delivered by the District will not change; however, with proper accounting of surface water delivery, the water will remain in the system longer.

f) How will actual water savings be verified upon completion of the project?

The Districts' water savings will be verified using the same study as presented in this grant application. Data from meters will be saved using a water accounting program designed by the Districts. The Districts also own a hand-operated ultrasonic meter which can be used to manually verify the flow of each metered turnout.

4. Turf Removal: NOT APPLICABLE
5. Smart Irrigation Controllers, etc.: NOT APPLICABLE
6. High-Efficiency Indoor Appliances and Fixtures: NOT APPLICABLE
7. Commercial Cooling Systems: NOT APPLICABLE

Evaluation Criterion B – Renewable Energy (20 Points)

Subcriterion B.1: Implementing Renewable Energy Projects Related to Water Management and Delivery: **NOT APPLICABLE**

Subcriterion B.2: Increasing Energy Efficiency in Water Management

Describe any energy efficiencies that are expected to result from implementation of the water conservation or water efficiency project (e.g. reduced pumping).

- If quantifiable energy savings is expected to result from the project, please provide sufficient details and supporting calculations. If quantifying energy savings, please state the estimated amount in kilowatt hours per year.

Energy Efficiencies

The Magnetic Smart Meter Installation Project will result in an **estimated 1,987,254 kilowatt hours (kWh)** saved per year through a reduction in energy use by landowners for groundwater pumping.

Lower Tule River and Pixley Irrigation Districts both allocate surface water proportionally to the lands in the Districts. Per **Table 1**, the 20-year average water deliveries to users total 105,015 AF. The Magnetic Smart Meter Installation Project will save an estimated 10,621 AF/year through more accurate metering. That water currently gets delivered to landowners through turnouts measured by head differential measurement, but does not get accounted for due to the lack of accuracy in the measurement and metering of the head differential system. The increased efficiency of the Magnetic Smart Meter Installation Project will account for that water, adding it back into the Districts' water supply and making it available for allocation to the lands in the Districts.

Being able to add the saved water (10,621 AF/year) into the annual allocation to landowners will reduce the amount of groundwater pumped by the same factor.

Calculation of Energy Savings¹

The combined energy savings from the Magnetic Smart Meter Installation Project is estimated to be **1,987,254 kWh saved per year** or **39,745,080 kWh over the life expectancy of the installed magnetic smart meters.**

Using information provided by the University of California, the Districts estimate a well pump system uses 143.92 kilowatt hours (kWh) to pump one AF of water using the 10-year average depth to water, referenced here in **Table 2.**

Table 2 – 10-year Average Depth to Groundwater

Spring Measurement	Depth to Groundwater
2013	124.17
2014	141.62
2015	145.58
2016	156.59
2017	152.38
2018	143.05
2019	140.54
2020	125.47
2021	137.77
2022	138.27
Average	140.54

Summary Calculations

$$AF \text{ Weight: } 325,851 \text{ gallons} \times 8.345 \text{ lb/gallon} = 2,719,226 \text{ lbs}$$

$$2,719,226 \text{ lbs of water} \times 1 \text{ foot of lift} = 2,719,226 \text{ ft-lbs of energy}$$

The 10-year average District depth to groundwater is 140.54 feet - See **Table 2.**

$$2,719,226 \text{ lbs of water} \times 140.54 \text{ feet of lift} = 382,160,022 \text{ ft-lbs of energy}$$

The conversion from ft-lbs to kWh is: 1 kWh = 2,655,220 ft-lbs of energy

$$382,160,022 / 2,655,220 = 143.92 \text{ kWh per AF}$$

$$143.92 \text{ kWh per AF} \times 10,621 \text{ AF} = 1,528,657 \text{ kWh}$$

¹ Based on University of California Data: Cooperative Extension Pub. IG6-96

The total of 1.5M kWh assumes 100% efficiency in the pumping plant. Pumping plants do not operate at 100% efficiency. Energy is lost in the motor and column shaft, and friction losses occur throughout. A properly designed and adjusted pump will operate at about 70% efficiency; that is, 70% of the power goes to lifting water, the rest is used up in the mechanics of the pumping plant. To pump the entire amount of water will require an additional 30% to offset the efficiency loss

Applying a 70% efficiency factor results in a **total of 1,987,254 kWh/Year saved.**

$$1,528,657 \text{ kWh} \times 1.3 = 1,987,254 \text{ kWh}$$

- **How will the energy efficiency improvement combat/offset the impacts of climate change**, including an expected reduction in greenhouse gas emissions?

The water savings will be reallocated to the landowners as surface water which will reduce groundwater pumping by the same amount. As stated above, the annual water savings of 10,621 AF/year from the proposed Project will result in an estimated net reduction of pumping by 1,987,254 kWh/year (or 1,987 MWh/year).

The Districts themselves do not pump groundwater; the wells and pumps are privately owned. The type of pumps, efficiency and energy used varies across the district by landowner with most being electric motors with power provided directly from the local utility.

According to the EPA², the national average carbon dioxide output rate for electricity generated is 884.2 lbs CO₂ per megawatt-hour (EPA 2021), which translates to about 953.7 lbs CO₂ per megawatt-hour for delivered electricity, assuming transmission and distribution losses of 7.3%.

Based on general calculations and estimates, the proposed Project would reduce pumping by 10,621 AF/year on average, saving an estimated 1,987 MWh/year which would equate to a **reduction of 1,985,001 lbs CO₂ (900.38 metric-tons CO₂) in greenhouse gas emissions** through energy savings.

- **If the project will result in reduced pumping, please describe the current pumping requirements and the types of pumps** (e.g., size) currently being used. How would the proposed project impact the current pumping requirements and energy usage?

The District does not operate any pumps. Farmers around the District own private wells; the details on pumping requirements are not currently available.

- Please indicate whether your energy savings estimate originates from the point of diversion, or whether the estimate is based upon an alternate site of origin.
NOT APPLICABLE

² <https://www.epa.gov/energy/greenhouse-gases-equivalencies-calculator-calculations-and-references>

- Does the calculation include any energy required to treat the water, if applicable?
NOT APPLICABLE
- **Will the project result in reduced vehicle miles driven**, in turn reducing greenhouse gas emissions? Please provide supporting details and calculations.

Over the course of the 20-year lifespan of the new magnetic smart meters, **204 metric-tons of CO₂ in greenhouse gas emissions will be offset.**

By replacing the head differential measurement actions through the Magnetic Smart Meter Installation Project, District staff will need to read meters only once per month instead of the current twice-daily requirement. Trucks driving in the project area for twice-daily water measurement readings consume an average of 1,440 gallons of gas each year. Approximately 80% of that fuel consumption will be reduced (1,152 gal) with fewer trips for water meter reading required post-installation. Per the EPA website, this equates to 10.2 metric-tons of CO₂ saved each year.

This was calculated using the EPA greenhouse gas equivalencies energy calculator. **Table 3** shows the emission reduction per EPA standards.

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Table 3 – Estimated Emission Reduction Per EPA

Canal Name	Length (miles)	Driven (miles/day) ^C	Driven (miles/water year) ^A	Gasoline Consumption (gallons) per year ^B
Canal #1	51	102	4,590	230
Canal #2	52	104	4,680	234
Canal #3	54	108	4,860	243
Canal #4	51	102	4,590	230
Canal #5	50	100	4,500	225
Pixley ID East Canal	30	60	2,700	135
Pixley ID West Canal	32	64	2,880	144
Total	320	640	28,800	1,440
Reduction of Gasoline Consumption due to Magnetic Smart Metering Installation Project (80%) ^D per year				1,152
Reduction of Gasoline Consumption over the life expectancy of the Magnetic Smart Meter Installation Project (20 years)				23,040
Per EPA (Greenhouse Gas equivalencies calculator, Carbon Dioxide equivalent of Gasoline Consumption Reduction per year) (metric ton) ^E				10.2
NOTE(S)	A - Average days of water delivery in a water year is roughly 45 days			
	B - Ford F-150 average MPG is 20 miles/gallon			
	C - Head differential reading twice per day. Ditch rider has to drive the canal twice per day.			
	D - Post Smart Metering Project, ditch rider or water technician can take reading at the end of the month.			
	E - Per: https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator#results			

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- **Describe any renewable energy components** that will result in minimal energy savings/production (e.g., installing small-scale solar as part of a SCADA system).
NOT APPLICABLE

Evaluation Criterion C – Sustainability Benefits (20 points)

Enhancing drought resiliency. In addition to the separate WaterSMART Environmental Water Resources Projects NOFO, this NOFO places a priority on projects that enhance drought resiliency, through this section and other sections above, consistent with the SECURE Water Act. Please provide information regarding how the project will enhance drought resilience by benefitting the water supply and ecosystem, including the following:

- **Does the project seek to improve ecological resiliency to climate change?**

The proposed project does not relate to ecological resiliency to climate change; therefore, the question is not applicable.

- **Will water remain in the system for longer periods of time?** If so, provide details on current/future durations and any expected resulting benefits (e.g., maintaining water temperatures or water levels).

Additional Water Remaining in System

The Magnetic Smart Meter Installation Project will result in **additional water remaining in the system for 13.7 days/year**. Through implementation of the Magnetic Smart Meter Installation Project, approximately 10,621 AF/year will be saved and returned back to the surface water supply system for allocation to landowners. This will extend the average duration of the annual water delivery run by 13.7 days/year. The additional days were calculated using the total estimated water savings each year divided into the calculated AF used per day for that year, and taking an average over that 20-year period to get to 13.7 days/year. See **Table 4**.

In terms of expected benefits, this additional water will assist the Districts in the future during extreme drought events and when surface water supply deliveries critical to ecosystems are diminished during dry years. This additional water will also assist in stabilizing or increasing groundwater levels in the Tule Subbasin aquifer by reducing groundwater pumping by an amount equivalent to the water savings.

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Table 4 – Days of Water Remaining in System From Water Savings

Water Year	Turnout Deliveries - Lower Tule	Turnout Deliveries - Pixley	Total	Head Differential Deliveries (65%)	Est. Water Not Measured -(15.56%)
2002	72,275	16,660	88,935	57,808	(8,995)
2003	119,885	19,609	139,494	90,671	(14,108)
2004	77,025	6,646	83,671	54,386	(8,462)
2005	177,265	37,901	215,166	139,858	(21,762)
2006	135,957	36,744	172,701	112,256	(17,467)
2007	32,850	5,343	38,193	24,825	(3,863)
2008	72,265	6,630	78,895	51,282	(7,979)
2009	96,686	15,228	111,914	72,744	(11,319)
2010	158,176	17,544	175,720	114,218	(17,772)
2011	170,962	37,868	208,830	135,740	(21,121)
2012	62,901	-	62,901	40,886	(6,362)
2013	35,028	3,251	38,279	24,882	(3,872)
2014	-	-	-	-	-
2015	1,284	-	1,284	835	(130)
2016	70,753	4,673	75,426	49,027	(7,629)
2017	187,821	54,868	242,689	157,748	(24,546)
2018	72,162	11,700	83,862	54,510	(8,482)
2019	172,537	52,743	225,280	146,432	(22,785)
2020	36,527	-	36,527	23,743	(3,694)
2021	14,736	5,801	20,537	13,349	(2,077)
20-Year Averages			105,015	68,260	(10,621)
Total Water Saving with a min 20 Yr. lifespan of the SMART Metering Project					(212,425)

- Will the project benefit species (e.g., federally threatened or endangered, a federally recognized candidate species, a state listed species, or a species of particular recreational, or economic importance)? Please describe the relationship of the species to the water supply, and whether the species is adversely affected by a Reclamation project or is subject to a recovery plan or conservation plan under the Endangered Species Act (ESA).

The proposed project does not relate to federally threatened or endangered species or related actions; therefore, this question is not applicable.

- Please describe any other ecosystem benefits as a direct result of the project.

The proposed project does not result in any direct ecosystem benefits; therefore, this question is not applicable.

