PHASE I - LATERAL #4 CANAL EXPANSION PROJECT

US Department of Interior, Bureau of Reclamation

WaterSMART Drought Response Program: Drought Resiliency Projects for FY2023

Request for Funding Opportunity No. R23AS00005

Funding Group II and Eligible Project Section C.4.1.1



Applicant:

Pixley Irrigation District 357 E. Olive Avenue, Tipton, CA 93272

Project Manager:

Eric Limas General Manager 357 E. Olive Avenue, Tipton, CA 93272 elimas@ltrid.org (559) 686-4716

Pixley Irrigation District Lateral #4 Expansion Project

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I. Executive Summary

| Date: | June 15, 2022 | | |
|-----------------------|-----------------------------------|--|--|
| Project Name | Lateral #4 Expansion Project | | |
| Applicant Information | | | |
| Name Eric Limas | | | |
| Title | General Manager | | |
| | Pixley Irrigation District | | |
| Telephone | (559) 686-4716 | | |
| E-mail Address | elimas@ltrid.org | | |
| City, County, State | Pixley, Tulare County, California | | |

The Pixley Irrigation District (District), a Category A applicant, will construct 5.5 miles of new canals adding 5,500 acres to the total service area of the Irrigation District. The Lateral #4 Expansion Project (Project) will enable the District to increase irrigation deliveries to the region by 1,620 acre-feet on an average annual basis, reducing the demand on the critically over drafted Tule groundwater basin. California is experiencing its third consecutive year of epic drought conditions. Having the ability to deliver additional water and recharge aquifers in wet years is a key tool in mitigating drought and climate change impacts. The Lateral #4 Expansion Project will provide drought resiliency through improved aguifer conditions and enhanced water supply reliability for local farmers, the Pixley Public Utility District (PPUD), Teviston Community Service District (TCSD), and local domestic water users, capturing water that would otherwise be lost and preserving it for later use. The Lateral #4 Expansion Project is identified as drought mitigation in both the District's Groundwater Sustainability Plan (GSP) and Tule River Integrated Regional Water Management Plan (IRWMP). The Lateral #4 Expansion Project is supported by neighboring water districts, severely disadvantaged communities, and local landowners as a critical drought relief project. Lateral #4 Expansion Project construction will begin in September of 2023 and will take approximately 14 months to complete. Funding is being requested under NOFA R23AS00005. The Lateral #4 Expansion Project site is not located on any Federal facilities.

II. Project Location

The Lateral #4 Expansion Project is located in Tulare County, CA, 2.5 miles northwest of Pixley and 4 miles southwest of Tipton. More specifically, the Lateral #4 Expansion Project starts in West-Main Canal located at Road 112 and 0.5 miles north of Ave 104 more specifically with a coordinate location of 35°59'10.3"N and 119°19'18.1"W Google Earth Link. (See Figure 1 – Vicinity Map and Figure 2 – Regional Location in Appendix I – List of Figures)

III. Technical Project Description

Phase I of the Lateral #4 Expansion Project will construct a gravity distribution canal system that will allow the District to deliver surface water to an area that solely relies on groundwater supply to meet the irrigation demand of high value crops. The District is pursuing development of the surface water delivery system to a 5,500-acre service area. The open channel gravity conveyance system beginning from the end of the

existing West Main Canal terminates into a landowner-owned recharge/groundwater replenishment site. The facility will primarily run along the Avenue 116 alignment starting at Road 116 and end between Road 84 and Road 76. The new gravity distribution canal system, referred to as Lateral #4 Expansion Project, is capable of delivering roughly 70 cubic-feet per second (cfs) from the head of the canal and reduces to 35 cfs through roughly 0.5 miles of 36-inch pipeline, which is the end of the distribution system. The Lateral #4 Expansion Project is a critical piece of infrastructure for Pixley Irrigation District. The Lateral #4 Expansion Project will allow the District to capture excess surface water when it is available. Pixley Irrigation District operates under a Cross Valley Canal Contract in the amount of 31,102 acre-feet and diversion rights out of Deer Creek, an uncontrolled river.

Pixley Irrigation District also relies on cooperative agreements with irrigation districts that are adjacent to Pixley on three sides. The District has an agreement with Lower Tule River Irrigation District (North) that enables Pixley to purchase surplus water in certain water years—water that would be delivered to the Project service area. The District also has a standing agreement with the Delano Earlimart Irrigation District (South) to take delivery of any water beyond the needs of Delano, and a long term working relationship with Saucelito Irrigation District (East) who also holds a repayment contracts for Class I and/or Class II Central Valley Project (CVP) water. These agreements require the District to react quickly to deliver water whenever it becomes available, storing wet year water in the underground for drought resiliency through the dry stretches that have become regular in California.

The 75-foot-wide Lateral #4 Expansion Project will deliver water using a gravity system. Water flow is controlled by a cast-in-place weir structure equipped with channel guides. Each weir structure will contain a turnout structure or gate for point of delivery to the individual farmers, equipped with a stilling or measuring well that measures the level or head difference between the canal and the stilling well. The measured difference will be used to calculate the flow for each specific turnout size. Measurement of gravity flow is made twice a day to ensure accuracy of the water delivery. For accuracy and verification purposes, landowners are also required to install their own meters outside of the District's easements. The Lateral #4 Expansion Project includes various vehicle crossings. Each crossing will contain two buried reinforced concrete pipes (RCP), ranging in size between 36-60 inches depending on crossing, to allow water flow. The pipeline will contain various control valves for water flows at each section. Multiple air vents will be installed to ensure and maintain pressure in the line. Various pipes will be installed after the turnout to the outside toe of the canal or easement for landowner connection. Christy Box concrete covers will be installed to protect the air vents and buried turnout structures.

IV. Performance Measures

The primary performance measure to quantify the Project benefits will be the total volume of water delivered and recharged within the groundwater-reliant service area. Water delivered and recharged into the service area for irrigation purposes is measured through a gravity measurement reading in the headwall of the project. Total water

delivered to the area can be measured using a staff gauge and weir rating table. Total water delivered to individual farmers is measured through a magnetic meter (mag meter) and/or gravity flow calculation through the turnout. Measurement through the mag meter will be made with an accuracy of $\pm 0.5\%$ and measurement through the gravity calculation is within a $\pm 10\%$ deviation. The quantity of water will be tracked in acre-feet per year (AFY) and evaluated against historical District diversion in the service area.

A secondary performance measure will be shown in improved groundwater levels within the District and neighboring districts. Additional water delivered within the District for irrigation and recharge purposes will reduce the dependency on groundwater supply and allow groundwater levels to equalize and normalize. The District performs two groundwater level measurements per year: one in fall (October) and one in spring (March). Groundwater level measurement is measured with a well sounder coupled with a measuring tape. The well sounder emits sound when it touches water and the measuring tape indicates how deep the groundwater level is for the specific well. Measurement is recorded in the nearest foot. The lowest groundwater levels in the District are located in the area of the proposed Lateral #4 Expansion Project. The information gathered will be evaluated by the District to determine the impacts of switching from all groundwater to the use of canal water as a supplemental source. The summary will be completed using a Geographic Information System (GIS), or more specifically, a groundwater contour map or groundwater level map.

V. Evaluation Criteria

Evaluation Criterion A – Project Benefits (30 pts)

 How will the project build long-term resilience to drought? How many years will the project continue to provide benefits?

The Lateral #4 Expansion Project will build long-term resilience to drought by adding 1,620 acre-feet of additional water to a 5,500-acre service area that currently relies solely on groundwater. Water used to serve the area will come from CVC contract water and Deer Creek natural flows—water that Pixley currently has available but cannot provide to the service area. The water will be delivered to 5,500 acres for irrigation demand and groundwater recharge, offsetting current groundwater pumping in all years in order to preserve the groundwater for drought resilience in dry years. These deliveries and recharge efforts will protect groundwater elevations for the landowners, severely disadvantaged communities of Pixley and Teviston and other domestic well users in the area.

The Lateral #4 Expansion Project will also build long-term resiliency to drought by providing Pixley Irrigation District increased delivery capability, flood management capability, transfer/exchange opportunities, mitigation of existing canal conveyance limitation, as well as improved system efficiency. The combination of these benefits adds operational flexibility to the District that will allow areas beyond the immediate service area of the Project to receive benefits that create additional drought resiliency.

The Lateral #4 Expansion Project will provide benefits for a minimum of 50-100 years. The balance of the District's canal system is more than 60 years old and in functioning condition.

• Will the project make additional water supplies available?

Yes. The Lateral #4 Expansion Project will make additional water supplies available by providing a new delivery system to an area that solely relies on groundwater today. It will increase the District's capacity to deliver and recharge surface water, especially when river and canal systems are in flood management operations. Contracted water supplies, CVC contract water for exchange, and flood water from other Districts are not fully utilized when available because of the District's limited distribution system capacity. Pixley Irrigation District has a Central Valley Project CVC contract in the amount of 31,102 acre-feet as well as diversion from Deer Creek, a natural ephemeral river system. The District has an application (A0322246) on file with the State Water Resource Board for a diversion of up to 10,000 acre-feet. The District also has agreements in place to purchase water from Lower Tule River Irrigation District and other Districts in wet years. The Lateral #4 Expansion Project will expand the District's ability to capture, deliver and store excess surface water when it becomes available. Lower Tule and Pixley have a cooperative agreement to manage wet year water. For example, under this agreement, in 2019, Pixley was able to purchase approximately 54,000 acre-feet of water from Lower Tule River Irrigation District. Despite the additional purchases, 90,000 acre-feet of water during Millerton Reservoir flood operations was available but remained unused due to the lack of sufficient delivery infrastructure. With the Project funded and Lateral #4 Expansion Project built, water that can be accessed can also be delivered (See Appendix I - List of Tables, Table 1 - Tabulated Historical Water Supply).

> If so, what is the estimated quantity of additional supply the project will provide and how was this estimate calculated? Provide this quantity in acre-feet per year as the average annual benefit over ten years.