- Will the project directly result in more efficient management of the water supply? For example, will the project provide greater flexibility to water managers, resulting in a more efficient use of water supplies?

Yes. The focus of the Magnetic Smart Meter Installation Project is based on improving efficiency of water management, which in turn provides greater flexibility and efficiency

to the end user and the Districts. Efficiency and flexibility directly result from the following:

- Having accurate meter data will allow water managers to know more precisely how much water is needed to add or subtract to the system to meet District-wide demands.
- The Project provides accurate water flow measurement to ensure water rights holders and landowners are receiving the amount of water they are allocated. The current method delivers more to some and less to others, creating inequities and resulting in inefficiencies.
- The current system undercounts a high percentage of the deliveries by an average of 15%, which equates to lost revenue.
- Landowners will know much more precisely how much water they are receiving, which will provide them additional tools in on-farm irrigation efficiency. *e.g. Each crop has a target range for water applied in order to get maximum yield against evapotranspiration. A user thinks they are getting X through their turnout and designs an irrigation pattern around that amount. If that amount varies from X by a high amount, then they are shorting the crop or applying more water than is needed.*

Addressing a specific water and/or energy sustainability concern(s). Will the project address a specific sustainability concern? Please address the following:

- **Explain and provide detail of the specific issue(s) in the area that is impacting water sustainability**, such as shortages due to drought and/or climate change, increased demand, or reduced deliveries.

Specific Issues Impacting Water Sustainability

1. Shortage due to drought:

California has experienced three consecutive years of drought with a total of six of the last 10 years being at drought or near-drought precipitation levels.³

2. Reduced deliveries:

Lower Tule and Pixley are Friant Division CVP contractors. The Friant Division had contract allocation reductions through the passage of two separate federal actions:

- A. Public Law 102-575 - Central Valley Project Improvement Act
- B. Public Law 111-11 - San Joaquin River Restoration. Settlement Act

3. Climate Change:

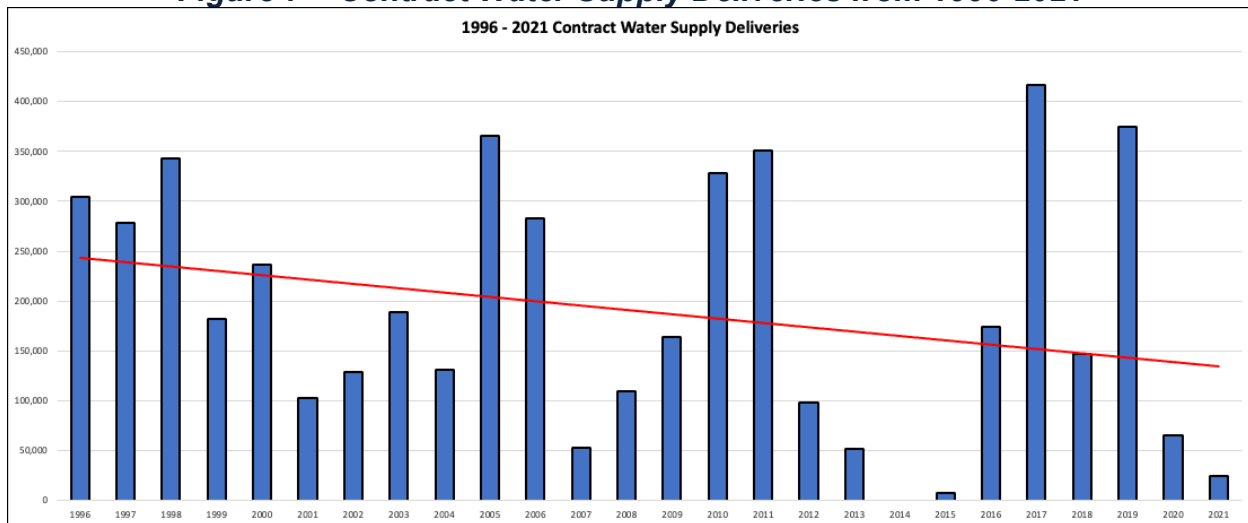
The climate change effects of reduced snowpack, increased rainfall in winter and wet and dry cycles marked by extremes in both have also affected the long-term water sustainability.⁴

³<https://water.ca.gov/water-basics/drought>

⁴<https://oag.ca.gov/environment/impact#:~:text=These%20include%3A,the%20end%20of%20the%20century.>

Figure 7 below visually demonstrates the effects of drought, reduced deliveries and climate change to the water supply delivered to Lower Tule and Pixley from 1996 through 2021. The overall trendline shows a considerable decline in water delivered over the period. The 10-year drought cycle is also visible from 2012-2021 with the entire picture showing the reduced deliveries resulting from drought, climate change and related federal actions.

Figure 7 – Contract Water Supply Deliveries from 1996-2021



- Explain and provide detail of the specific issue(s) in the area that is impacting energy sustainability, such as reliance on fossil fuels, pollution, or interruptions in service.

The proposed project does not have a specific issue in the area that impacts energy sustainability; therefore, this question is not applicable.

- Please describe how the project will directly address the concern(s) stated above. For example, if experiencing shortages due to drought or climate change, how will the project directly address and confront the shortages?

The Magnetic Smart Meter Installation Project will directly address and confront shortages by:

1. Installing magnetic smart meters that are able to measure water more accurately, resulting in an annual estimated water savings of 10,621 acre-feet/year; and
 2. Increasing the average time that water can be delivered to users by 13.7 days/year.
- Please address where any conserved water as a result of the project will go and how it will be used including whether the conserved water will be used to offset groundwater pumping, used to reduce diversions, used to address

shortages that impact diversions or reduce deliveries, made available for transfer, left in the river system, or used to meet another intended use.

The estimated water savings of an estimated 10,621 AF/year as a result of the Magnetic Smart Meter Installation Project will be allocated to landowners and water rights holders to offset groundwater pumping.

- **Provide a description of the mechanism that will be used**, if necessary, to put the conserved water to the intended use.

There are no additional mechanisms necessary to put the conserved water to use. The Districts' current allocation system will be used to allocate water savings derived from the Project.

- **Indicate the quantity of conserved water that will be used for the intended purpose(s).**

All (100%) of the water saved through the Project will be used for the intended purpose of irrigation.

Other project benefits. Please provide a detailed explanation of the project benefits and their significance. These benefits may include, but are not limited to, the following:

- (1) **Combating the Climate Crisis:** Please describe how the project will address climate change, including:
 - Please provide specific details and examples on how the project will address the impacts of climate change and help combat the climate crisis.

The Project will address climate change by reducing CO₂ output rates through energy savings and fuel use reduction.

Energy Savings

The Magnetic Smart Meter Installation Project will result in an **estimated 1,987,254 kilowatt hours (kWh)** saved per year through a reduction in energy use by landowners for groundwater pumping through adding the Project's estimated saved water (10,621 AF/year) into the annual allocation to landowners. The estimated savings in kWh also comes with a corresponding CO₂ reduction—an estimated **1,985,001 lbs CO₂ in greenhouse gas emissions** through energy savings. (See Attachment E)

Fuel Savings

With monthly meter readings instead of the current twice-daily water measurement readings, the Project will save **10.2 metric-tons of CO₂ each year, and 204 metric-tons of CO₂ over the 20-year lifespan** of the magnetic smart meters. See **Figure 9** for emission equivalencies. (See Attachment E for detailed calculations)

- **Does this proposed project strengthen water supply sustainability to increase resilience to climate change?**

The Magnetic Smart Meter Installation Project provides an estimated water savings of 10,621 AF/year. That water would otherwise be pumped as groundwater. Climate change is resulting in more extremes in water supply availability (see **Figure 7**) which requires farmers to use groundwater more often and for longer periods of time until the next wet weather event. Reducing groundwater consumption increases the resiliency of the groundwater and provides for more sustainable adaptation to climate change.

- **Will the proposed project establish and utilize a renewable energy source?**

The proposed project will not establish or utilize a renewable energy source.

- **Will the project result in lower greenhouse gas emissions?**

Yes. The proposed project lowers GGE through the reduction of power generation and reduced miles driven:

- Based on general calculations and estimates, the proposed project would reduce pumping by 10,621 AF/year on average, saving an estimated 1,987 MWh / year which would equate to a **reduction of 900.38 metric-tons CO₂** in greenhouse gas emissions through energy savings.
- Reductions resulting from vehicles not having to drive in project area for twice-daily water measurement: 10.2 metric-tons CO₂ x 20-year lifespan = **204 metric-tons of CO₂** saved.

(2) Disadvantaged or Underserved Communities: Please describe how the project supports these Executive Orders:

The proposed project does not directly serve/benefit a disadvantaged or historically underserved community; therefore, the questions associated with this criterion are not applicable.

(3) Tribal Benefits:

The proposed project does not directly serve/benefit a local Tribe; therefore, the questions associated with this criterion are not applicable.

(4) Other Benefits: Will the project address water and/or energy sustainability in other ways not described above? For example:

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

The proposed project does not assist States and water users in interstate compact compliance; therefore, this question is not applicable.

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

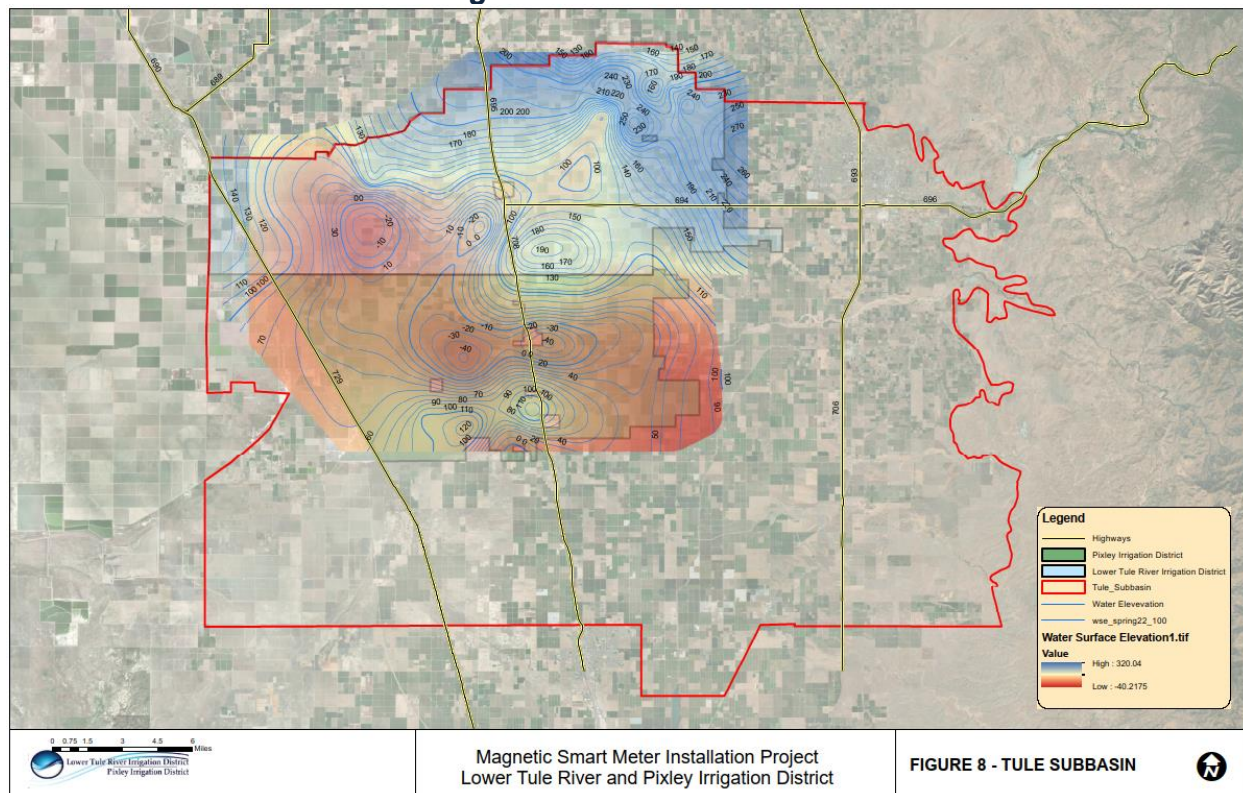
The project does not directly benefit multiple sectors/other users; therefore, this question is not applicable.

c. Will the project benefit a larger initiative to address sustainability?

The proposed Magnetic Smart Meter Installation Project will decrease groundwater pumping by an estimated 212,425 AF over a 20-year period, which directly impacts the Districts’ ability to comply with the State of California’s Sustainable Groundwater Management Act (SGMA).

SGMA was enacted into law in the State of California in 2014 and is focused on addressing groundwater overdraft by 2040. The proposed Project will be located within the Districts, which is located within the Tule Subbasin as shown in **Figure 8**. The Tule Subbasin is one of the subbasins deemed critically overdrafted by the California Department of Water Resources (DWR). Groundwater pumping is one of the factors that contributes to overdraft and declining water levels including groundwater quality impacts to local communities.

Figure 8 – Tule Subbasin



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

Yes. There is frequent tension over water both internally within the Districts and externally within the larger subbasin. The Project will assist in mitigating that tension.

Internal

The proposed Project supports accurate water delivery metering to all users in the Districts. Accurate data is key to properly managing water equitably for all users. When some users are getting more water than others, and not paying for it, that creates tension and inequities within the system. Conversely, when some users are not getting what was measured and paid for, they have a conflict with the District. The head differential measuring, and related lack of efficiency, has long been a challenge the Districts wanted to address. Changing to standard magnetic smart meters allows for that next step.

External

Legal tension over water in the region is not uncommon, and that will only get worse as water becomes more scarce and expensive. Compounding that will be the SGMA rules that now apply to all users of groundwater in California. Having accurate meter and use data will be a critical tool in helping to reduce tension and could be a key dataset if any conflict results in litigation.

Evaluation Criterion D – Complementing On-Farm Improvements (10 points)

If the proposed project will complement an on-farm improvement eligible for NRCS assistance, please address the following:

- **Describe any planned or ongoing projects** by farmers/ranchers that receive water from the applicant to improve on-farm efficiencies.
 - **Provide a detailed description of the on-farm efficiency improvements.**

The proposed Magnetic Smart Meter Installation Project will allow the Districts to save approximately 10,621 acre-feet of surface water per year. That water can then be allocated to landowners for the purpose of irrigation. The proposed magnetic smart meters will also provide landowners with accurate meter readings for the total volume of water delivery. Landowners in the District work directly with NRCS to obtain funding for various projects that will bolster on-farm efficiencies. The proposed Project will provide more data to landowners with drip irrigation systems to better schedule irrigations and make on-farm improvements through various NRCS programs.

- **Have the farmers requested technical or financial assistance from NRCS for the on-farm efficiency projects, or do they plan to in the future?**

Yes. Lower Tule River Irrigation and Pixley Irrigation District in partnership with NRCS submitted a grant application to obtain funding for programs mentioned above. Landowners within the District have successfully obtained funding for on-farm efficiency projects. Some of the successful projects include installation of drip irrigation system, installation and construction of variable frequency drive, and construction of water banking facilities.

- **If available, provide documentation that the on-farm projects are eligible for NRCS assistance, that such assistance has or will be requested, and the number or percentage of farms that plan to participate in available NRCS programs.**

Available programs are listed under the [NRCS](https://www.nrcs.usda.gov) website: [nrcs.usda.gov](https://www.nrcs.usda.gov). Approximately 50% of the farms in the Districts plan to participate in NRCS programs.

- **Applicants should provide letters of intent from farmers/ranchers in the affected project areas.**

Landowners within the District submit independent applications for projects they want to be considered by NRCS. The Districts do not have applicable letters of intent.

- **Describe how the proposed WaterSMART project would complement any ongoing or planned on-farm improvement.**
 - **Will the proposed WaterSMART project directly facilitate the on-farm improvement?** If so, how? For example, installing a pressurized pipe through WaterSMART can help support efficient on-farm irrigation practices, such as drip-irrigation.
 - OR-
 - **Will the proposed WaterSMART project complement the on-farm project by maximizing efficiency in the area? If so, how?**

Farmers in the District will benefit from the proposed Project as the magnetic smart meters will provide a more accurate amount of water delivered—this data will help landowners with drip irrigation systems to better schedule irrigations and make on-farm improvements through various NRCS programs.

- **Describe the on-farm water conservation or water use efficiency benefits that are expected to result from any on-farm work.**
 - **Estimate the potential on-farm water savings** that could result in acre-feet per year. Include support or backup documentation for any calculations or assumptions.

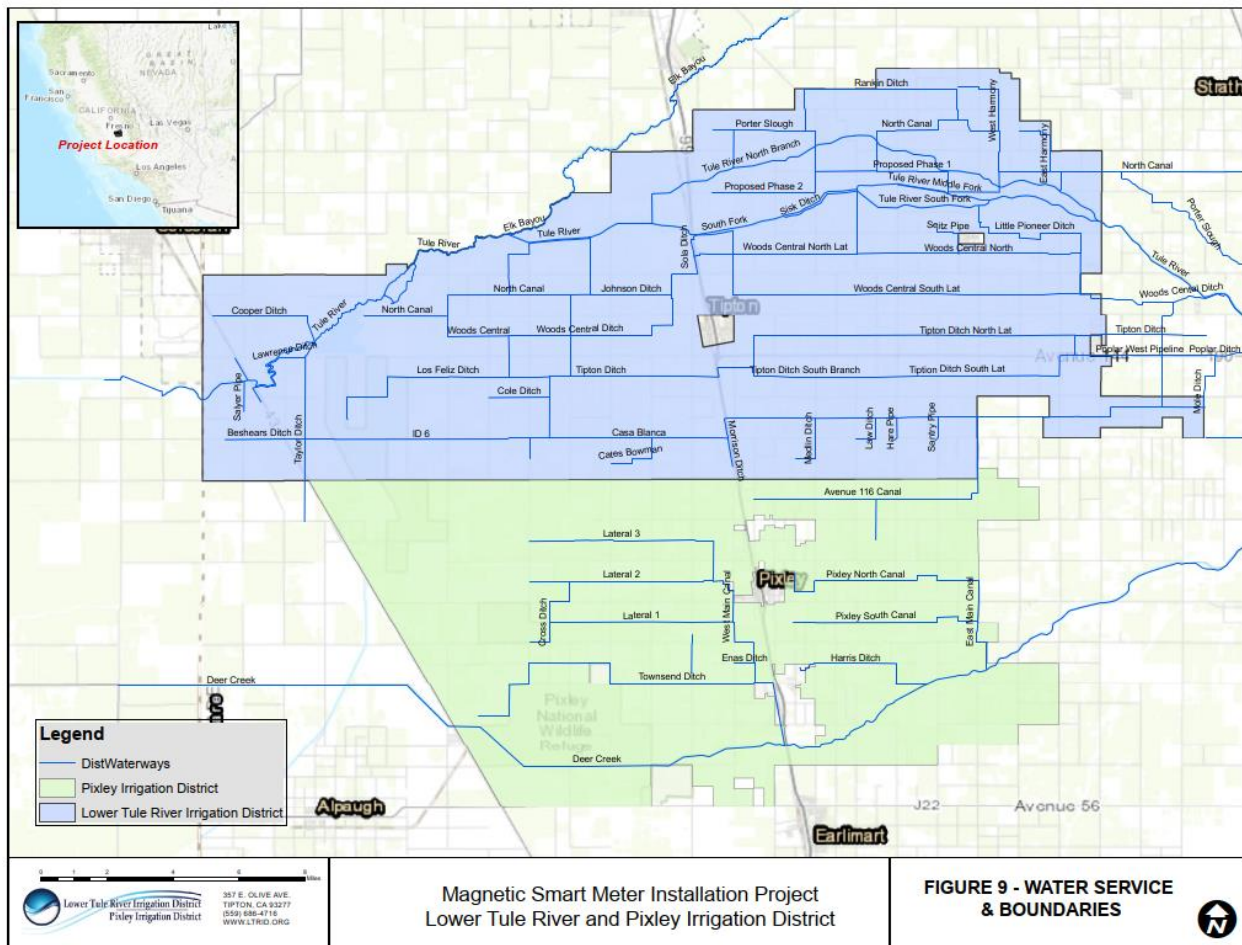
The District land encompasses over 165,000 acres of farmland; on-farm water savings will result after implementation of the proposed Project. With the implementation of the Project, accurate and timely data will be available to the District and water users.

With accurate metering devices and SGMA regulations, groundwater and surface water management will be improved. According to the study mentioned in the water savings calculation, the district would be able to conserve 10,621 AF/year. See **Table 1** for supporting calculations. The conserved surface water can be used for irrigation consumption, which will reduce groundwater pumping.

- **Please provide a map of your water service area boundaries. If your project is selected for funding under this NOFO, this information will help NRCS identify the irrigated lands that may be approved for NRCS funding and technical assistance to complement funded WaterSMART projects.**

Please see **Figure 9**.

Figure 9 – Maps of District’s Water Service Area Boundaries



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Evaluation Criterion E – Planning and Implementation (8 points)

Subcriterion E.1 - Project Planning

Does the applicant have a Water Conservation Plan and/or System Optimization Review (SOR) in place? Does the project address an adaptation strategy identified in a completed WaterSMART Basin Study? Please self-certify or provide copies of these plans where appropriate to verify that such a plan is in place. Including a specific excerpt or a link to the planning document may also be considered where appropriate.

Provide the following information regarding project planning:

(1) Identify any district-wide, or system-wide, planning that provides support for the proposed project. This could include a Water Conservation Plan, SOR, Drought Contingency Plan or other planning efforts done to determine the priority of this project in relation to other potential projects.

The Districts have three planning efforts that connect directly to the Project:

1. Water Conservation Plans
 - a. Required under the Districts federal repayment contracts (Article 27)
2. System Optimization Review
3. Groundwater Sustainability Plans

Water Conservation / Management Plans

Lower Tule River and Pixley Irrigation Districts have Water Conservation/Management Plans consistent with their federal Water Repayment Contracts.

Those plans can be found at:

- Lower Tule River Irrigation District Water Management Plan: http://www.ltrid.org/wp-content/uploads/pdf/LTRID_WMP_final2017.pdf
- Pixley Irrigation District Water Management Plan: <http://www.ltrid.org/wp-content/uploads/2022/07/pixley-water-management-plan-2017-criteria.pdf>

The Water Conservation/Management plans address metering and the planned work to refine accuracy of measurement of water deliveries.

System Optimization Reviews

Lower Tule and Pixley Irrigation District coordinated with CalPoly San Luis Obispo Irrigation Training & Research Center (ITRC) to perform a Rapid Appraisal Process (RAP) to perform a System Optimization Review (2017). One of the key ITRC

recommendations was that flow meters are needed to accurately measure water entering and leaving the delivery system.⁵

- LTRID RAP: http://www.ltrid.org/wp-content/uploads/pdf/water_supply/Lower-Tule-River-Irrigation-District-R.A.P.pdf
- Pixley ID RAP: http://www.ltrid.org/wp-content/uploads/pdf/water_supply/Pixley-Irrigation-District-R.A.P.pdf

Groundwater Sustainability Plans (GSP)

Each District drafted a GSP in compliance with the Sustainable Groundwater Management Act (SGMA). The GSP identifies various sets of operational guidelines, rules, and regulations that are being developed. Under Lower Tule and Pixley ID GSPs, accuracy of surface water delivery is critical. The proposed Project will allow the District to accurately calculate the amount of water credits that can be allocated to landowners. To comply with SGMA and the rules and regulations stated under the GSPs, the need for an accurate surface water delivery metering system is vital and a priority of the District. The proposed project meets a key need of the GSP action items.