The average annual benefit over ten years is 16,200 acre-feet (See Appendix J – List of Figures, Figure 3 – Graphical Historical Water Supply) and over the minimum life expectancy of 50 years equates to 81,000 AF of new water supply. The conveyance of floodwater was used for the calculation. The Lateral #4 Expansion Project has access to excess water from Lower Tule River Irrigation District who has a CVP contract for 300,000 acre-feet of Friant Division water. Historically, normal water delivery for Pixley Irrigation District is available for 35 days. Historical data demonstrates that flood water is available three (3) out of ten (10) years. The Lateral #4 Expansion Project is designed to convey 70 cfs of water. Taking the average normal delivery availability of 35 days multiplied by the project design flow of 70 cfs, the Lateral #4 Expansion Project could yield approximately 4,860 acre-feet per year when surplus

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water is available. Since flood water occurs every 3 years, the average annual benefit is approximately 1,620 acre-feet per year.

Once the Lateral #4 Expansion Project is completed, other water transfer/exchanges may occur, which would increase the average annual benefit.

Since the service area solely relies on groundwater supply, the Project will reduce groundwater extraction by an annual project benefit of 1,620 acre-feet which can be stored and used for mitigation against future drought impacts. The operational term for this is "in lieu groundwater recharge." More specifically, an area that used to only use groundwater will now be able to take advantage of surface water "in-lieu" of pumping groundwater, which has the net effect of leaving that water (that would have otherwise been pumped) in the ground.

In-lieu groundwater consumption is calculated by taking the acreage of each crop in the services and multiplying the acreage of each crop by its average ET in acre-feet. See **Appendix I – List of Tables, Table 2 – Crop Demand Benefit in lieu of Groundwater Consumption.** The avoided groundwater extraction serves as a new water supply and groundwater protection by storing the groundwater in-lieu of pumping to meet crop demand for irrigation.

 What percentage of the total water supply does the additional water supply represent? How was this estimate calculated?

Over the 10-year period of 2011 through 2020, Pixley Irrigation District delivered an average of 14,745 acre-feet of surface water. An additional average annual benefit of approximately 1,620 acre-feet of surface water will amount to an 11% increase in surface water supply. The additional surface water percentage was calculated using the Lateral #4 Expansion Project's annual benefit of 1,620 acre-feet divided by the annual delivery of Pixley Irrigation District from 2011 through 2020 in the amount of 14,745 acre-feet.

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

The additional surface water provided by the Lateral #4 Expansion Project will be used to supply crop demand and recharge the groundwater aquifer, reducing groundwater reliance in the area. The reduction of groundwater reliance in the area will increase the water table or groundwater level for the severely disadvantaged communities of Pixley and Teviston as well as other domestic well users. Because of the reduction of groundwater reliance in the area, surface water supply above the crop demand will be used to replenish the groundwater supply. Groundwater replenishment will be achieved by on-farm recharge and basin recharge. These coupled benefits will provide long-term assurance and drought resiliency for the future.

 Will the project improve the management of water supplies? For example, will the project increase efficiency, increase operational flexibility, or facilitate water marketing (e.g., improve the ability to deliver water during drought or access other sources of supply)?

Yes, the Lateral #4 Expansion Project will improve the management of water supply by providing operational flexibility and improved operational efficiency through the expanded opportunity to facilitate water transfers/exchanges between Pixley Irrigation District and various water and irrigation districts.

How will the project increase efficiency or operation flexibility?

The Lateral #4 Expansion Project will increase efficiency and operational flexibility by allowing an expansion and addition of Pixley Irrigation District's delivery system. The Lateral #4 Expansion Project will allow the District to focus on surface water delivery to an area that solely relies on groundwater supply. This will allow the Pixley Irrigation District to achieve the following: (1) Selectively deliver surface water to the Lateral #4 Project service area and reduce the limitation of surface water delivery; (2) Increase operational activity by allowing landowners to take surface water delivery to use for either crop demand or to replenish local groundwater supplies; and (3) Provide more storage capacity, thus providing water and canal operators more options to deliver/store the water. The expansion of the delivery system will also allow the District to deliver more water, especially when delivery timing of flood water is limited.

 What is the estimated quantity of water that will be better managed as a result of this project? How was this estimate calculated? Provide this quantity in acre-feet per year as the average annual benefit over ten years (e.g., if the project captures flood flows in wet years, provide the average benefit over ten years including dry years).

The estimated water that will be better managed is 1,620 acre-feet per year, or approximately 16,200 acre-feet over the period of 10 years. This estimate was calculated using the maximum design flow of the canal of 70 cfs, multiplied by the average delivery of 35 days. The resulting total was divided by the frequency of flood water availability. See calculation below:

$$Better \ Water \ Managed \ (BWM) \\ = \frac{\left(Design \ Flow \ of \ Canal * 1.98356 \frac{acre - feet}{cfs} * avg. \ delivery\right)}{Average \ Flood \ year \ availability}$$

$$BWM = \frac{\left(70\ cfs * 1.98356 \frac{acre-feet}{cfs} * 35\ days\right)}{3} = 1,620\ acre-feet\ per\ year$$

Or: 16,200 acre-feet over the 10-year period.

What percentage of the total water supply does the water better managed represent? How was this estimated?

The Pixley Irrigation District delivers an average of 14,745 acre-feet per year. However, the deviation in that average is considerable. There are some years when zero surface water is available and other years when water runs in the canals for months at a time. The purpose and benefit of the Project is to capture water during the wet years and store it for the dry years to make for drought resiliency. The average annual benefit of the project will amount to 1,620 acre-feet, or 11%, that cannot be captured by the current delivery system. This is calculated by dividing the calculated annual benefit by the annual average of Pixley Irrigation District water delivery.

 Provide a qualitative description of the degree/significance of anticipated water management benefits.

The water management benefit can be described as additional water delivered to an area that solely relies on groundwater supply. The qualitative benefit will be measured by the amount of water diverted into the Project. The total amount of water delivered by the new Project will correlate to a near exact offset of groundwater that would have otherwise been pumped, causing a lower groundwater table. The Lateral #4 Expansion Project expands the delivery system allowing the District to replenish groundwater supply, thus bolstering groundwater reserves for drought resiliency.

Will the project make new information available to water managers?
 If so, what is that information and how will it improve water management?

Yes, the Lateral #4 Expansion Project will make new information available to water managers. As a result of water delivery in the area, water managers can gather information on the groundwater level elevations. The Project will likely increase the groundwater level in the area as a direct result of surface water delivery. There are specific wells the District measures twice a year, in March and October. Tabulated data will be entered into an existing database for record purposes. A Geographic Information System (GIS) program is used to plot and compare previous and current water levels to determine the effect of direct delivery of surface water to an area that solely relies on groundwater. The project will provide sensitive information for the annual updates to the Department of Water Resources under the Sustainable Groundwater Management Act (SGMA) of 2014. This will allow water managers to determine the benefits of the following surface water delivery activities: direct delivery to crop demand, delivery to groundwater replenishment sites, and reduction in groundwater supply dependency under this Project.

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

 Provide a link to the applicable drought plan, and only attach relevant sections of the plan that are referenced in the application, as an appendix to your application. These pages will be included in the total count of the application.

The primary drought plan for this Project is Pixley Irrigation District Groundwater Sustainability Plan (GSP). Relevant sections of the GSP are attached in **Appendix D – Pixley Irrigation District GSP**. The full Pixley Irrigation District GSP documents can be found in **Pixley Irrigation District GSP**.

- Explain how the applicable plan addresses drought. Proposals that reference plans clearly intended to prepare for and address drought will receive more points under this criterion.
 - Does the drought plan contain drought focused elements including a system for drought monitoring, sector vulnerability assessment related to drought, prioritized mitigation actions, and response actions to different stages of drought?

Through the Groundwater Sustainability Plan (GSP) the District has set measurable objectives in groundwater levels for drought monitoring. Those objectives include minimum threshold levels that are projected at five-year intervals. Those objectives and thresholds are monitored continuously through the bi-annual measurements to monitor groundwater level vulnerability. If the groundwater level or measurable objectives are not met, then specific mitigation actions are prioritized and taken or certain "dials" can be adjusted, such as groundwater allocation and extraction fees. For example, Pixley Irrigation District allows for "Transitional Pumping," which is a groundwater allocation to help landowners transition to sustainability. If groundwater level is determined to be lower than projected, the Board of Directors can adjust the Transitional Pumping Allocation to help groundwater levels stabilize and increase. The groundwater extraction fee related to the Transitional Pumping allocation may be increased, which encourages landowners to save their allocation for the future, thus reducing groundwater extraction. As stated above, certain restrictions or "dials" can be adjusted as a response action to different levels of droughts. Fees collected from the groundwater extraction may be used for surface water purchase, which can then be brought to the District for groundwater replenishment.

Land fallowing programs may also be used as a response action during different levels of drought. The Pixley Irrigation District has land fallowing policy may elect to pay landowners to fallow ground in exchange for their groundwater allocation. The groundwater allocation bought from landowners will remain in the groundwater supply and the supply will not be extracted. This is to help mitigate the decline of groundwater levels. Each year, managers and contractors evaluate water conditions to determine the progress to sustainability.

 Explain whether the drought plan was developed with input from multiple stakeholders. Was the drought plan developed through a collaborative process?

Yes, the Groundwater Sustainability Plan (GSP) was developed with input from multiple stakeholders including District Landowners, other irrigation and water districts, Public Utility Districts, various business representatives, disadvantaged community representatives and various public stakeholders. The GSP partners with the Pixley Public Utility District and Teviston Community Services District through Memoranda of Understanding that give those agencies a seat at the planning table. Public meetings were held to discuss and gather input from different stakeholders. Pixley Irrigation District also developed a Groundwater Planning Commission (GPC) Committee to advise the Board on the plan and groundwater management actions, which is composed of landowner representatives selected by the five members of the Board of Directors. In the GPC, participation seats are also available to Public Utility Districts. The development of the GSP was done with input and comments from various stakeholders. The development of the plan required a 60-day comment period from various stakeholders, as well. Section 6 of the GSP: Plan Implementation (see Appendix E – Outreach and Engagement Plan) Referent to Pixley ID GSA Communication, Engagement and Outreach Plan outlines the collaborative process including the public participation process and inputs.

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

Yes, the GSP takes climate change impacts into consideration in both water resources and drought. Per Section 2.4.5 of the GSP titled *Projected Water Budget*: "The projected hydrology information shall also be applied as a baseline condition...associated with projections of climate change and sea level rise." The groundwater budget projection considers the effects of climate change to 2070. Section 3.5.1 of the GSP titled *Measurable Objectives and Interim Milestones* also takes climate change into consideration. *Measurable Objectives and Interim Milestone objectives* provide the GSA guidelines on proper actions that are needed during drought years.

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

The Lateral #4 Expansion Project is a project described in the GSP, specifically in Section 5 – Project and Management Actions. The Lateral #4 Expansion Project provides multiple benefits, one of which is an additional water supply storage capability to a service area that solely relies on groundwater. The project will offset groundwater supply pumping needs of valuable crops in the service area. As climate change and projected precipitation occurs more as rain events rather than snow events, projects like this will be needed to capture and distribute these waters as quickly as possible.

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

Yes, the Lateral #4 Expansion Project, as described in the GSP, is considered a potential mitigation and response action. Under Section 5.2.2 of the GSP is the "Existing Water Supply Optimization Project" which names and describes Lateral #4 Expansion Project.

 Does the proposed project implement a goal or need identified in the drought plan?

Yes, the Lateral #4 Expansion Project implements a District goal of better preparing for future drought and implementing drought resiliency by delivering surface water for onfarm demand. The service area of the Lateral #4 Expansion Project is one of the areas with the lowest groundwater levels in the District. The Lateral #4 Expansion Project's primary goal is to deliver surface water to an area that solely relies on groundwater extraction. The direct benefit of surface water delivery is decreased groundwater extraction, resulting in a higher groundwater level. A higher groundwater level will provide a better groundwater supply and resiliency to drought in the future.

How is the proposed project prioritized in the drought plan?

The Lateral #4 Expansion Project is prioritized by evaluating project benefits. A feasibility study was done to determine the economic impact compared to the project yield. It was determined that water supply optimization (of delivering surface water versus pumping groundwater) is the quickest way to arrest the groundwater level decline and build in drought resiliency. The Project demonstrated the ability to meet key metrics of the GSP, which resulted in the Project being included in the GSP project and planning as a high priority action.

Evaluation Criterion C – Sustainability and Supplemental Benefits (15 pts)

Climate Change – E.O 14008

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

The Lateral #4 Expansion Project will help protect communities of Alpaugh, Allensworth and Corcoran, along with the Pixley National Wildlife Refuge, from Deer Creek flood flows by increasing the District's ability to divert those flows away from the channel during flood events. As it stands today, Deer Creek tends to break out of the channel banks in and around those communities and the Refuge creating overland flooding, resulting in disruption to the community and increased pressure on the Refuge's upland habitat management areas.

 Does the proposed project include green or sustainable infrastructure to improve community climate resiliency such as, but not limited to, reducing the urban heat island effect, lowering building energy demands, or reducing energy needed to manage water? Does this infrastructure complement other green solutions being implemented throughout the region or watershed?

The Lateral #4 Expansion Project will deliver surface water to a service area that solely relies on groundwater supply, which is extracted using hydrocarbons such as natural gas or electricity. The Lateral #4 Expansion Project uses gravity to deliver surface water, thus reducing the number of hydrocarbons consumed. Additionally, the reduced groundwater extraction will bring about a higher groundwater level, which will allow the disadvantaged communities of Pixley and Teviston to use less energy to pump needed groundwater.

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

Yes. The weir structures that will control the flow of water are sufficient to take and accommodate low head, small renewable hydropower turbine technologies, such as Canal Plus Technology. The low head small renewable hydropower turbine is installed at the weir structure. The kinetic flow velocity of running water will then spin the small turbine creating a small renewable energy plant. There are approximately nine structures that can be equipped with low head hydro power. Each structure is capable of producing 10 kilowatts, and a single concrete box containing two turbines can generate up to 80 megawatt-hours per year. See **Appendix J – List of Figures, Figure 4 – Canal Plus Technology** shows a similar construction using Canal Plus Technology.

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

Yes, the Lateral #4 Expansion Project promotes the replenishment of groundwater supply, which will raise groundwater elevations, improving water quality.

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

The Lateral #4 Expansion Project will not implement reduction of greenhouse gas emissions.

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

The Lateral #4 Expansion Project does not directly implement healthy lands and soils, but it will protect water supplies and its associated uses. One key component of healthy soil management is surface water supply to grow the different grasses needed to promote healthy soils. The District is also developing a healthy soils program; the pilot

program is anticipated to go online in the fourth quarter of 2022 water season. The Lateral #4 Expansion Project will promote the protection of water supplies through ensuring even distribution of surface water supply, especially to a service area that relies on groundwater.

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

As a secondary benefit of Lateral #4 Expansion Project to climate change resiliency, is the potential of the project to introduce surface water supply for groundwater recharge purposes. Groundwater recharge will sustain the groundwater level and has the potential to increase the groundwater level in the area. The introduction of surface water to the groundwater may also dilute any groundwater contaminants in the area, causing better groundwater quality. The Lateral #4 Expansion Project also promotes the practice of healthy soils programs with the delivery of surface water in the service area.

Disadvantaged or Underserved Communities – E.O. 140008

 Please describe in detail how the community is disadvantaged or underserved based on a combination of variables:

According to https://datausa.io/profile/geo/pixley-ca, 76% of the population is Hispanic, 11.9% is non-Hispanic, 7.86% is White and 3.85% is African American. Pixley is considered a low-income community. As of 2019, the median household income was \$33,824 while the average household income in the state of California was \$78,556. The disadvantaged communities around Pixley and Teviston rely heavily on jobs and income related to farming and the agriculture industry, which is threatened by drought, an environmental stressor. Also, according to https://datausa.io/profile/geo/pixley-ca, 2019 data shows that 57.9% of Pixley population relied on occupations in Farming, Fishing & Forestry. Employment in Pixley, CA, from 2018 to 2019 declined by 12.4% from 984 employees to 862 employees. This may be due to crops grown in drought being reduced in quantity or quality, which led to reduced hours and wages for local workers. The continued expansion of a delivery system can make it more economical and sustainable for these communities and businesses. Delivery of surface water to the service area through the Lateral #4 Expansion Project is vital to ensure socioeconomic growth for the farming community, especially to an area that employs local workers in a classified disadvantaged community.

Tribal Benefits

 Does the proposed project support tribal resilience to climate change and drought impacts or provide other tribal benefits such as improved public health and safety through water quality improvements, new water supplies, or economic growth opportunities? Please describe these benefits.

The project does not support tribal resilience to climate change and drought impacts or provide other tribal benefits. However, the Lateral #4 Expansion Project may add more safety through flood protection for the tribes located upstream of the Success Reservoir,

which will allow tribes to continue economic growth. Lower Tule River Irrigation District can transfer surface water to Pixley Irrigation District to allow management of Tule River in Success Reservoir during flood years.

 Does the proposed project support Reclamation's tribal trust responsibilities or a Reclamation activity with a Tribe? Please describe the benefits.

The Project has no direct nexus to Reclamation's tribal trust responsibilities or Reclamation activity with Tribe.

Environmental Benefits

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

The Lateral #4 Expansion Project promotes delivery of surface water as opposed to using the limited groundwater supply; groundwater benefits the preservation of existing habitats in place. Species such as migratory birds and local species may be preserved through specific crops grown with water delivered.

According to research titled "Farming for Birds: Alfalfa and Forage as Valuable Wildlife Habitat" by C. Alex Hartman and Keiller Kyle, alfalfa and forage crops provide habitat to several bird species such as the White-Faced Ibis, a threatened species, Long-Billed Curlew, a near-threatened species due to population decrease, and Swainson's Hawk, an endangered species under the California Endangered Species Act (CESA). Alfalfa and forage crops also provide habitat to invertebrate prey including insects, spiders, mites and earthworms. Per Hartman and Kyle, "Alfalfa is not only essential to the agriculture economy, but also for sustaining wildlife."

(https://alfalfa.ucdavis.edu/+symposium/proceedings/2010/10-61.pdf) As shown in **Table 2 – Crop Demand Benefit in Lieu of Groundwater Consumption**, nearly half of the service area is planted with alfalfa and wheat, which supports the sustainability of certain bird species. The sustained crops serve as a habitat for birds mentioned above.

Lateral #4 Expansion Project offers flood protection to the existing Pixley National Wildlife Refuge. The Lateral #4 Expansion Project relies on surface water supply that originates from the West Main Canal, which is directly tied into the uncontrolled stream of Deer Creek. The Pixley National Wildlife Refuge is located downstream of Deer Creek. Lateral #4 Expansion can take delivery of excess water that may flood the Refuge and offer storage of excess water to protect existing habitat in the area. Excess flows that can potentially flood the Refuge can be diverted to the Lateral #4 Expansion Project, protecting existing habitat and existing species.

 What are the types and quantities of environmental benefits provided, such as the types of species and the numbers of benefited, acreage or habitat

improved, restored, or protected, or the amount of stream flow added? How were these benefits calculated?

Per the publication titled "Farming for Birds: Alfalfa and Forage as Valuable Wildlife Habitat" by C. Alex Hartman and Keiller Kyle, there are three bird species and various invertebrate prey that benefit from sustained alfalfa and wheat fields. **The Lateral #4 Expansion Project promotes the sustainability of roughly 2,300 acres of alfalfa and wheat habitats** for the various birds and insects, by allowing the delivery of surface water to these crops suitable for White-Faced Ibis, Long-Billed Curlew, and Swainson's Hawk bird habitats. The benefits were calculated using the Land IQ crop data in the service area—the crops were separated into specific classifications and total acreage for sustained habitat was added.

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

Yes, as stated in the publication by Hartman and Kyle, alfalfa and wheat crops produce a similar ecosystem to wetland and grassland. The Lateral #4 Expansion Project will help sustain roughly 2,300 acres of alfalfa and wheat, providing necessary habitats for threatened species such as the White-Faced Ibis and Long Billed Curlew, endangered species such as Swainson's Hawk, and various invertebrate species.