(2) Describe how the project conforms to and meets the goals of any applicable planning efforts and identify any aspect of the project that implements a feature of an existing water plan(s).

The Districts have Water Management Plans, along with a RAP System Optimization Review and Groundwater Sustainability Plans. The Districts' Water Management Plans describe its agricultural water management activities in accordance with the requirements of Reclamation and the State of California. The plan also includes descriptions of the Districts' inventory of water resources, water delivered, cropping patterns, and water inventory tables. The RAP System Optimization Review describes the improvement that the District can perform to maximize surface water delivery to farmers. The GSP describes the necessary actions of the Districts to conform with SGMA. The goals of the GSP are listed below:

- Preserve and enhance the reliability of groundwater resources.
- Ensure the long-term availability of high-quality groundwater and surface water.
- Maintain local control of groundwater resources within the District.
- Minimize impacts of groundwater pumping, including subsidence and overdraft.
- Prevent and minimize unnecessary restrictions on the groundwater use for farmers.
- Ensure coordination between District, local, and regional groundwater management activities.
- Optimize use of groundwater storage conjunctively with surface water.

⁵ Overview of Flow Meter Options - August 2015 Memo from ITRC

- Ensure that the District water users understand the steps they can take to protect and enhance groundwater supply.

(3) If applicable, provide a detailed description of how a project is addressing an adaptation strategy specifically identified in a completed WaterSMART Basin Study or Water Management Options Pilot (e.g., a strategy to mitigate the impacts of water shortages resulting from climate change, drought, increased demands, or other causes)

The District does not have a WaterSMART Basin Study or Water Management Options Pilot. The Districts' Groundwater Sustainability Plan outlines the necessary steps to reach groundwater sustainability, including accurate metering of all surface and groundwater resources.

Subcriterion E.2 - Readiness to Proceed

- **Identify and provide a summary description of the major tasks necessary to complete the project.** Note: please don't repeat the more detailed technical project description provided in D.2.2.2. Application Content. This section should focus on a summary of major tasks to be accomplished as part of the project.

Readiness to Proceed

The Districts are ready to proceed with the proposed project. The magnetic smart meter technology has been researched and selected, and the turnouts to be upgraded have been identified and cataloged in the Districts' water delivery systems. Several of the meters have already been installed as part of a beta test within the Districts. Each of the implementation tasks of the project are described below:

1. **Grant Management** - Grant management will include executing the grant agreement and all administrative work. The District will submit requests for reimbursements and all progress reports required under the grant agreement and will complete a final report and payment request.
2. **Planning and Environmental**: The Project Manager will review any CEQA and NEPA needs and complete any filings or exemption paperwork prior to the start of the project.
3. **Procurement and Installation**: The Project Manager will coordinate the purchase of the magnetic smart meters and related parts. This will include the purchase and installation of an estimated 50% of the meters during the first year and another 50% the second year to reach 100% project completion. Installation and final purchases will be timed around the water delivery season.
4. **Monitor Performance Data**: The Project Manager will monitor all performance data and input findings in biannual progress reports to Reclamation.

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

At this time, no permits are necessary to proceed. Any additional permits that may be identified in the planning process will be obtained prior to any construction activities.

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

Specifications and installation parameters will be obtained from the meter manufacturer. Pre-engineering work and design has been completed by the manufacturer and will be provided to the District as requested. The RAP System Optimization Review also describes certain parameters as a requirement for construction and installation.

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

Lower Tule and Pixley Irrigation Districts adopted a resolution to implement the project. On July 19, 2022, and July 21, 2022 during the special Board of Directors meeting by Lower Tule and Pixley ID, respectively, the Board of Directors adopted a resolution to allocate funds for the proposed project if selected by the Bureau. There were no new policies or actions required to implement the project.


- **Please also include an estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates. Milestones may include, but are not limited to, the following: complete environmental and cultural compliance; mobilization; begin construction/installation; construction/installation (50% complete); and construction/installation (100% complete). Was the expected timeline for environmental and cultural compliance discussed with the local Reclamation Regional or Area Office?**

Project Schedule

The estimated project schedule is shown in **Table 5**. The timeline for the environmental and cultural compliance was not discussed with the local Reclamation office. However, the environmental and cultural compliance schedule was based on previous similar grant applications.

Table 5 – Estimated Project Schedule

Task	Start (mm/yy)	End (mm/yy)	2022			2023					2024					2025					2026		
			JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB
Grant Submittal	07/2022	07/2022																					
Grant Award Notification	05/2023	05/2023																					
Execute Grant Agreement	06/2023	06/2023																					
NEPA Permitting Process	08/2023	09/2023																					
CEQA Permitting Process	08/2023	09/2023																					
Local Permitting Process	08/2023	09/2023																					
Project Administration	06/2023	01/2026																					
Project Report	12/2023	12/2025																					
Meter Purchase	10/2023	12/2023																					
Meter Installation	01/2024	12/2025																					
Final Report / Project Close-Out	01/2026	01/2026																					



Milestone (s)

- ◇ Grant Award Notification
- ◇ Execute Grant Agreement
- ◇ Meter Purchase
- ◇ Final Report / Project Close-out

Evaluation Criterion F – Collaboration (6 points)

Please describe how the project promotes and encourages collaboration. Consider the following:

- **Is there widespread support for the project? Please provide specific details regarding any support and/or partners involved in the project. What is the extent of their involvement in the process?**

Yes, there is widespread support for the project. Accuracy of water delivery is critical to avoiding conflict in the Districts and the region. The Districts received letters of support from the following agencies:

- Friant Water Authority
- Stone Corral Irrigation District
- Porterville Irrigation District
- Terra Bella Irrigation District
- Saucelito Irrigation District
- Tule Basin Land & Water Conservation Trust
- Exeter Irrigation District
- Ivanhoe Irrigation District
- South Valley Water Association
- Pioneer Water Company
- Tea Pot Dome Water District
- Vandalia Water District
- Campbell Moreland Water Company and
- Eastern Tule GSA

- **What is the significance of the collaboration/support?**

The Proposed Magnetic Smart Meter Installation Project promotes water management in the District which is beneficial to other water users in the basin, as demonstrated by the letters of support from many who share the same aquifer. During drought, local farmers face difficulties when surface water allocations are limited. The proposed metering project will provide farmers with accurate data to properly account for surface water that was converted to groundwater credits.

- **Will this project increase the possibility/likelihood of future water conservation improvements by other water users?**

Yes. The proposed Project will be used to accurately measure surface water delivery. The proposed magnetic smart meters will provide the District with accurate data which can be used to set trends and develop more robust surface water delivery schedules. This proposed Project will allow farmers to create their own trends, as well, by taking historical surface water delivery data. Daily flows can be stored and gathered by the landowners to preserve and optimize their supply. This can also validate the surface water delivery to private landowner recharge ponds.

- **Please attach any relevant supporting documents (e.g., letters of support or memorandum of understanding).**

Letters of support can be found in **Attachment C**.

Evaluation Criterion G – Non-Federal Funding (4 points)

Non-Federal Funding accounts for **58%** or **\$2,746,282.59** of the total project (**\$4,746,282.59**)

Evaluation Criterion H – Nexus to Reclamation (4 points)

Describe the nexus between the proposed project and a Reclamation project or Reclamation activity. Please consider:

- **Does the applicant have a water service, repayment, or operations and maintenance (O&M) contract with Reclamation?**

Both districts are Central Valley Project (CVP) contractors with water repayment contracts totaling 361,404 acre-feet from both the Friant Division and the Cross Valley Division of the CVP. The primary source of conveyance to the districts is the Friant-Kern Canal, a CVP project facility.

Lower Tule

Friant-Kern Canal 61,200 acre-feet Class 1
Friant-Kern Canal 238,000 acre-feet Class 2

Contract No:175R-2771D
Contract No:175R-2771D

Cross Valley Canal 31,200 acre-feet

Contract No:14-06-200-8237A-IR5-P

Pixley

Cross Valley Canal 31,200 acre-feet

Contract No:14-06-200-8238A-IR5-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?**

The applicant is a Reclamation Contractor.

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

Yes, the Proposed Magnetic Smart Meter Installation Project will contribute accurate water delivery data to the Tule Subbasin of the Tulare Lake Basin, through the delivery of water in the Friant-Kern Canal. The proposed Project also promotes water saving. The water saved will be used for irrigation deliveries and the preservation of groundwater supply.

- **Is the applicant a Tribe?**

No, neither the lead applicant Lower Tule River Irrigation District nor the co-applicant Pixley Irrigation District are Tribes.

V. Performance Measures

Provide a brief summary describing the performance measure that will be used to quantify actual benefits upon completion of the project (e.g., water saved or better managed, energy generated or saved). For more information calculating performance measures, see *Appendix A: Benefit Quantification and Performance Measure Guidance*.

The Project aims to:

- **accurately bill customers for actual amount of water delivered**
- **facilitate accurate and equitable distribution of water within the Districts**

Post-project (after the magnetic smart meters are installed) the improvements in **performance will be measured by comparing the last known flow rate for each turnout to the flow rate indicated by the magnetic meter, showing the amount of water saved**. The Districts will be able to convert from previously non-metered water deliveries to metered water deliveries and begin billing for actual water use using a volumetric water pricing structure.

VI. Project Budget

A. Budget Proposal

The Project budget excludes costs incurred prior to the submission of the grant application and executed agreement with the Bureau of Reclamation. The total project cost is estimated at **\$4,746,282.59** as shown in **Table 7 - Total Project Cost**. The non-

federal amount is **\$2,746,282.59**, which will be paid or supplemented from the District bank reserves. Lower Tule River Irrigation District and Pixley Irrigation District are seeking funding for **\$2,000,000** in Federal Funding Group II to accomplish the proposed Project, as shown in **Table 6 - Summary of Federal and non-Federal Funding Sources**. The total estimated cost for the proposed Project that includes district salaries, wages, fringe benefits, equipment, environmental and permitting is shown in **Table 8 - Magnetic Smart Meter Installation Project Budget Proposal**.

As the lead agency of the proposed Project, Lower Tule River Irrigation District adopted a resolution (see Attachment A-1) on July 19, 2022 during a special Board of Directors meeting to authorize the submittal of the Grant application. On July 21, a special Board of Directors meeting of the Pixley Irrigation District adopted a similar resolution in support of the Project (See Attachment A-2).

Table 6 – Summary of Federal and non-Federal Funding Sources

Funding Source	Percentage	Amount
Non-Federal Entities		
Lower Tule River and Pixley Irrigation District	58%	\$2,746,282.59
Non-Federal Subtotal		\$2,746,282.59
Other Federal Entities		
NONE	0%	\$0.00
Requested Reclamation Funding	42%	\$2,000,000.00
Total Project Funding	100%	\$4,746,282.59

Table 7 – Total Project Cost

Funding Source	Percentage	Amount
Cost to be reimbursed with the requested Federal Funding	42%	\$2,000,000.00
Cost to be paid by the Applicant	58%	\$2,746,282.59
Value of Third-party Contributions	0%	\$0.00
Total Project Funding	100%	\$4,746,282.59

Table 8 – Magnetic Smart Meter Installation Budget Project Proposal

BUDGET ITEM DESCRIPTION	Computation		Quantity Type	TOTAL
	\$/Unit	Quantity		COST
District Staff Salaries & Wages				
General Manager	\$112.98	120.00	hr.	\$13,557.60
Assistant General Manager / Operations Manager	\$77.58	80.00	hr.	\$6,206.40
District Engineer	\$46.43	160.00	hr.	\$7,428.80
Controller	\$57.89	80.00	hr.	\$4,631.20
Field Supervisor ^A	\$48.75	760.00	hr.	\$37,050.00
Maintenance 1 ^A	\$28.48	2,080.00	hr.	\$59,238.40
Maintenance 2 ^A	\$21.25	2,080.00	hr.	\$44,200.00
District Fringe Benefit				
General Manager	\$30.17	120.00	hr.	\$3,620.40
Assistant General Manager / Operations Manager	\$22.91	80.00	hr.	\$1,832.80
District Engineer	\$12.37	160.00	hr.	\$1,979.20
Controller	\$13.47	80.00	hr.	\$1,077.60
Field Supervisor ^A	\$13.11	760.00	hr.	\$9,963.60
Maintenance 1 ^A	\$6.78	2,080.00	hr.	\$14,102.40
Maintenance 2 ^A	\$5.98	2,080.00	hr.	\$12,438.40
Equipment				
8" Magnetic Meter	\$2,963.70	15.00	ea	\$44,455.50
10" Magnetic Meter	\$3,276.00	111.00	ea	\$363,636.00
12" Magnetic Meter	\$3,804.30	134.00	ea	\$509,776.20
>12" Magneting Meter	\$6,653.60	482.00	ea	\$3,207,035.20
8" PVC Flange	\$72.84	30.00	ea	\$2,185.20
10" PVC Flange	\$100.12	222.00	ea	\$22,226.64
12" PVC Flange	\$103.85	268.00	ea	\$27,831.80
>12" PVC Flange	\$329.00	964.00	ea	\$317,156.00
Fasteners (nuts and bolts)	\$2.00	11,872.00	ea	\$23,744.00
PVC Solvent Glue (128 oz)	\$76.37	25.00	ea	\$1,909.25
Environmental and Permit Compliances				
CEQA (Compliance + Filing Fees)	\$2,000.00	1.00	ea	\$2,000.00
NEPA Compliance	\$5,000.00	1.00	ea	\$5,000.00
Local Permits	\$2,000.00	1.00	ea	\$2,000.00
TOTAL AMOUNT				\$4,746,282.59
NOTE(S):A-Construction cost				

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B. Budget Narrative

Personnel - Salaries & Wages

\$112.98/hr: (*Project Manager*) Eric Limas, the General Manager for the Lower Tule River Irrigation District and Pixley Irrigation District will devote roughly 120 hours overseeing the Project. The Project Manager will execute the agreement with the Bureau of Reclamation and will review necessary documents. The documents include but are not limited to: grant agreement, quarterly or bi-annual report, approval of third party construction agreement (if needed) and final and close out report.

Year 1: \$112.98/hr x 40 hours = \$4519.20

Year 2: \$112.98/hr x 40 hours = \$4519.20

Year 3: \$112.98/hr x 40 hours = \$4519.20

Total= \$13,557.60

\$77.58/hr: (*Assistant General Manager / Operations Manager*) Mike Battles, will devote 80 hours to oversee the project construction and assist the general manager.

Year 1: \$77.58/hr x 0 hours = \$0.00

Year 2: \$77.58/hr x 40 hours = \$3,103.20

Year 3: \$77.58/hr x 40 hours = \$3,103.20

Total= \$6,206.40

\$46.43/hr: (*District Engineer*) John Michael Domondon, will contribute 160 hours to purchase the magnetic smart meters and to assist the construction for technical details as specified by the meter manufacturer.

Year 1: \$46.43/hr x 80 hours = \$3,714.40

Year 2: \$46.43/hr x 40 hours = \$1,857.20

Year 3: \$46.43/hr x 40 hours = \$1,857.20

Total= \$7,428.80

\$57.89/hr: (*Controller*) Mark Greenall will contribute 80 hours to review purchase orders, the project budget during the project implementation, and will prepare the final budget for grant agreement purposes at a rate of \$57.89 per hour.

Year 1: \$57.89/hr x 26 hours = \$1,505.14

Year 2: \$57.89/hr x 26 hours = \$1,505.14

Year 3: \$57.89/hr x 28 hours = \$1,620.92

Total= \$4,631.20

\$48.75/hr: (*Field Supervisor*) Jack Lopez, will contribute 760 hours to assist during construction. The Field Supervisor will provide installation and construction updates to the Project Manager, Asst. Manager / Operations Manager and Engineer.

Year 1: \$48.75/hr x 320 hours = \$15,600.00
Year 2: \$48.75/hr x 320 hours = \$15,600.00
Year 3: \$48.75/hr x 120 hours = \$5,850.00
Total= \$37,050.00

\$28.48/hr: (*Field Maintenance 1*) will contribute 2080 hours to perform the field installation/construction.

Year 1: \$28.48/hr x 320 hours = \$28,480.00
Year 2: \$28.48/hr x 320 hours = \$28,480.00
Year 3: \$28.48/hr x 120 hours = \$2,278.40
Total= \$59,238.40

\$21.25/hr: (*Field Maintenance 2*) will contribute 2080 hours to perform the field installation/construction.

Year 1: \$21.25/hr x 320 hours = \$21,250.00
Year 2: \$21.25/hr x 320 hours = \$21,250.00
Year 3: \$21.25/hr x 120 hours = \$1,700.00
Total= \$44,200.00

Fringe Benefits

Fringe benefits are based on hours for each staff member and include employer paid benefits: vision, dental and medical insurance. Fringe benefits also include employer paid taxes such as FICA, Medicare and unemployment. It also includes other paid taxes such as disability, workers compensation and retirement. All of the benefits apply to all personnel. Fringe rates have been computed at \$30.17 per hour for the General Manager (applied to the 120 hour estimate) and \$22.91 per hour for the Assistant General Manager / Operations Manager (applied to the 80 hour estimate).

Fringe rates have been computed at \$12.37 per hour for the District Engineer and applied to the 160 hour estimate for this position. The Controller will contribute 80 hours with a fringe rate of \$13.47 per hour. The Field Supervisor will contribute 760 hours with a computed fringe rate of \$13.11 per hour. Field Maintenance 1 and Field Maintenance 2 will contribute 2080 hours each with a computed fringe rate of \$6.78 per hour and \$5.98 per hour respectively. **Table 9 - Fringe Benefit and Salary Wage** shows the comparison of fringe benefits to the salary and wages in percentage.

Table 9 – Fringe Benefit and Salary Comparison

Fringe Benefit and Salary & Wage Comparison	Hourly Rate	Fringe Benefit (per hour)	% Fringe Benefit
General Manager	\$112.98	\$30.17	27%
Assistant General Manager / Operations Manager	\$77.58	\$22.91	30%
District Engineer	\$46.43	\$12.37	27%
Controller	\$57.89	\$13.47	23%
Field Supervisor ^A	\$48.75	\$13.11	27%
Maintenance 1 ^A	\$28.48	\$6.78	24%
Maintenance 2 ^A	\$21.25	\$5.98	28%

Travel

No travel costs are associated with the proposed Project.

Equipment

The Proposed Magnetic Smart Meter Installation Project includes the installation of 742 magnetic smart meters to accurately measure water delivery. The requested meters, in varying sizes, cost an estimated \$4,124,902.90 total. The prices were based on average prices from various manufacturers. The various meter counts, sizes and price are:

- 8-inch meter at \$2,963.90/meter or a total of \$44,455.50 for 15 meters
- 10-inch meter at \$3,276.00/meter or a total of \$363,636 for 111 meters
- 12-inch meter at \$3,804.30/meter or a total of \$509,776.20 for 134 meters
- >12-inch meters at \$6,653.60/meter or a total of \$3,207,035.20 for 482 meters

These magnetic smart meters are a permanent installation and are not available for rental.

Supplies

The proposed Magnetic Smart Meter Installation Project will install magnetic smart meters in various sizes to existing turnouts and will require various flange sizes, fasteners such as nuts and bolts, and PVC solvent glue. Prices for the flanges are determined using the previous project costs. The different flange sizes are: 8-, 10-, 12- and greater-than-12-inches in diameter; the prices are \$72.84, \$100.12, \$103.85, and \$329.00, respectively. Fastener prices are also determined by previous project costs. If fasteners are purchased in bulk, the net price per bolt and nut set is \$2.00. PVC solvent glue from Grainger is priced at \$76.37 for a 128 oz. container. A more detailed budget is located in **Table 8**.

Contractual

The majority of the work will be performed by District Staff. Outside contracting will be performed following the guideline of the existing Districts' Procurement Guidelines and may include survey, design, construction staking and material bidding. The costs included in the Project Budget are based on previous costs confirmed through similar jobs.

Construction

The Districts own all the necessary equipment and machinery that will be required for this project. The hourly rates listed have been established by the US Army Corps of Engineers within the Construction Equipment Ownership and Expense Schedule for the Region. The estimated number of project hours for the machines were extrapolated using actual numbers and data from similar past projects completed by the District.

Installation of previously mentioned magnetic smart meters, flanges, fasteners, and PVC solvent glue will be performed by District Field Maintenance Staff.

There are no other construction-related costs anticipated for the project.

See **Table 8** for more detail.

Other Costs

No other costs are anticipated for the project.

Indirect Costs

No indirect costs are anticipated for the project.

C. Funding Plan and Letter of Commitment

The lead applicant, Lower Tule River Irrigation District and co-applicant Pixley Irrigation District aim to provide an equitable and reliable surface water delivery accounting. The Proposed Magnetic Smart Meter Installation Project provides a foundational step to promote more transparent billing and water delivery statements vital to surface water management. The Districts have funding in place in both joint and individual accounts to cover the non-federal cost share for the proposed project. The District will provide the non-Federal share of the project cost from its reserve accounts. The Funds are available in the joint operations funds and individual reserves funds.

The resolution adopted July 19, 2022 by the Lower Tule River Irrigation District Board of Directors (see **Attachment A-1: Lower Tule River ID Official Resolution**) and similar resolution adopted by the Pixley Irrigation District Board of Directors' on July 21, 2022 commit to make funds available if the project is selected for funding by the Bureau of Reclamation (See **Attachment A-2: Pixley ID Official Resolution**).

Attachment B: Financial Statement includes the most current financial report showing the District's reserve fund from several different accounts.

Pre-Award Costs

No costs are anticipated before the project is approved.

VII. Environmental and Cultural Resource Considerations

- **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.

Earth-disturbing activities will be minimal during the construction of the proposed project. Sections of the buried turnout delivery pipe will be exposed using a backhoe or a shovel. Water tanks will be available to minimize impacts on the surrounding area, along with other suggested practices, such as reduced traffic speed and reduced traffic footprint in the area. Practices developed under CEQA and/or NEPA will be strictly implemented.

- **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?**

No, it is not anticipated that the Project would affect any Federal threatened or endangered species.

- **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.**

No, there are no wetland areas or other surface waters known along the Project area.

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

Lower Tule River Irrigation District and Pixley Irrigation District have owned, operated, and maintained the current water distribution system since their formation in the early 1950s and early 1960s, respectively. Various features of the distribution system have been constructed from its formation through to present day.

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- **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.**

No, the Proposed Smart Meter Project will not result in any modification of or effect to individual features of the irrigation system.

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

No. A review of the National Register of Historic Places did not show any listing for any buildings, structures, or features within the Project Location. It is not believed that the existing site is eligible for listing on the National Register of Historic Places.

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

No, 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?**

No. The proposed project does not have disproportionately high and adverse effects on low income or minority populations.

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

No, there are not known Indian sacred sites known to exist in the Project area.

- **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. The District maintenance program includes eradication of noxious weeds.

VIII. Required Permits or Approval

Prior to construction, the District will obtain all appropriate permits that are needed to construct the Smart Meter Project. All necessary permits will be completed within 4

months after a grant agreement has occurred.

Environmental Compliance Cost

The Proposed Magnetic Smart Meter Installation Project does not create any environmental impact. The District will work with Reclamation Staff to complete the National Environmental Policy Act (NEPA). It is estimated that NEPA efforts will cost around \$15,000 to complete the proper documentation; the estimate was based on a previous grant received from the Bureau. Through a previous Reclamation grant, a negative declaration of California Environmental Quality Act (CEQA) will be filed with Tulare County for minimum ground disturbance. It is estimated that CEQA will cost around \$5,000, which includes the filing fee and time to prepare the necessary documents.