The Lateral #4 Expansion Project offers flood protection to the Pixley National Wildlife Refuge, as stated above. The Lateral #4 Expansion Project will help sustain the existing ecosystem of Pixley National Wildlife Refuge thus promoting the sustainability of species in refuge.

This sub-criterion will be based on planned, direct benefits that will result from project implementation. Applicants that can quantify the direct benefits and provide reasonable support will receive the most points in this sub-criterion. Example project that may receive points in this category include, but not limited to:

 Increase storage to augment stream flows during dry periods to protect endangered species

The Lateral #4 Expansion Project increases the storage and delivery capacity of Pixley Irrigation District. This will allow Pixley Irrigation District to capture water when it is available. The Lateral #4 Expansion Project will directly deliver water to an area that solely relies on groundwater supply. When groundwater supply extraction reduces, the groundwater supply improves, thus providing groundwater users (such as Pixley National Wildlife Refuge) a better supply for the future. The Lateral #4 Expansion Project's primary goal is to deliver surface water to users and capture excess water when it is available. The delivery of surface water by the Lateral #4 Expansion Project will offset groundwater supply, which may be reserved and saved for use during dry periods for water users such as the Pixley National Wildlife Refuge and the species therein.

Improving water quality or providing water for wildlife habitat areas

The Lateral #4 Expansion Project indirectly offers water quality improvement and provides groundwater supply for wildlife habitat in the area by directly delivering high quality surface water to the area. High quality surface water may be used to replenish the groundwater supply, thus diluting groundwater pollution. Replenishment of groundwater supply will also bolster the groundwater level in the area used for wildlife habitat areas.

Other Benefits:

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

No, the Lateral #4 Expansion Project will not assist State and water users in complying with interstate compacts.

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

The Lateral #4 Expansion Project will result in better water management both in surface water and groundwater for agricultural users including the disadvantaged communities of Pixley and Teviston, which rely on groundwater as the primary source of water for the Pixley Public Utility District and Teviston Community Services District by delivering surface water. The delivery of surface water would mitigate decline of groundwater elevation, thus reducing overdraft in the area. The Lateral #4 Project would greatly benefit the agriculture, industrial, municipal, and environmental sectors. The project would benefit the agriculture sector by delivering surface water instead of groundwater supply extraction, relying on an overall cheaper water fee per acre. Maintaining crops by allowing surface water delivery would ensure food resources are available to the public. The Lateral #4 Expansion Project would also promote benefits to the municipal and industrial sector by allowing groundwater levels or the water table to rise, which would reduce the pumping cost and delivery of potable water to nearby disadvantaged communities. The Lateral #4 Project also offers environmental benefits to the Pixley National Wildlife Refuge by offering flood protection. Excess water that may flood the Pixley National Wildlife can be diverted to the Lateral #4 Project.

 Will the project benefit a larger initiative to address sustainability of water supplies?

Yes, the Lateral #4 Expansion Project addresses sustainability of water supply through allowing the District to capture surface water when it is available, which will be used for crop demand and groundwater replenishment purposes. Coupled with the District's groundwater allocation and extraction limitations through their GSP and SGMA, this project will allow the District to be sustainable and drought resilient well into the future.

Evaluation Criterion D – Severity of Actual or Potential Drought to be addressed by the Project (15 pts)

Describe the severity of the impacts that will be addressed by the project:

- What are the ongoing or potential drought specific sectors in the projects area if no action is taken (e.g., impacts to agriculture, environments, hydropower, recreation and tourism, forestry), and how severe are those impacts? Impacts should be quantified and documented to the extent possible. For example, impacts could include, but are not limited to:
 - Whether there are public health concerns or social concerns associated with current or potential drought conditions (e.g., water quality concerns including past or potential violations of drinking water standards, increased risk of wildfire, or past or potential shortage of drinking water supplies? Does the community have another water source available to them if their water service is interrupted?).

The disadvantaged communities of Teviston and Pixley in/near the Project area rely on groundwater for drinking water supplies. Potential drought impacts would be minimized through the Lateral #4 Expansion Project, which would serve to recharge the groundwater and bring surface water to lessen groundwater pumping needs. The disadvantaged community of Pixley and Teviston only relies on groundwater supply and does not have any other source for clean drinking water supply.

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

Ongoing or potential environmental impacts of drought to endangered, threatened or candidate species or habitat is unknown. However, local habitat and local species located in the Pixley National Wildlife Refuge, which encompasses nearly 7,000 acres may be affected with the restriction of groundwater pumping in the area, thus reducing available habitats for the local species. Ongoing drought may affect Pixley National Wildlife Species such as cranes, Canadian geese, and ibis.

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

Past drought and current drought impacts to groundwater users have resulted in a water level depression locally and as a direct result of lower water level, higher pumping and well maintenance costs for all sectors of groundwater users. Pixley Irrigation District has very low groundwater elevations due to limited surface water supply and limited distribution facilities. Per projection of Groundwater Flow Model (GFM) of the Tule Subbasin, in the GSP of the Pixley Irrigation District, interim milestones and measurable objectives, the groundwater levels will continue to decline 25 feet over the next 20 years in groundwater elevation in the service area if drought and groundwater extraction

occurs (See Appendix J – List of Figure, Figure 5 – Groundwater Flow Model Groundwater Elevation Projection) resulting in a higher pumping cost. The net result of a higher pumping cost can be calculated by taking the rate of Southern California Edition (25 feet groundwater elevation change) * (1.46 kWH/acre-foot/foot of lift) * (0.24 rate per kWH) which will result in a \$8.76 per acre-foot increase.

There are economic impacts associated with the current drought. The limited groundwater supply available for extraction will force local landowners to fallow fertile and suitable grounds. The economic impact may vary depending on the crop type. There are various crops located in the service area: Alfalfa, almonds, a variety of corn, sorghum or sudan, miscellaneous grain and hay, pistachios and wheat. Assuming that the Lateral #4 Expansion Project receives funding, See **Appendix I – List of Tables**, **Table 3 – Crop Value Saving in Service Area**, shows the possible economic sustainability of crop value savings in the service area.

The drought impact to real estate is also vital and significant. Recent appraisal shows a 5-10%¹ decline of land value in the area.

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

The ongoing drought creates a crisis of conflicts between the farming and residential sectors of the economy. The drought-affected limited groundwater supply curtails the ability of farmers to properly grow their high-value crops. Consequently, farmers who cannot afford the high-water prices due to drought may sell their land to developers turning fertile and productive ground into housing, or the farmers may elect to fallow their ground indefinitely. This may affect the food supply chain negatively by the reduction of produce available to the public. A reduction in supply results in higher prices impacting disadvantaged communities such as Pixley and Teviston disproportionately.

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

The Pixley Irrigation District, especially in the Project location area, suffers from the ongoing drought conditions that are gripping the Western states. Surface water

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¹ appraisal value provided by Alliance Ag Services, INC.

deliveries to the District has been very limited during the drought, with six of the last ten years seeing either zero or very limited canal water provided to users. See **Appendix I** – **List of Tables**, **Table 1 - Historical Water Supply**. As stated above, SGMA requires each GSA to be sustainable by 2040, which limits landowners in groundwater supply extraction.

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

Widely published work on climate change analysis shows significant hydrological impacts to the region, including cycles of drought and flooding, largely due to the receding snowline and a shift towards more rain-based precipitation. This translates into decreased water storage in the upper watershed and higher flows during storm events, impacting water supply availability. Local water systems, which are designed and operated based on historical conditions, can be overwhelmed by changes in regional hydrology and are likely insufficient for flood protection or water supply as climate change advances. The Sierra Nevada elevations most vulnerable to climate change are between 5,000-8,000 feet which is where a significant portion of Pixley's water supply comes from. (*Anthropogenic warming impacts on California snowpack during drought* - https://doi.org/10.1002/2016GL072104)

Evaluation Criterion E – Project Implementation (10 pts)

• Describe the implementation plan of the proposed project. Please include an estimated project schedule that shows the stages and duration of the proposed work, including major tasks, milestones, and dates. Milestones may include, but are not limited to, the following: design, environmental and cultural resources compliance, permitting, construction and installation.

See Appendix F – Lateral #4 Expansion Project Schedule. The California Environmental Quality Act (CEQA) Mitigated Negative Declaration was completed July 2019. The complete 100% design and construction specification was completed March 2022. Of the 9 easement documents, 7 have been obtained and the remaining 2 easement documents are currently in the process of being obtained. The completed easement documents were recorded by Pixley Irrigation District in the Tulare County Recorder's office in May 2022 for the Lateral #4 Expansion Project. The NEPA/Cultural compliance will be completed after the award of this grant, if selected. The estimated one-year construction duration would commence after all the necessary permits are acquired and necessary agreement with the Bureau is executed. The construction is estimated to commence April 2023 and be completed in December 2024.

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

Permits and approvals anticipated for the Lateral #4 Expansion Project are as follows:

NEPA/Cultural Compliance – Pixley Irrigation District in cooperation with United States Bureau of Reclamation (USBR) will comply with the National Environmental Policy Act (NEPA). It is currently assumed that USBR will be the lead agency for this process. It is anticipated that the Environmental Assessment will be prepared and a Finding of No Significant Impact (FONSI) will be filed.

California Environmental Quality Act (CEQA) – Pixley Irrigation District has completed all CEQA actions for the Project and adopted a Negative Declaration on August 8, 2019.

Dust Control Plan – A Dust Control Plan (DCP) will be needed for the canal earthwork. The DCP will be submitted to the local Air Quality Control Board one month before construction. Pursuant to Section 6.3 of Rule 8021 of the San Joaquin Valley Air Pollution Control District, a DCP application will be submitted to the Southern Region Office located at 34946 Flyover Court, Bakersfield, CA 93308.

Stormwater Pollution Prevention Plan (SWPPP) – The Pixley Irrigation District will submit a Notice of Intent (NOI) to EPA that covers the implementation of the project. The NOI will be submitted to www.epa.gov/npdes/enoi. The contractor will prepare the necessary documents in regards to SWPPP.

Other Local Permits – Local permits will be obtained by the District and/or a consultant through the Tulare County government office.