VIX. Overlap or Duplication of Effort Statement

The proposed project does not overlap with any other active or anticipated proposals or projects.

X. Conflict of Interest Disclosure Statement

There is no known existing or potential conflict of interest.

XII. Uniform Audit Reporting Statement

The Districts were not required to submit a uniform audit report.

XIII. Letters of Support

Letter of Support can be found in **Attachment D**.

XIV. Official Resolution

Official Resolution can be found in **Attachment A-1** and **Attachment A-2**.

Attachment A-1: Lower Tule River Irrigation District Official Resolution

**RESOLUTION NO. 2022-7-2
OF THE BOARD OF THE DIRECTORS OF THE
LOWER TULE RIVER IRRIGATION DISTRICT**

WHEREAS, the Lower Tule River Irrigation District (LTRID) receives water supplies from the Central Valley Project (CVP) through its water service and repayment contract with United States Bureau of Reclamation (Reclamation) and from Tule River through appropriate water rights; and

WHEREAS, the Pixley Irrigation District is a co-applicant to the grant application; and

WHEREAS, the Board of Directors of the Districts support the Project and the water management benefits provided thereby; and

WHEREAS, the District desires to apply and secure funds that may be made available thereto from the United States Department of Interior, Bureau of Reclamation (USBR) from the WaterSMART Grants: Water and Energy Efficiency Grants for Fiscal Year (FY) 2023 with a Notice of Funding Opportunity (NOFO) No. R23AS00008; and

WHEREAS, said Project will consist of advance meter infrastructure (AMI) procurement and installation, all of which can be constructed and made operational within the timeframe as may be established by USBR; and

WHEREAS, the District possesses cash reserves dedicated for new facilities and capital projects sufficient to provide funding and in-kind contributions as specified in the project Funding Plan; and

WHEREAS, the District pledges to cooperate with USBR in meeting deadlines established thereby for the purpose of entering into Cooperative Agreement (Agreement) therewith.

NOW THEREFORE, BE IT RESOLVED by the Board of Directors of the Lower Tule River Irrigation District that it (a) has reviewed and supports the Project (b) the District has in its possessions sufficient funds and can furnish in-kind contributions to fulfill its funding requirements and identified the Project Funding Plan.

BE IT FURTHER RESOLVED that, if selected by the USBR for a grant from the Grant Program, the General Manager of the District is hereby authorized to execute a Cooperative Agreement therewith and the District shall cooperate with USBR to ensure timely execution of said Agreement.

THE FOREGOING RESOLUTION WAS ADOPTED at a special meeting of the Board of Directors of the Lower Tule River Irrigation District held the 19th of July 2022 motion by Director MendonSA and second by Director COSTA and unanimously approved.

ATTEST:

I, Eric Limas, Secretary of the Board of Directors of the Lower Tule River Irrigation District, hereby certify that the foregoing Resolution was introduced at a special meeting of the Board of Directors of said District, held on the 19th of July 2022, and was adopted at the meeting by the following vote:

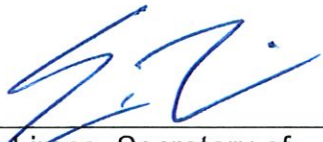
AYES: Barcellos, COSTA, MendonSA, Garcia

NOES: 0

ABSTAIN: 0

ABSENT: PitigliANO

ATTEST:



Eric Limas, Secretary of
the Board of Directors of
Lower Tule River Irrigation District

Attachment A-2: Pixley Irrigation District Official Resolution

**RESOLUTION NO. 2022-7-2
OF THE BOARD OF THE DIRECTORS OF THE
PIXLEY IRRIGATION DISTRICT**

WHEREAS, the Pixley Irrigation District (PIXID) receives water supplies from the Central Valley Project (CVP) through its water service and repayment contract with United States Bureau of Reclamation (Reclamation) and from transfers and exchanges from other CVP contractors; and

WHEREAS, the Lower Tule River Irrigation District is a co-applicant to the grant application; and

WHEREAS, the Board of Directors of the Districts support the Project and the water management benefits provided thereby; and

WHEREAS, the District desires to apply and secure funds that may be made available thereto from the United States Department of Interior, Bureau of Reclamation (USBR) from the WaterSMART Grants: Water and Energy Efficiency Grants for Fiscal Year (FY) 2023 with a Notice of Funding Opportunity (NOFO) No. R23AS00008; and

WHEREAS, said Project will consist of advance meter infrastructure (AMI) procurement and installation, all of which can be constructed and made operational within the timeframe as may be established by USBR; and

WHEREAS, the District possesses cash reserves dedicated for new facilities and capital projects sufficient to provide funding and in-kind contributions as specified in the project Funding Plan; and

WHEREAS, the District pledges to cooperate with USBR in meeting deadlines established thereby for the purpose of entering into Cooperative Agreement (Agreement) therewith.

NOW THEREFORE, BE IT RESOLVED by the Board of Directors of the Pixley Irrigation District that it (a) has reviewed and supports the Project (b) the District has in its possession sufficient funds and can furnish in-kind contributions to fulfill its funding requirements and identified the Project Funding Plan.

BE IT FURTHER RESOLVED that, if selected by the USBR for a grant from the Grant Program, the General Manager of the District is hereby authorized to execute a Cooperative Agreement therewith and the District shall cooperate with USBR to ensure timely execution of said Agreement.

THE FOREGOING RESOLUTION WAS ADOPTED at a special meeting of the Board of Directors of the Pixley Irrigation District held the 21st of July 2022 motion by Director Westbrook and second by Director Schott and unanimously approved.

ATTEST:

I, Eric Limas, Secretary of the Board of Directors of the Pixley Irrigation District, hereby certify that the foregoing Resolution was introduced at a special meeting of the Board of Directors of said District, held on the 21st of July 2022, and was adopted at the meeting by the following vote:

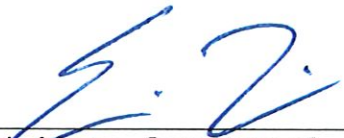
AYES: *Junto, DeGroot, Parneira, Schott, Westbrook*

NOES: *0*

ABSTAIN: *0*

ABSENT: *0*

ATTEST:



Eric Limas, Secretary of
the Board of Directors of
Pixley Irrigation District

Attachment C: Letter of Support



Cliff Loeffler
Lindsay-Strathmore I.D.
Chairman of the Board

Edwin Camp
Arvin-Edison W.S.D.
Vice Chairman

Jim Erickson
Madera I.D.
Secretary/Treasurer

Kole Upton
Chowchilla W.D.

Jerry Dyer
City of Fresno

George Porter
Fresno I.D.

Loren Booth
Hills Valley I.D.

Chris Tantau
Kaweah Delta W.C.D.

Michael Brownfield
Lindmore I.D.

Josh Pitigllano
Lower Tule River I.D.

Kent H. Stephens
Kern-Tulare W.D.

Arlen Miller
Orange Cove I.D.

Eric Borba
Porterville I.D.

Steven G. Kislung
Saucelito I.D.

Matt Leider
Tea Pot Dome W.D.

Edwin L. Wheaton
Terra Bella I.D.

Rick Borges
Tulare I.D.

Jason R. Phillips
Chief Executive Officer

854 N. Harvard Ave.
Lindsay, CA 93247

1121 L St., Ste. 610
Sacramento, CA 95814

(559) 562-6305

July 11, 2022

Recipient Name
Bureau of Reclamation
Attn: Mr. Josh German
Mail Code: MP-400
2800 Cottage Way
Sacramento, California 95825

RE: Joint Lower Tule River Irrigation District and Pixley Irrigation District Magnetic Metering Project WaterSMART Grant: Water and Efficiency Grant Application for FY 2023

Dear Mr. German,


The Friant Water Authority supports the effort of Lower Tule River Irrigation District (LTRID) and Pixley Irrigation District (Pix ID) in their pursuit of a WaterSMART Grant: Water and Efficiency Grant Application from the United States Department of Interior, Bureau of Reclamation (Reclamation) for Fiscal Year 2023. The WaterSMART program funds projects that achieve sustainable water savings and water reliability benefits. This project aligns with the mission of the Water SMART program as the Magnetic Metering Project replaces head differential measurement with a more accurate and advanced technology utilizing a magnetic pulse meter device.

The Friant Water Authority recognizes the importance of sound water management and the significance it plays in the sustainability of local water supplies. The Friant Water Authority, Lower Tule River Irrigation District and Pixley Irrigation District have a long history of coordinating water management projects and programs aimed to better account for and manage water supplies in the area. The Magnetic Metering Project is envisioned to be one of these projects that will assist Districts to achieve sustainable water savings and broader water reliability benefit. The Friant Water Authority strongly encourages Reclamation to consider funding this project.

Sincerely,

Johnny Amaral
Chief Operating Officer

JA/tm



Protect farmers and
their water!

STONE CORRAL IRRIGATION DISTRICT

37656 ROAD 172
VISALIA, CA

e-mail

wwest@stonecorralid.org

Phone

OFFICE (559) 528-4408

CELL (559) 804-5743

MAILING ADDRESS

P.O. BOX 367

IVANHOE, CA 93235-0367

7/11/2022

Bureau of Reclamation

Attn: Mr. Josh German

Mail Code: MP-400

2800 Cottage Way

Sacramento, California 95825

BOARD OF DIRECTORS

ART RAMIREZ-CHAIRMAN

DAVID ROBERTS-VICE CHAIR

TOM RUNYON

JOE LEAL

VACANT

**RE: Joint Lower Tule River Irrigation District and Pixley
Irrigation District Magnetic Metering Project WaterSMART
Grant: Water and Efficiency Grant Application for FY 2023**

Dear Mr. German,

Stone Corral Irrigation District (SCID) supports the effort of Lower Tule River Irrigation District (LTRID) and Pixley Irrigation District (Pix ID) in their pursuit of a WaterSMART Grant: Water and Efficiency Grant Application from the United States Department of Interior, Bureau of Reclamation (Reclamation) for Fiscal Year 2023. The WaterSMART program funds project that achieves sustainable water savings and water reliability benefits. As we understand, the proposed Magnetic Metering Project replaces head differential measurement with a more accurate and advanced technology utilizing a magnetic pulse meter device.

The SCID recognizes the importance of sound water management and the significant it plays in sustainability of local water supply. The SCID, Lower Tule River Irrigation District and Pixley Irrigation District have a long history of coordinating water management projects and programs aimed to better account and manage water supplies in the area. The Magnetic Metering Project is envisioned to be one of these projects that will assist Districts to achieve sustainable water savings and broader water reliability benefit. The SCID strongly

encourages Reclamation to consider funding the Project in their
pursuit of this grant application.

Respectfully,



Gene Kilgore
General Manager

SEAN P. GEIVET
General Manager

JODY A. GRISWOLD-
BRATCHER
Secretary-Treasurer
Assessor/Collector

AUBREY A. MAURITSON
Ruddell, Stanton, Bixler, Mauritsen
& Evans LLP



ERIC L. BORBA
President

DAVID E. GISLER
Vice-President

TIMOTHY J. WITZEL
Director

JOSEPH "BRETT" McCOWAN
Director

EDWIN L. CHAMBERS
Director

July 14, 2022

**BUREAU OF RECLAMATION
ATTN: MR. JOSH GERMAN
MAIL CODE: MP-400
2800 COTTAGE WAY
SACRAMENTO CA 95825**

Subject: Joint Lower Tule River Irrigation District and Pixley Irrigation District Magnetic Metering Project WaterSMART Grant: Water and Efficiency Grant Application for FY 2023

Dear Mr. German,

The Porterville Irrigation District (Porterville ID) supports the effort of Lower Tule River Irrigation District (LTRID) and Pixley Irrigation District (Pix ID) in their pursuit of a WaterSMART Grant: Water and Efficiency Grant Application from the United States Department of Interior, Bureau of Reclamation (Reclamation) for Fiscal Year 2023. The WaterSMART program funds project that achieves sustainable water savings and water reliability benefits. As we understand, the proposed Magnetic Metering Project replaces head differential measurement with a more accurate and advance technology utilizing a magnetic pulse meter device.