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

The District has completed 100% of the design for the Lateral #4 Expansion Project. The survey, design and feasibility study have been completed, accepted and reviewed by Pixley Irrigation District. As of the submission of this grant application, 6 of the 8 necessary easements have been completed and recorded at the Tulare County Assessor's Office. Completed plans can be downloaded at Lateral #4 Expansion Complete 100 Design Plan.

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

No new policies or administrative actions are required to implement the project.

Evaluation Criterion F – Nexus to Reclamation (10 pts)

• Does the application have a water service, repayment, or O&M contract with Reclamation?

Yes. The Pixley Irrigation District has a Cross Valley Canal Repayment Contract (CVC) (Contract No: 14-06-200-8237B) in the amount of 31,102 acre-feet with the Bureau of

Reclamation. The District receives all deliveries through the Friant-Kern Canal, a Reclamation facility.

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

While the Pixley Irrigation District has a repayment contract with the Bureau of Reclamation it also has contracts and agreements for the purchase and transfer of water with the Lower Tule River Irrigation District and Delano Earlimart Irrigation District. Historically, Saucelito Irrigation District, Porterville Irrigation District and Tea Pot Dome Water District, which are Friant Division CVP contractors have also transferred water to Pixley Irrigation District.

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

Yes, the Lateral #4 Expansion Project will contribute water to the Tule Subbasin of the Tulare Lake Basin, through the delivery of water in the Friant-Kern Canal. The water will be used for irrigation deliveries and replenish groundwater supply. This will protect groundwater (quantity and quality) in the area and make the supply more reliable to better prepare for a drought period. The Friant-Kern Canal bisects the Tule Subbasin along the eastern portion of the Subbasin.

• Is the applicant a Tribe?

No, the Pixley Irrigation District is not a Tribe.

VI. Project Budget

Funding Plan and Letters of Commitment

Pixley Irrigation District believes that the Lateral #4 Expansion Project is foundational to drought planning, drought resiliency, and water supply operations. Pixley Irrigation District has funding in place to cover the non-federal cost share for this Project.

The District will provide the non-Federal share of the project cost from its reserve accounts. The Funds are available in the Pixley Irrigation District account and no time constraints or contingencies exist on the funds. The resolution adopted on June 9th, 2022 by the Board of Directors (see **Appendix A: Official Resolution**) commits to make this fund available if the project is selected for funding and the Bureau accepts the contribution amounts outlined in the funding plan. **Appendix B – Financial Statement** includes the most current financial report showing the District's reserve funds from several different accounts.

No letters of commitment are needed, as the District plans to provide the non-Federal share of the project cost.

Budget Proposal

Pixley Irrigation District is seeking funding for \$2,000,000 in the Federal Funding Group II to accomplish the proposed Project. Through cash reserves and in-kind contributions by the district's construction staff, Pixley Irrigation District will meet the remaining cost share. See Table 4 – Total Project Cost Summary and Table 5 – Non-Federal and Federal Funding Source Summary. The complete budget proposal is on the page following these detailed estimates and supporting costs are included in Appendix G – Budget Proposal.

The total cost of the Lateral #4 Expansion Project is **\$4,331,474.27**. The project potential of new water is approximately 1,620 acre-feet per year or 81,000 acre-feet for the minimum life expectancy (50 years) of the project. The average cost of the Lateral #4 Expansion Project per acre-foot in the minimum 50-year life expectancy of the project is \$53.47 per acre-foot of water.

Table 4 – Total Project Cost Summary

| Funding Source | Percentage | Amount |
|--|------------|----------------|
| Cost to be reimbursed with the requested | 46% | \$2,000,000 |
| Federal Funding | | |
| Cost to be paid by Applicant | 54% | \$2,331,474.27 |
| Value of third-party contributions | 0% | \$0.00 |
| Total Project Funding | 100% | \$4,331,474.27 |

Table 5 – Non-Federal and Federal Funding Source Summary

| Table 5 - North cactar and reactar runding Source Summary | | | | | |
|---|------------|----------------|--|--|--|
| Funding Source | Percentage | Amount | | | |
| Non-Federal Entities | | | | | |
| Pixley Irrigation District | 54% | \$2,331,474.27 | | | |
| Non-Federal Subtotal | | \$2,331,474.27 | | | |
| Other Federal Entities | | | | | |
| NONE | 0% | \$0.00 | | | |
| Requested Reclamation Funding | 46% | \$2,000,0000 | | | |
| Total Project Funding | 100% | \$4,331,474.27 | | | |

Budget Narrative

The Project Manager will be Eric Limas, General Manager for the Pixley Irrigation District. Labor rates and estimated hours to be spent on the project are listed in the Budget Proposal (See **Appendix G – Budget Proposal**) and the breakdown of estimated time to be spent on tasks outlined in the **Table 6 – Estimated District Staff Hours**. Hours allocated for reporting include 110 hours for review of each report with the final report to be prepared by the District Engineer and approved by the Project manager. Hours allocated for Project Administration, Reporting, Planning, and Implementation include billing; coordination with USBR staff, consultant and contractor; meeting; construction oversight; project closeout; and various grant-related tasks.

Table 6 – Estimated District Staff Hours

| District Staff, Title | Project Administration | Reporting | Implementation / Construction |
|---|---------------------------|-----------|-------------------------------|
| Eric Limas, General Manager (PM) | 50 | 30 | 0 |
| Mike Battles, Asst. Gen. Mgr. (Construction Lead) | 40 | 0 | 364 |
| District Engineer | 40 | 80 | 250 |
| Controller | 160 | 0 | 0 |
| Field Supervisor | 0 | 0 | 1456 |
| Safety Personnel | 0 | 0 | 728 |
| Master Operator | 0 | 0 | 2080 |
| Grader Operator | 0 | 0 | 2080 |
| Dump Truck Operator | 0 | 0 | 2080 |
| Water Truck Operator | 0 | 0 | 2080 |
| Field Worker | 0 | 0 | 2080 |
| Field Worker | 0 | 0 | 2080 |

Salaries and Wages – The District will be completing the majority of the Project using force account staffing. The bulk of the time will come from installation and construction of check structures, and grading and excavation in the proposed site. Salaries and wages were broken into a unit rate per each category of District staff expected to be involved. The Budget Proposal estimates the hours of each staff type.

Table 7 - Staff Salary and Wages Total Cost

| District Staff, Title | Total Hours | Rate (\$/hour) | 1 | Total Cost |
|---|-------------|----------------|----|------------|
| Eric Limas, General Manager (PM) | 80 | 152.99 | \$ | 12,239.20 |
| Mike Battles, Asst. Gen. Mgr. (Construction Lead) | 404 | 107.62 | \$ | 43,478.48 |
| District Engineer | 370 | 58.53 | \$ | 21,656.10 |
| Controller | 160 | 76.98 | \$ | 12,316.80 |
| Field Supervisor | 1456 | 63.96 | \$ | 93,125.76 |
| Safety Personnel | 728 | 44.53 | \$ | 32,417.84 |
| Master Operator | 2080 | 62.14 | \$ | 129,251.20 |
| Grader Operator | 2080 | 52.03 | \$ | 108,222.40 |
| Dump Truck Operator | 2080 | 32.22 | \$ | 67,017.60 |
| Water Truck Operator | 2080 | 34.56 | \$ | 71,884.80 |
| Field Worker | 2080 | 53.33 | \$ | 110,926.40 |
| Field Worker | 2080 | 43.78 | \$ | 91,062.40 |

Fringe Benefits – Since District Staff will be performing the constructions, Fringe Benefits will be accrued during the construction efforts. Fringe benefits were broken into a unit rate per District Personnel expected to work on the Project. Fringe Benefits available to each employee are insurance (medical, dental, vision and life), worker's compensation insurance, retirement, disability, and liability insurance (See **Appendix G - Budget Proposal** for calculation)

Travel – No travel costs are being included in the Budget Proposal for this Project.

Equipment – The District owns some of its own equipment and will be using it during the construction effort. The District equipment includes an excavator, a grader, a dump truck and a water truck (See **Appendix G - Budget Proposal for Calculation**). Some heavy equipment will need to be rented, including a concrete pumper truck (pouring concrete for the check structures and drop checks).

Materials and supplies – All materials and supply costs associated with the Project are items not included in contractual work. Due to the District performing the construction, these listed items are those needed to perform the construction.

Contractual – The majority of the design and construction of the new conveyance system will be performed by the District staff. Outside contracting will be done using the District's existing procurement guidelines and may include survey, design, construction staking and land acquisition assistance. Other contractual services may include material testing of the concrete being poured to confirm appropriate strength. The costs included in the Project Budget are based on previous costs confirmed through similar jobs.

Third-party In-Kind Contributions – There are no third-party in-kind contributions for this Project.

Environmental and Regulatory Compliance Costs – CEQA compliance was performed by the District Consulting Engineer and is complete. A portion of the budget was set aside for environmental and regulatory compliance. NEPA costs were not included in the contractual category since it is believed that they will be incurred by USBR staff. The estimated cost is \$25,000, which represents 1% of the total estimated Project Cost.

Other Expenses –There are no other expenses included for this Project.

Indirect Costs – There are no indirect costs included for this Project.

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 occur in the construction of the proposed earthen channels and structures. Typical mitigation measures, such as the use of a water truck, will be used to minimize impacts on the surrounding area, along with other suggested practices, such as reduced traffic in the area, reduced speed of motor vehicles, developed in the CEQA/NEPA process.

 Are you aware of any species listed or proposed to be listed as 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?

It is not anticipated that the Project would affect any endangered or threatened species near the Project. However, since this is potential habitat for the San Joaquin Kit Fox and Swainson's Hawk, mitigation measures may be necessary prior to and during construction to ensure no negative impacts to the species. Mitigation measures may include stopping work in locations where animal habitats are located, and setting buffer zones away from the habitat.

 Are there wetlands or other surface waters inside the project boundaries that potentially fall under CWA jurisdiction as "Water 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. No adverse impacts are expected.

• When was the delivery system constructed?

Pixley Irrigation District has owned, operated, and maintained the current water distribution system since its formation in 1958. Various features of the distribution system have been constructed from 1958 through 2022.

 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 of timing of any extensive alterations or modifications to those features completed previously.