The Porterville ID recognizes the importance of sound water management and the significant it plays in sustainability of local water supply. The Porterville ID, Lower Tule River Irrigation District and Pixley Irrigation District have a long history of coordinating water management projects and programs aimed to better account and manage water supplies in the area. The Magnetic Metering Project is envisioned to be one of these projects that will assist Districts to achieve sustainable water savings and broader water reliability benefit. The Porterville ID strongly encourages Reclamation to consider funding the Project in their pursuit of this grant application.

If you have any questions or require additional information, please do not hesitate

to contact the Porterville ID office at (559) 784-0716 or by email at portervilleid@ocsnet.net.

Sincerely,


Sean P. Geivet
General Manager

SPG/jgb

Physical: 22086 Avenue 160, Porterville CA 93257-9261
Alternate: PO Box 1248, Porterville CA 93258-1248
Phone: 559-784-0716 Fax: 559-784-6733 Email: portervilleid@ocsnet.net
Website: <https://portervilleid.org>

TERRA BELLA IRRIGATION DISTRICT

24790 Avenue 95
Terra Bella CA 93270

Established 1915

559/535-4414
Fax 559/535-5168

EDWIN L. WHEATON, President
Division 3

GLEN R. FOWLER, Vice-President
Division 4

BRENT E. DOYEL
Division 1

GEOFFREY C. GALLOWAY
Division 2

ALFREDO MARTINEZ
Division 5

SEAN P. GEIVET
General Manager

ANN NELMS
Secretary-Treasurer

AUBREY CARNS MAURITSON
Legal Counsel

KELLER-WEGLEY
ENGINEERING
Consulting Engineer

July 14, 2022

Bureau of Reclamation
Attn: Mr. Josh German
Mail Code: MP-400
2800 Cottage Way
Sacramento, California 95825

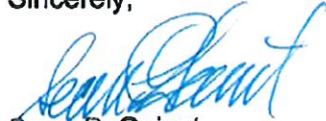
RE: Joint Lower Tule River Irrigation District and Pixley Irrigation District Magnetic Metering Project WaterSMART Grant: Water and Efficiency Grant Application for FY 2023

Dear Mr. German,

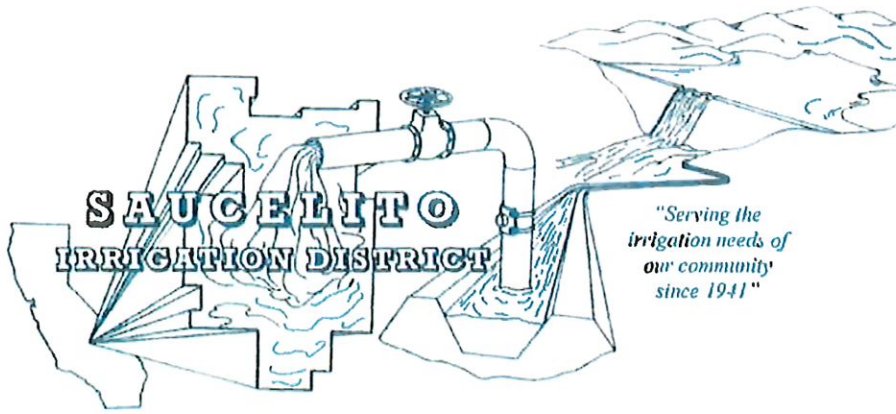
Terra Bella Irrigation District supports the effort of Lower Tule River Irrigation District (LTRID) and Pixley Irrigation District (Pix ID) in their pursuit of a WaterSMART Grant: Water and Efficiency Grant Application from the United States Department of Interior, Bureau of Reclamation (Reclamation) for Fiscal Year 2023. The WaterSMART program funds project that achieves sustainable water savings and water reliability benefits. As we understand, the proposed Magnetic Metering Project replaces head differential measurement with a more accurate and advance technology utilizing a magnetic pulse meter device.

The *Terra Bella Irrigation District* recognizes the importance of sound water management and the significant it plays in sustainability of local water supply. The *Terra Bella Irrigation District*, Lower Tule River Irrigation District and Pixley Irrigation District have along history of coordinating water management projects and programs aimed to better account and manage water supplies in the area. The Magnetic Metering Project is envisioned to be one of these projects that will assist Districts to achieve sustainable water savings and broader water reliability benefit. The *Terra Bella Irrigation District* strongly encourages Reclamation to consider funding the Project in their pursuit of this grant application.

Sincerely,



Sean P. Geivet,
General Manager



Saucelito Irrigation District

Board of Directors:

Eric R. Merritt, President
Steven G. Kisling, V.P.
Lucille Demetriff
Jeffrey M. Noble
Mark O. Merritt

Manager/Assistant Secretary

Sean P. Geivet

Assessor, Collector, Treasurer, Secretary

Diane M. Ennis

Legal Counsel

Ruddell, Stanton, Bixler,
Mauritson & Evans, LLP
Aubrey Mauritson

Date: 07/14/2022

Bureau of Reclamation
Attn: Mr. Josh German
Mail Code: MP-400
2800 Cottage Way
Sacramento, California 95825

RE: Joint Lower Tule River Irrigation District and Pixley Irrigation District Magnetic Metering Project WaterSMART Grant: Water and Efficiency Grant Application for FY 2023

Dear Mr. German,

Saucelito Irrigation District supports the effort of Lower Tule River Irrigation District (LTRID) and Pixley Irrigation District (Pix ID) in their pursuit of a WaterSMART Grant: Water and Efficiency Grant Application from the United States Department of Interior, Bureau of Reclamation (Reclamation) for Fiscal Year 2023. The WaterSMART program funds project that achieves sustainable water savings and water reliability benefits. As we understand, the proposed Magnetic Metering Project replaces head differential measurement with a more accurate and advanced technology utilizing a magnetic pulse meter device.

The *Saucelito Irrigation District* recognizes the importance of sound water management and the significant it plays in sustainability of local water supply. The *Saucelito Irrigation District*, Lower Tule River Irrigation District and Pixley Irrigation District have along history of coordinating water management projects and programs aimed to better account and manage water supplies in the area. The Magnetic Metering Project is envisioned to be one of these projects that will assist Districts to achieve sustainable water savings and broader water reliability benefit. The *Saucelito Irrigation District* strongly encourages Reclamation to consider funding the Project in their pursuit of this grant application.

Sincerely,

Sean P. Geivet
General Manager

* P.O. Box 3858 * Porterville, CA * 93258-3858 *

* (559) 784-1208 * Fax (559) 784-3116 * Emergency No. (559) 359-8975 * saucelito-id@ocsnet.net *



Tule Basin Land & Water Conservation Trust

Date: 7/12/2022

Bureau of Reclamation
Attn: Mr. Josh German
Mail Code: MP-400
2800 Cottage Way
Sacramento, California 95825

RE: Joint Lower Tule River Irrigation District and Pixley Irrigation District Magnetic Metering Project WaterSMART Grant: Water and Efficiency Grant Application for FY 2023

Dear Mr. German,

Tule Basin Land & Water Conservation Trust supports the effort of Lower Tule River Irrigation District (LTRID) and Pixley Irrigation District (Pix ID) in their pursuit of a WaterSMART Grant: Water and Efficiency Grant Application from the United States Department of Interior, Bureau of Reclamation (Reclamation) for Fiscal Year 2023. The WaterSMART program funds project that achieves sustainable water savings and water reliability benefits. As we understand, the proposed Magnetic Metering Project replaces head differential measurement with a more accurate and advanced technology utilizing a magnetic pulse meter device.

The *Tule Basin Land & Water Conservation Trust* recognizes the importance of sound water management and the significant it plays in sustainability of local water supply. The *Tule Basin Land & Water Conservation Trust*, Lower Tule River Irrigation District and Pixley Irrigation District have a long history of coordinating water management projects and programs aimed to better account and manage water supplies in the area. The Magnetic Metering Project is envisioned to be one of these projects that will assist Districts to achieve sustainable water savings and broader water reliability benefit. The *Tule Basin Land & Water Conservation Trust* strongly encourages Reclamation to consider funding the Project in their pursuit of this grant application.

Sincerely,

A handwritten signature in blue ink, appearing to read 'D. Vink', is written over a white background.

Daniel Vink



3746 W mineral king avenue,
Visalia, ca 93291



559-931-0633



admin@tuletrust.org



PRESIDENT
JOSEPH E. FERRARA
SECRETARY/MANAGER
GENE KILGORE
ATTORNEY
MINASIAN LAW

150 SOUTH E. STREET
P. O. BOX 546
EXETER, CA 93221-0546
OFFICE: (559) 592-2181
FAX: (559) 592-4464
EMAIL: OFFICE@EXETERID.ORG

DIRECTORS
JOSEPH E. FERRARA
GREGORY V. CROSSON
RALPH E. FULLER
ROBERT C. WARD
KEITH H. COSART

7/11/2022

Bureau of Reclamation
Attn: Mr. Josh German
Mail Code: MP-400
2800 Cottage Way
Sacramento, California 95825

RE: Joint Lower Tule River Irrigation District and Pixley Irrigation District Magnetic Metering Project WaterSMART Grant: Water and Efficiency Grant Application for FY 2023

Dear Mr. German,

Exeter Irrigation District (EID) supports the effort of Lower Tule River Irrigation District (LTRID) and Pixley Irrigation District (Pix ID) in their pursuit of a WaterSMART Grant: Water and Efficiency Grant Application from the United States Department of Interior, Bureau of Reclamation (Reclamation) for Fiscal Year 2023. The WaterSMART program funds project that achieves sustainable water savings and water reliability benefits. As we understand, the proposed Magnetic Metering Project replaces head differential measurement with a more accurate and advance technology utilizing a magnetic pulse meter device.

The EID recognizes the importance of sound water management and the significant it plays in sustainability of local water supply. The EID, Lower Tule River Irrigation District and Pixley Irrigation District have along history of coordinating water management projects and programs aimed to better account and manage water supplies in the area. The Magnetic Metering Project is envisioned to be one of these projects that will assist Districts to achieve sustainable water savings and broader water reliability benefit. The EID strongly encourages Reclamation to consider funding the Project in their pursuit of this grant application.

Respectfully,


Gene Kilgore
General Manager

PRESIDENT
GARY CAVIGLIA

SECRETARY/MANAGER
GENE KILGORE

DISTRICT COUNSEL
ALEX PELTZER



33777 Rd 164
VISALIA, CA 93292
OFFICE: (559) 798-1118
FAX: (559) 798-1344

DIRECTORS
DOUG PHILLIPS
BOB FELTS
VITO DELEONARDIS
STEVE PAREGIEN
TERRY PELTZER
WILLIAM SPRUITENBURG

7/11/2022

Bureau of Reclamation
Attn: Mr. Josh German
Mail Code: MP-400
2800 Cottage Way
Sacramento, California 95825

RE: Joint Lower Tule River Irrigation District and Pixley Irrigation District Magnetic Metering Project WaterSMART Grant: Water and Efficiency Grant Application for FY 2023

Dear Mr. German,

Ivanhoe Irrigation District (IID) supports the effort of Lower Tule River Irrigation District (LTRID) and Pixley Irrigation District (Pix ID) in their pursuit of a WaterSMART Grant: Water and Efficiency Grant Application from the United States Department of Interior, Bureau of Reclamation (Reclamation) for Fiscal Year 2023. The WaterSMART program funds project that achieves sustainable water savings and water reliability benefits. As we understand, the proposed Magnetic Metering Project replaces head differential measurement with a more accurate and advance technology utilizing a magnetic pulse meter device.

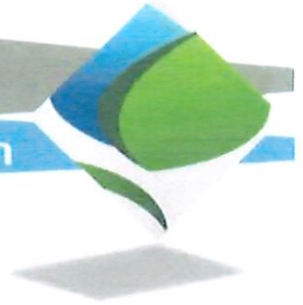
The IID recognizes the importance of sound water management and the significant it plays in sustainability of local water supply. The IID, Lower Tule River Irrigation District and Pixley Irrigation District have along history of coordinating water management projects and programs aimed to better account and manage water supplies in the area. The Magnetic Metering Project is envisioned to be one of these projects that will assist Districts to achieve sustainable water savings and broader water reliability benefit. The IID strongly encourages Reclamation to consider funding the Project in their pursuit of this grant application.

Respectfully,



Gene Kilgore
General Manager

South Valley Water Association



President
Joe Ferrara

Vice President
Kelley Hampton

Executive Director
Daniel G. Vink

General Counsel
Alex Peltzer

Member Districts

Delano-Earlimart I.D.
Exeter I.D.
Ivanhoe I.D.
Pixley I.D.
Shafter-Wasco I.D.
Stone Corral I.D.
SSJMUD

Date: 7/12/2022

Bureau of Reclamation
Attn: Mr. Josh German
Mail Code: MP-400
2800 Cottage Way
Sacramento, California 95825

RE: Joint Lower Tule River Irrigation District and Pixley Irrigation District Magnetic Metering Project WaterSMART Grant: Water and Efficiency Grant Application for FY 2023

Dear Mr. German,

South Valley Water Association supports the effort of Lower Tule River Irrigation District (LTRID) and Pixley Irrigation District (Pix ID) in their pursuit of a WaterSMART Grant: Water and Efficiency Grant Application from the United States Department of Interior, Bureau of Reclamation (Reclamation) for Fiscal Year 2023. The WaterSMART program funds project that achieves sustainable water savings and water reliability benefits. As we understand, the proposed Magnetic Metering Project replaces head differential measurement with a more accurate and advanced technology utilizing a magnetic pulse meter device.

The *South Valley Water Association* recognizes the importance of sound water management and the significant it plays in sustainability of local water supply. *South Valley Water Association*, Lower Tule River Irrigation District and Pixley Irrigation District have a long history of coordinating water management projects and programs aimed to better account and manage water supplies in the area. The Magnetic Metering Project is envisioned to be one of these projects that will assist Districts to achieve sustainable water savings and broader water reliability benefit. The *South Valley Water Association* strongly encourages Reclamation to consider funding the Project in their pursuit of this grant application.

Sincerely,

Daniel Vink

3746 W. Mineral King Ave.
Visalia, CA 93291
Tel: (559) 372-2400
Fax: (559) 553-6221



July 18, 2022

Albert Berra
President

Bureau of Reclamation
Attn: Mr. Josh German
Mail Code: MP-400
2800 Cottage Way
Sacramento, California 95825

Keith Watkins
Director

Guido Allan Lombardi
Director

RE: Joint Lower Tule River Irrigation District and Pixley Irrigation District
Magnetic Metering Project WaterSMART Grant: Water and Efficiency Grant
Application for FY 2023

Julia Inestroza
Director

Dear Mr. German,

Michael Knight
Director

Pioneer Water Company (PWC) supports the effort of Lower Tule River Irrigation District (LTRID) and Pixley Irrigation District (Pix ID) in their pursuit of a WaterSMART Grant: Water and Efficiency Grant Application from the United States Department of Interior, Bureau of Reclamation (Reclamation) for Fiscal Year 2023. The WaterSMART program funds project that achieves sustainable water savings and water reliability benefits. As we understand, the proposed Magnetic Metering Project replaces head differential measurement with a more accurate and advance technology utilizing a magnetic pulse meter device.

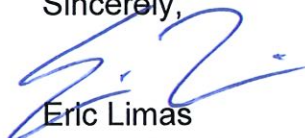
Alex Peltzer
Legal Counsel

The PWC recognizes the importance of sound water management and the significant it plays in sustainability of local water supply. The PWC, Lower Tule River Irrigation District and Pixley Irrigation District have along history of coordinating water management projects and programs aimed to better account and manage water supplies in the area. The Magnetic Metering Project is envisioned to be one of these projects that will assist Districts to achieve sustainable water savings and broader water reliability benefit. The PWC strongly encourages Reclamation to consider funding the Project in their pursuit of this grant application.

Operating Agent
*Lower Tule River
Irrigation District*

Contact
Eric L. Limas

Sincerely,



Eric Limas
General Manager

357 E. Olive Avenue
Tipton, Ca 93272
Office: (559) 686-4716
Fax: (559) 686-0151

Tea Pot Dome Water District

Since 1954

Matthew Leider
President

Dyson Schneider
Vice President

Tim Peltzer
Director

David Sherwood
Director

Ron Castro
Director

Eric Limas
General Manager

Alex Peltzer
Legal Counsel

July 18, 2022

Bureau of Reclamation
Attn: Mr. Josh German
Mail Code: MP-400
2800 Cottage Way
Sacramento, California 95825


RE: Joint Lower Tule River Irrigation District and Pixley Irrigation District
Magnetic Metering Project WaterSMART Grant: Water and Efficiency Grant
Application for FY 2023

Dear Mr. German,

Tea Pot Dome Water District (TPDWD) supports the effort of Lower Tule River Irrigation District (LTRID) and Pixley Irrigation District (Pix ID) in their pursuit of a WaterSMART Grant: Water and Efficiency Grant Application from the United States Department of Interior, Bureau of Reclamation (Reclamation) for Fiscal Year 2023. The WaterSMART program funds project that achieves sustainable water savings and water reliability benefits. As we understand, the proposed Magnetic Metering Project replaces head differential measurement with a more accurate and advanced technology utilizing a magnetic pulse meter device.

The TPDWD recognizes the importance of sound water management and the significant it plays in sustainability of local water supply. The TPDWD, Lower Tule River Irrigation District and Pixley Irrigation District have along history of coordinating water management projects and programs aimed to better account and manage water supplies in the area. The Magnetic Metering Project is envisioned to be one of these projects that will assist Districts to achieve sustainable water savings and broader water reliability benefit. The TPDWD strongly encourages Reclamation to consider funding the Project in their pursuit of this grant application.

Sincerely,


Eric Limas
General Manager

357 E. Olive Avenue
Tipton, CA 93272
(559) 686-4716
FAX (559) 686-0151
e-MAIL ltrid@ltrid.org



Vandalia

Water District

Steve Meier
President

Dyson Schneider
Vice-President

William Bennett
Director

Richard Job
Director

Jim Zimmerman
Director

Eric Limas
General Manager

Beth Grote-Lewis
Assessor

Alex Peltzer
Legal Council

357 E. Olive Avenue
Tipton, CA 93272
PH (559) 686-4716
FAX (559) 686-0151
Email: ltrid@ltrid.org

July 18, 2022

Bureau of Reclamation
Attn: Mr. Josh German
Mail Code: MP-400
2800 Cottage Way
Sacramento, California 95825

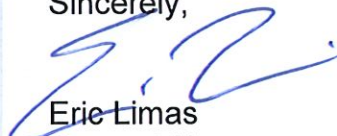
RE: Joint Lower Tule River Irrigation District and Pixley Irrigation District
Magnetic Metering Project WaterSMART Grant: Water and Efficiency
Grant Application for FY 2023

Dear Mr. German,

Vandalia Water District (VWD) supports the effort of Lower Tule River Irrigation District (LTRID) and Pixley Irrigation District (Pix ID) in their pursuit of a WaterSMART Grant: Water and Efficiency Grant Application from the United States Department of Interior, Bureau of Reclamation (Reclamation) for Fiscal Year 2023. The WaterSMART program funds project that achieves sustainable water savings and water reliability benefits. As we understand, the proposed Magnetic Metering Project replaces head differential measurement with a more accurate and advanced technology utilizing a magnetic pulse meter device.

The VWD recognizes the importance of sound water management and the significant it plays in sustainability of local water supply. The VWD, Lower Tule River Irrigation District and Pixley Irrigation District have along history of coordinating water management projects and programs aimed to better account and manage water supplies in the area. The Magnetic Metering Project is envisioned to be one of these projects that will assist Districts to achieve sustainable water savings and broader water reliability benefit. The VWD strongly encourages Reclamation to consider funding the Project in their pursuit of this grant application.

Sincerely,



Eric Limas
General Manager

Campbell-Moreland

Ditch Company

357 E. Olive Ave. Tipton, CA 93272 (559) 686-4716

July 18, 2022

Bureau of Reclamation
Attn: Mr. Josh German
Mail Code: MP-400
2800 Cottage Way
Sacramento, California 95825

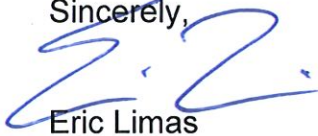
RE: Joint Lower Tule River Irrigation District and Pixley Irrigation District Magnetic Metering Project WaterSMART Grant: Water and Efficiency Grant Application for FY 2023

Dear Mr. German,

Campbell-Moreland Ditch Company (CMDC) supports the effort of Lower Tule River Irrigation District (LTRID) and Pixley Irrigation District (Pix ID) in their pursuit of a WaterSMART Grant: Water and Efficiency Grant Application from the United States Department of Interior, Bureau of Reclamation (Reclamation) for Fiscal Year 2023. The WaterSMART program funds project that achieves sustainable water savings and water reliability benefits. As we understand, the proposed Magnetic Metering Project replaces head differential measurement with a more accurate and advanced technology utilizing a magnetic pulse meter device.

The CMDC recognizes the importance of sound water management and the significant it plays in sustainability of local water supply. The CMDC, Lower Tule River Irrigation District and Pixley Irrigation District have along history of coordinating water management projects and programs aimed to better account and manage water supplies in the area. The Magnetic Metering Project is envisioned to be one of these projects that will assist Districts to achieve sustainable water savings and broader water reliability benefit. The CMDC strongly encourages Reclamation to consider funding the Project in their pursuit of this grant application.

Sincerely,



Eric Limas
General Manager

*Eastern Tule Groundwater
Sustainability Agency, JPA*

*881 W. Morton Ave, Suite D
Porterville, CA 93257
559-781-7660*

*Rogelio Caudillo
General Manager*

*easterntulegsa.com
info@easterntulegsa.com*



City of Porterville

County of Tulare

Kern-Tulare Water District

Porterville Irrigation District

Teapot Dome Water District

Terra Bella Irrigation District

Vandalia Water District

Saucelito Irrigation District

July 18, 2022

Bureau of Reclamation
Attn: Mr. Josh German
Mail Code: MP-400
2800 Cottage Way
Sacramento, California 95825


RE: Joint Lower Tule River Irrigation District and Pixley Irrigation District Magnetic Metering Project
WaterSMART Grant: Water and Efficiency Grant Application for FY 2023

Dear Mr. German,

The Eastern Tule Groundwater Sustainability Agency (ETGSA) supports the effort of Lower Tule River Irrigation District (LTRID) and Pixley Irrigation District (Pix ID) in their pursuit of a WaterSMART Grant: Water and Efficiency Grant Application from the United States Department of Interior, Bureau of Reclamation (Reclamation) for Fiscal Year 2023. The WaterSMART program funds project that achieves sustainable water savings and water reliability benefits. As we understand, the proposed Magnetic Metering Project replaces head differential measurement with a more accurate and advance technology utilizing a magnetic pulse meter device.

The ETGSA recognizes the importance of sound water management and the significant it plays in sustainability of local water supply. The ETGSA, Lower Tule River Irrigation District and Pixley Irrigation District have been great collaborators in coordinating water management projects and programs aimed to better account and manage water supplies in the region. The Magnetic Metering Project is envisioned to be one of these projects that will assist Districts to achieve sustainable water savings and broader water reliability benefit. The ETGSA strongly encourages the Bureau of Reclamation to consider funding the Project in their pursuit of this grant application.

Sincerely,


Rogelio Caudillo
General Manager.