The project will result in slight modification to the existing Lateral 3. The modifications will be to raise the earthen banks and confining headwalls on the upstream side of existing road crossings. Lateral 3 was constructed as part of an improvement district expansion and completed in the early 1980s. Regular maintenance is performed on all canals, ditches and structures in the District.

 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 State Historic Preservation Office can assist in answering this question.

No. A review of the National Register of Historic Places did not show 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 archeological sites in the proposed project area.

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

No. On the contrary, the benefits from this project will impact rural parts of Tulare County, typically classified as disadvantaged communities with low-income areas and a high minority population.

• Will the proposed project limit access to and ceremonial use of Indian sacred sites or results 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 and Approval

Required permits and approval processes are discussed in *Section V. Evaluation Criteria, Criterion E* of this grant application.

VIX. Letter of Support

Letters of support were provided by various entities, irrigation and water districts to show support of the project. Individual letters can be found in **Appendix H – Letters of Support**

X. Official Resolution

Appendix A – Official Resolution 2022-6-2 authorizes the preparation of this application and funding for the District cost share. This resolution was adopted at the June 9, 2022, Board Meeting. The Board of Directors is composed of local landowners, so the resolution will also represent support for the Project from local farmers.

There is no known or potential conflict of interest in the project.

RESOLUTION NO. 2022-06-02 OF THE BOARD OF DIRECTORS OF THE PIXLEY IRRIGATION DISTRICT

APPLICANT'S NAME: PIXLEY IRRIGATION DISTRICT

- WHEREAS, the Pixley Irrigation District (District) has prepared and reviewed the preliminary and final plans for the Lateral #4 Expansion Project (Project) which will provide increased surface water delivery capacity and groundwater recharge for future drought resiliency; and
- **WHEREAS**, the Board of Directors of the District support the Project and the water management benefits provided thereby; and
- WHEREAS, the District desires to apply for and secure funds that may be made available thereto from the United States Department of Interior, Bureau of Reclamation (USBR) from the WaterSMART Drought Response Program: Drought Resiliency Projects for Fiscal Year (FY) 2023 with a Notice of Funding Opportunity (NOFO) No. R23AS000005; and
- WHEREAS, said Project will consist of a new delivery system which is composes of both earthen and small section of pipeline, and appurtenant facilities, all of which can be constructed and made operational within the time frame as may be established by USBR; and
- WHERES, the District has acquired the necessary easement for the Project; 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 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 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 regular meeting of the Borad of Directors of the Pixley Irrigation District held this 9th day of June 2022 motion by Director ______ and second by Director ______ and unanimously approved.

ATTEST:

I Eric Limas, Secretary to the Board of Directors of the Pixley Irrigation District, hereby certify that the foregoing Resolution was introduced at a regular meeting of the Board of Directors of said District, held on the 9th day of June 2022, and was adopted at the meeting by the following vote:

AYES: Junio, Debroot, Parretra, Westbrook

NOES:

ABSTAIN:

ABSENT: SCHOTT

ATTEST!

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



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.

> > Tim Orman 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 Pitigliano 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. Kisling 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

June 10, 2022

Bureau of Reclamation Attn: Ms. Sheri Looper Mail Code: MP-400 2800 Cottage Way

Sacramento, California 95825

RE: Pixley Irrigation District – Phase I - Lateral #4 Gravity Distribution Canal Project Drought Response Program: Drought Resiliency Grant Application FY2023

Dear Ms. Looper,

The Friant Water Authority supports the effort of the Pixley Irrigation District (Pixley ID) in their pursuit of a WaterSMART Drought Response Program: Drought Resiliency Grant Application from the United States Department of Interior, Bureau of Reclamation (Reclamation) for Fiscal Year 2023. The grant application involves the development of roughly 5.5-mile open channel gravity conveyance system originating from the West Main Canal from Ave. 112 to Ave 116, between Rd 112 to Rd 80; that will increase surface water availability to an area that relies solely on groundwater supply. Bringing in surface water to this part of the District will allow for less pumping of groundwater supply when surface water is available. The Friant Water Authority believes strongly that the proposed project greatly benefits the area, along with the neighboring districts, and neighboring communities of Pixley and Teviston.

The Friant Water Authority recognizes the importance of sound water management and drought resiliency projects, and the significant role they play in stabilizing the local water supply. The Friant Water Authority and the Pixley ID have long history of coordinating water management projects and programs aimed at better managing water supplies in the area to meet local demands and resiliency for the future. The Lateral #4 Project is envisioned to be one of these projects that will assist in securing a viable water supply for the local area and promotes sustainability for the future. The Friant Water Authority strongly encourages the Bureau to consider funding the Pixley Irrigation District in their pursuit of this grant application.

Sincerely,

Johnny Amaral

Chief Operating Officer

JA/tm

PRESIDENT GARY CAVIGLIA IVANHOE IRRIGATION DISTRICT

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

Bureau of Reclamation Attn: Ms. Sheri Looper Mail Code: MP-400 2800 Cottage Way Sacramento, California 95825

RE: Pixley Irrigation District – Phase I - Lateral #4 Gravity Distribution Canal Project Drought Response Program: Drought Resiliency Grant Application FY2023

Dear Ms. Looper,

The Ivanhoe Irrigation District supports the effort of the Pixley Irrigation District (Pixley ID) in their pursuit of a WaterSMART Drought Response Program: Drought Resiliency Grant Application from the United States Department of Interior, Bureau of Reclamation (Reclamation) for Fiscal Year 2023. The grant application involves the development of roughly 5.5-mile open channel gravity conveyance system originating from the West Main Canal from Ave. 112 to Ave 116, between Rd 112 to Rd 80; that will increase surface water availability to an area that relies solely on groundwater supply. Bringing in surface water to this part of the District will allow for less pumping of groundwater supply when surface water is available. The Ivanhoe Irrigation District believes strongly that the proposed project greatly benefits the area, along with the neighboring districts, and neighboring communities of Pixley and Teviston.

The Ivanhoe Irrigation District recognizes the importance of sound water management and drought resiliency projects, and the significant role they play in stabilizing the local water supply. The Ivanhoe Irrigation District and the Pixley ID have long history of coordinating water management projects and programs aimed at better managing water supplies in the area to meet local demands and resiliency for the future. The Lateral #4 Project is envisioned to be one of these projects that will assist in securing a viable water supply for the local area and promotes sustainability for the future. The Ivanhoe Irrigation District strongly encourages the Bureau to consider funding the Pixley Irrigation District in their pursuit of this grant application.

Sincerely,

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

June 10, 2022

Bureau of Reclamation Attn: Ms. Sheri Looper Mail Code: MP-400 2800 Cottage Way Sacramento, California 95825

RE: Pixley Irrigation District – Phase I - Lateral #4 Gravity Distribution Canal Project Drought Response Program: Drought Resiliency Grant Application FY2023

Dear Ms. Looper,

The Eastern Tule Groundwater Sustainability Agency (ETGSA) supports the effort of the Pixley Irrigation District (Pixley ID) in their pursuit of a WaterSMART Drought Response Program: Drought Resiliency Grant Application from the United States Department of Interior, Bureau of Reclamation for Fiscal Year 2023. The grant application involves the development of a roughly 5.5-mile open channel gravity conveyance system originating from the West Main Canal from Ave. 112 to Ave. 116, between Rd. 112 to Rd. 80; that will increase surface water availability to an area that relies solely on groundwater supply. Bringing in surface water to this part of the District will allow for less pumping of groundwater supply when surface water is available. The ETGSA believes strongly that the proposed project greatly benefits the area, along with the neighboring districts, and neighboring communities of Pixley and Teviston.

The ETGSA recognizes the importance of sound water management and drought resiliency projects, and the significant role they play in stabilizing the local water supply. The ETGSA and the Pixley ID have long history of coordinating water management projects and programs aimed at better managing water supplies in the area to meet local demands and resiliency for the future. The Lateral #4 Project is envisioned to be one of these projects that will assist in

securing a viable water supply for the local area and promotes sustainability for the future. The ETGSA strongly encourages the Bureau to consider funding the Pixley Irrigation District in their pursuit of this grant application.

Sincerely,

Rogefio Caudillo General Manager



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

BOARD OF DIRECTORS

ART RAMIREZ-CHAIRMAN DAVID ROBERTS-VICE CHAIR TOM RUNYON JOE LEAL

VACANT

Bureau of Reclamation

Attn: Ms. Sheri Looper

Mail Code: MP-400

2800 Cottage Way

Sacramento, California 95825

RE: Pixley Irrigation District – Phase I - Lateral #4 Gravity
Distribution Canal Project Drought Response Program:
Drought Resiliency Grant Application FY2023

Dear Ms. Looper,

The Stone Corral Irrigation District (Stone Corral) supports the effort of the Pixley Irrigation District (Pixley ID) in their pursuit of a WaterSMART Drought Response Program: Drought Resiliency Grant Application from the United States Department of Interior, Bureau of Reclamation (Reclamation) for Fiscal Year 2023. The grant application involves the development of roughly 5.5-mile open channel gravity conveyance system originating from the West Main Canal from Ave. 112 to Ave 116, between Rd 112 to Rd 80; that will increase surface water availability to an area that relies solely on groundwater supply. Bringing in surface water to this part of the District will allow for less pumping of groundwater supply when surface water is available. Stone Corral believes strongly that the proposed project greatly benefits the area, along with the neighboring districts, and neighboring communities of Pixley and Teviston.

The Stone Corral recognizes the importance of sound water management and drought resiliency projects, and the significant role they play in stabilizing the local water supply. The Stone Corral and the Pixley ID have long history of coordinating water management projects and programs aimed at better managing water supplies in the area to meet local demands and resiliency for the future. The Lateral #4 Project is envisioned to be one of these projects that will

assist in securing a viable water supply for the local area and promotes sustainability for the future. The Stone Corral strongly encourages the Bureau to consider funding the Pixley Irrigation District in their pursuit of this grant application.

Sincerely,

Gene Kilgore

General Manager



PRESIDENT
JOSEPH E. FERRARA
GENERAL MANAGER
GENE M. KILGORE
ATTORNEY
DUSTIN C. COOPER

150 SOUTH E. STREET P. O. BOX 546 EXETER, CA 93221-0546 OFFICE: (559) 592-2181 FAX: (559) 592-4464 DIRECTORS
JOSEPH E. FERRARA
GREGORY V. CROSSON
RALPH E. FULLER
ROBERT C. WARD
KEITH H. COSART

June 8, 2022

Bureau of Reclamation Attn: Ms. Sheri Looper Mail Code: MP-400 2800 Cottage Way Sacramento, California 95825

RE: Pixley Irrigation District – Phase I - Lateral #4 Gravity Distribution Canal Project Drought Response Program: Drought Resiliency Grant Application FY2023

Dear Ms. Looper,

The Exeter Irrigation District supports the effort of the Pixley Irrigation District (Pixley ID) in their pursuit of a WaterSMART Drought Response Program: Drought Resiliency Grant Application from the United States Department of Interior, Bureau of Reclamation (Reclamation) for Fiscal Year 2023. The grant application involves the development of roughly 5.5-mile open channel gravity conveyance system originating from the West Main Canal from Ave. 112 to Ave 116, between Rd 112 to Rd 80; that will increase surface water availability to an area that relies solely on groundwater supply. Bringing in surface water to this part of the District will allow for less pumping of groundwater supply when surface water is available. The *Exeter Irrigation District* believes strongly that the proposed project greatly benefits the area, along with the neighboring districts, and neighboring communities of Pixley and Teviston.

The Exeter Irrigation District recognizes the importance of sound water management and drought resiliency projects, and the significant role they play in stabilizing the local water supply. The Exeter Irrigation District and the Pixley ID have long history of coordinating water management projects and programs aimed at better managing water supplies in the area to meet local demands and resiliency for the future. The Lateral #4 Project is envisioned to be one of these projects that will assist in securing a viable water supply for the local area and promotes sustainability for the future. The Exeter Irrigation District strongly encourages the Bureau to consider funding the Pixley Irrigation District in their pursuit of this grant application.

Sincerely,

Gene Kilgore General Manager SEAN P. GEIVET General Manager

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

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



ERIC L. BORBA President

DAVID E. GISLER Vice-President

TIMOTHY J. WITZEL

JOSEPH "BRETT" McCOWAN

EDWIN L. CHAMBERS

BUREAU OF RECLAMATION ATTN: Ms. SHERI LOOPER MAIL CODE: MP-400 2800 COTTAGE WAY SACRAMENTO CA 95825

Date:

June 7, 2022

Subject:

Pixley Irrigation District - Phase I - Lateral #4 Gravity Distribution

Canal Project Drought Response Program: Drought Resiliency

Grant Application FY2023

Dear Ms. Looper,

The Porterville Irrigation District (Porterville ID) supports the effort of the Pixley Irrigation District (Pixley ID) in their pursuit of a WaterSMART Drought Response Program: Drought Resiliency Grant Application from the United States Department of Interior, Bureau of Reclamation (Reclamation) for Fiscal Year 2023. The grant application involves the development of roughly 5.5-mile open channel gravity conveyance system originating from the West Main Canal from Avenue 112 to Avenue 116, between Road 112 to Road 80; that will increase surface water availability to an area that relies solely on groundwater supply. Bringing in surface water to this part of the District will allow for less pumping of groundwater supply when surface water is available. The Porterville ID believes strongly that the proposed project greatly benefits the area, along with the neighboring districts, and neighboring communities of Pixley and Teviston.

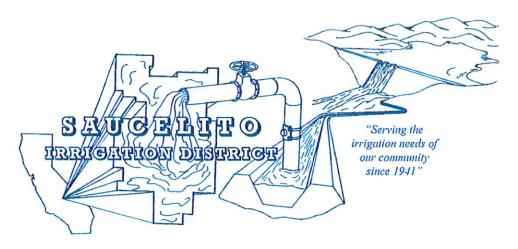
The Porterville ID recognizes the importance of sound water management and drought resiliency projects, and the significant role they play in stabilizing the local water supply. The Porterville ID and the Pixley ID have long history of coordinating water management projects and programs aimed at better managing water supplies in the area to meet local demands and resiliency for the future. The Lateral #4 Project is envisioned to be one of these projects that will assist in securing a viable water supply for the local area and promotes sustainability for the future. The Porterville ID strongly encourages the Bureau to consider funding the Pixley Irrigation District in their pursuit of this grant application.

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 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



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, Cochran
Stanton, Smith & Bixler, LLP
Aubrey Mauritson

Bureau of Reclamation Attn: Ms. Sheri Looper Mail Code: MP-400 2800 Cottage Way Sacramento, California 95825

RE: Pixley Irrigation District – Phase I - Lateral #4 Gravity Distribution Canal Project Drought Response Program: Drought Resiliency Grant Application FY2023

Dear Ms. Looper,

The Saucelito Irrigation District supports the effort of the Pixley Irrigation District (Pixley ID) in their pursuit of a WaterSMART Drought Response Program: Drought Resiliency Grant Application from the United States Department of Interior, Bureau of Reclamation (Reclamation) for Fiscal Year 2023. The grant application involves the development of roughly 5.5-mile open channel gravity conveyance system originating from the West Main Canal from Ave. 112 to Ave 116, between Rd 112 to Rd 80; that will increase surface water availability to an area that relies solely on groundwater supply. Bringing in surface water to this part of the District will allow for less pumping of groundwater supply when surface water is available. The Saucelito Irrigation District believes strongly that the proposed project greatly benefits the area, along with the neighboring districts, and neighboring communities of Pixley and Teviston.

The Saucelito Irrigation District recognizes the importance of sound water management and drought resiliency projects, and the significant role they play in stabilizing the local water supply. The Saucelito Irrigation District and the Pixley ID have long history of coordinating water management projects and programs aimed at better managing water supplies in the area to meet local demands and resiliency for the future. The Lateral #4 Project is envisioned to be one of these projects that will assist in securing a viable water supply for the local area and promotes sustainability for the future. The Saucelito Irrigation District strongly encourages the Bureau to consider funding the Pixley Irrigation District in their pursuit of this grant application.

Sincerety

Sean P. Geivet, General Manager Saucelito Irrigation District

TERRA BELLA IRRIGATION DISTRICT

24790 Avenue 95 Terra Bella CA 93270

Division 5

Bstablished 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

SEAN P. GEIVET General Manager ANN NELMS Secretary-Treasurer AUBREY CAIRNS MAURITSON Legal Counsel KELLER-WEGLEY **ENGINEERING** Consulting Engineer

Bureau of Reclamation Attn: Ms. Sheri Looper Mail Code: MP-400 2800 Cottage Way Sacramento, California 95825

RE: Pixley Irrigation District - Phase I - Lateral #4 Gravity Distribution Canal Project Drought Response Program: Drought Resiliency Grant Application FY2023

Dear Ms. Looper,

The Terra Bella Irrigation District supports the effort of the Pixley Irrigation District (Pixley ID) in their pursuit of a WaterSMART Drought Response Program: Drought Resiliency Grant Application from the United States Department of Interior, Bureau of Reclamation (Reclamation) for Fiscal Year 2023. The grant application involves the development of roughly 5.5-mile open channel gravity conveyance system originating from the West Main Canal from Ave. 112 to Ave 116, between Rd 112 to Rd 80; that will increase surface water availability to an area that relies solely on groundwater supply. Bringing in surface water to this part of the District will allow for less pumping of groundwater supply when surface water is available. The Terra Bella Irrigation District believes strongly that the proposed project greatly benefits the area, along with the neighboring districts, and neighboring communities of Pixley and Teviston.

The Terra Bella Irrigation District recognizes the importance of sound water management and drought resiliency projects, and the significant role they play in stabilizing the local water supply. The Terra Bella Irrigation District and the Pixley ID have long history of coordinating water management projects and programs aimed at better managing water supplies in the area to meet local demands and resiliency for the future. The Lateral #4 Project is envisioned to be one of these projects that will assist in securing a viable water supply for the local area and promotes sustainability for the future. The Terra Bella Irrigation District strongly encourages the Bureau to consider funding the Pixley Irrigation District in their pursuit of this grant application.

Sincerely

Sean P Geivet General Manager



Bureau of Reclamation Attn: Ms. Sheri Looper Mail Code: MP-400 2800 Cottage Way Sacramento, California 95825

RE: Pixley Irrigation District – Phase I - Lateral #4 Gravity Distribution Canal Project Drought Response Program: Drought Resiliency Grant Application FY2023

Dear Ms. Looper,

The Tule Basin Land Trust supports the effort of the Pixley Irrigation District (Pixley ID) in their pursuit of a WaterSMART Drought Response Program: Drought Resiliency Grant Application from the United States Department of Interior, Bureau of Reclamation (Reclamation) for Fiscal Year 2023. The grant application involves the development of roughly 5.5-mile open channel gravity conveyance system originating from the West Main Canal from Ave. 112 to Ave 116, between Rd 112 to Rd 80; that will increase surface water availability to an area that relies solely on groundwater supply. Bringing in surface water to this part of the District will allow for less pumping of groundwater supply when surface water is available. The Tule Basin Land Trust believes strongly that the proposed project greatly benefits the area, along with the neighboring districts, and neighboring communities of Pixley and Teviston.

The Tule Basin Land Trust recognizes the importance of sound water management and drought resiliency projects, and the significant role they play in stabilizing the local water supply. The Tule Basin Land Trust and the Pixley ID have long history of coordinating water management projects and programs aimed at better managing water supplies in the area to meet local demands and resiliency for the future. The Lateral #4 Project is envisioned to be one of these projects that will assist in securing a viable water supply for the local area and promotes sustainability for the future. The Tule Basin Land Trust strongly encourages the Bureau to consider funding the Pixley Irrigation District in their pursuit of this grant application.

Sincerely

Daniel Vink









Lower Tule River

Tom Barcellos

President

Jim Costa Vice President

Frank Mendonsa Director

Joshua Pitigliano

Alex Garcia

Eric Limas General Manager

Beth Grote-Lewis

Alex Peltzer Legal Counsel June 7, 2022

Bureau of Reclamation Attn: Ms. Sheri Looper Mail Code: MP-400 2800 Cottage Way Sacramento, California 95825

RE: Pixley Irrigation District – Phase I - Lateral #4 Gravity Distribution Canal Project Drought Response Program: Drought Resiliency Grant Application FY2023

Dear Ms. Looper,

The Lower Tule River Irrigation District (*LTRID*) supports the effort of the Pixley Irrigation District (Pixley ID) in their pursuit of a WaterSMART Drought Response Program: Drought Resiliency Grant Application from the United States Department of Interior, Bureau of Reclamation (Reclamation) for Fiscal Year 2023. The grant application involves the development of roughly 5.5-mile open channel gravity conveyance system originating from the West Main Canal from Ave. 112 to Ave 116, between Rd 112 to Rd 80; that will increase surface water availability to an area that relies solely on groundwater supply. Bringing in surface water to this part of the District will allow for less pumping of groundwater supply when surface water is available. The *LTRID* believes strongly that the proposed project greatly benefits the area, along with the neighboring districts, and neighboring communities of Pixley and Teviston.

The *LTRID* recognizes the importance of sound water management and drought resiliency projects, and the significant role they play in stabilizing the local water supply. The *LTRID* and the Pixley ID have long history of coordinating water management projects and programs aimed at better managing water supplies in the area to meet local demands and resiliency for the future. The Lateral #4 Project is envisioned to be one of these projects that will assist in securing a viable water supply for the local area and promotes sustainability for the future. The *LTRID* strongly encourages the Bureau to consider funding the Pixley Irrigation District in their pursuit of this grant application.

Eric Limas

Sincerely

General Manager

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

Dyson Schneider Vice President

Tim Peltzer

David Sherwood

Ron Castro

Eric Limas General Manager

Alex Peltzer Legal Counsel June 7, 2022

Bureau of Reclamation Attn: Ms. Sheri Looper Mail Code: MP-400 2800 Cottage Way Sacramento, California 95825

RE: Pixley Irrigation District – Phase I - Lateral #4 Gravity Distribution Canal Project Drought Response Program: Drought Resiliency Grant Application FY2023

Dear Ms. Looper,

The Tea Pot Dome Water District (*TPDWD*) supports the effort of the Pixley Irrigation District (Pixley ID) in their pursuit of a WaterSMART Drought Response Program: Drought Resiliency Grant Application from the United States Department of Interior, Bureau of Reclamation (Reclamation) for Fiscal Year 2023. The grant application involves the development of roughly 5.5-mile open channel gravity conveyance system originating from the West Main Canal from Ave. 112 to Ave 116, between Rd 112 to Rd 80; that will increase surface water availability to an area that relies solely on groundwater supply. Bringing in surface water to this part of the District will allow for less pumping of groundwater supply when surface water is available. The *TPWD* believes strongly that the proposed project greatly benefits the area, along with the neighboring districts, and neighboring communities of Pixley and Teviston.

The *TPWD* recognizes the importance of sound water management and drought resiliency projects, and the significant role they play in stabilizing the local water supply. The *TPWD* and the Pixley ID have long history of coordinating water management projects and programs aimed at better managing water supplies in the area to meet local demands and resiliency for the future. The Lateral #4 Project is envisioned to be one of these projects that will assist in securing a viable water supply for the local area and promotes sustainability for the future. The *TPWD* strongly encourages the Bureau to consider funding the Pixley Irrigation District 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



Steve Meier President

Dyson Schneider Vice-President

William Bennett

Director

Richard Job Director

Jim Zimmerman

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 June 7, 2022

Bureau of Reclamation Attn: Ms. Sheri Looper Mail Code: MP-400 2800 Cottage Way Sacramento, California 95825

RE: Pixley Irrigation District – Phase I - Lateral #4 Gravity Distribution Canal Project Drought Response Program: Drought Resiliency Grant Application FY2023

Dear Ms. Looper,

The Vandalia Water District (*VWD*) supports the effort of the Pixley Irrigation District (Pixley ID) in their pursuit of a WaterSMART Drought Response Program: Drought Resiliency Grant Application from the United States Department of Interior, Bureau of Reclamation (Reclamation) for Fiscal Year 2023. The grant application involves the development of roughly 5.5-mile open channel gravity conveyance system originating from the West Main Canal from Ave. 112 to Ave 116, between Rd 112 to Rd 80; that will increase surface water availability to an area that relies solely on groundwater supply. Bringing in surface water to this part of the District will allow for less pumping of groundwater supply when surface water is available. The *VWD* believes strongly that the proposed project greatly benefits the area, along with the neighboring districts, and neighboring communities of Pixley and Teviston.

The *VWD* recognizes the importance of sound water management and drought resiliency projects, and the significant role they play in stabilizing the local water supply. The *VWD* and the Pixley ID have long history of coordinating water management projects and programs aimed at better managing water supplies in the area to meet local demands and resiliency for the future. The Lateral #4 Project is envisioned to be one of these projects that will assist in securing a viable water supply for the local area and promotes sustainability for the future. The *VWD* strongly encourages the Bureau to consider funding the Pixley Irrigation District 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

June 7, 2022

Bureau of Reclamation Attn: Ms. Sheri Looper Mail Code: MP-400 2800 Cottage Way Sacramento, California 95825

RE: Pixley Irrigation District – Phase I - Lateral #4 Gravity Distribution Canal Project Drought Response Program: Drought Resiliency Grant Application FY2023

Dear Ms. Looper,

The Campbell Moreland Ditch Company (*CMDC*) supports the effort of the Pixley Irrigation District (Pixley ID) in their pursuit of a WaterSMART Drought Response Program: Drought Resiliency Grant Application from the United States Department of Interior, Bureau of Reclamation (Reclamation) for Fiscal Year 2023. The grant application involves the development of roughly 5.5-mile open channel gravity conveyance system originating from the West Main Canal from Ave. 112 to Ave 116, between Rd 112 to Rd 80; that will increase surface water availability to an area that relies solely on groundwater supply. Bringing in surface water to this part of the District will allow for less pumping of groundwater supply when surface water is available. The *CMDC* believes strongly that the proposed project greatly benefits the area, along with the neighboring districts, and neighboring communities of Pixley and Teviston.

The *CMDC* recognizes the importance of sound water management and drought resiliency projects, and the significant role they play in stabilizing the local water supply. The *CMDC* and the Pixley ID have long history of coordinating water management projects and programs aimed at better managing water supplies in the area to meet local demands and resiliency for the future. The Lateral #4 Project is envisioned to be one of these projects that will assist in securing a viable water supply for the local area and promotes sustainability for the future. The *CMDC* strongly encourages the Bureau to consider funding the Pixley Irrigation District in their pursuit of this grant application.

Sincerely,

General Manager



Albert Berra
President

Bureau of Reclamation Attn: Ms. Sheri Looper

June 7, 2022

Keith Watkins
Director

Mail Code: MP-400 2800 Cottage Way

Sacramento, California 95825

Guido Allan Lombardi Director

RE: Pixley Irrigation District – Phase I - Lateral #4 Gravity Distribution Canal Project Drought Response Program: Drought Resiliency Grant Application FY2023

Julia Inestroza

Director

Dear Ms. Looper,

Michael Knight Director

The Pioneer Water Company (PWC) supports the effort of the Pixley Irrigation District (Pixley ID) in their pursuit of a WaterSMART Drought Response Program: Drought Resiliency Grant Application from the United States Department of Interior, Bureau of Reclamation (Reclamation) for Fiscal Year 2023. The grant application involves the development of roughly 5.5-mile open channel gravity conveyance system originating from the West Main Canal from Ave. 112 to Ave 116, between Rd 112 to Rd 80; that will increase surface water availability to an area that relies solely on groundwater supply. Bringing in surface water to this part of the District will allow for less pumping of groundwater supply when surface water is available. The *PWC* believes strongly that the proposed project greatly benefits the area, along with the neighboring districts, and neighboring communities of Pixley and Teviston.

Alex Peltzer Legal Counsel

Operating Agent Lower Tule River Irrigation District

Contact Eric L. Limas The *PWC* recognizes the importance of sound water management and drought resiliency projects, and the significant role they play in stabilizing the local water supply. The PWC and the Pixley ID have long history of coordinating water management projects and programs aimed at better managing water supplies in the area to meet local demands and resiliency for the future. The Lateral #4 Project is envisioned to be one of these projects that will assist in securing a viable water supply for the local area and promotes sustainability for the future. The *PWC* strongly encourages the Bureau to consider funding the Pixley Irrigation District in their pursuit of this grant application.

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

Eric Limas General Manager

Sincerely,

South Valley Water Association



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

3746 W. Mineral King Ave. Visalia, CA 93291 Tel: (559) 372-2400 Fax: (559) 553-6221 Bureau of Reclamation Attn: Ms. Sheri Looper Mail Code: MP-400 2800 Cottage Way Sacramento, California 95825

RE: Pixley Irrigation District – Phase I - Lateral #4 Gravity Distribution Canal Project Drought Response Program: Drought Resiliency Grant Application FY2023

Dear Ms. Looper,

The South Valley Water Association supports the effort of the Pixley Irrigation District (Pixley ID) in their pursuit of a WaterSMART Drought Response Program: Drought Resiliency Grant Application from the United States Department of Interior, Bureau of Reclamation (Reclamation) for Fiscal Year 2023. The grant application involves the development of roughly 5.5-mile open channel gravity conveyance system originating from the West Main Canal from Ave. 112 to Ave 116, between Rd 112 to Rd 80; that will increase surface water availability to an area that relies solely on groundwater supply. Bringing in surface water to this part of the District will allow for less pumping of groundwater supply when surface water is available. The South Valley Water Association believes strongly that the proposed project greatly benefits the area, along with the neighboring districts, and neighboring communities of Pixley and Teviston.

The South Valley Water Association recognizes the importance of sound water management and drought resiliency projects, and the significant role they play in stabilizing the local water supply. The South Valley Water Association and the Pixley ID have long history of coordinating water management projects and programs aimed at better managing water supplies in the area to meet local demands and resiliency for the future. The Lateral #4 Project is envisioned to be one of these projects that will assist in securing a viable water supply for the local area and promotes sustainability for the future. The South Valley Water Association strongly encourages the Bureau to consider funding the Pixley Irrigation District in their pursuit of this grant application.

Sincerely,

Dan Vink